

ABORIGINAL CULTURAL HERITAGE ASSESSMENT DRAFT REPORT

520 Gardeners Road, Alexandria, NSW
Gadigal Country

Prepared for
PROJECT STRATEGY (ON BEHALF OF CHARTER HALL)
15 March 2022



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GLOSSARY

| Term | Definition |
|------------------------------|---|
| Aboriginal cultural heritage | The tangible (objects) and intangible (dreaming stories, legends and places) cultural practices and traditions associated with past and present-day Aboriginal communities. |
| Aboriginal object(s) | As defined in the NPW Act, any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises NSW, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains. |
| Aboriginal place | As defined in the NPW Act, any place declared to be an Aboriginal place (under s.84 of the NPW Act) by the Minister administering the NPW Act, by order published in the NSW Government Gazette, because the Minister is of the opinion that the place is or was of special significance with respect to Aboriginal culture. It may or may not contain Aboriginal objects. |
| ACHA | Aboriginal Cultural Heritage Assessment. |
| ACHAR | Aboriginal Cultural Heritage Assessment Report. |
| AHIMS | Aboriginal Heritage Information Management System: a register of previously reported Aboriginal objects and places managed by the DPC. |
| AHIP | Aboriginal Heritage Impact Permit. A permit issued under Section 90, Division 2 of Part 6 of the <i>NPW Act</i> . |
| Archaeology | The scientific study of human history, particularly the relics and cultural remains of the distant past. |
| Art | Art sites can occur in the form of rock engravings or pigment on sandstone outcrops or within shelters. An engraving is some form of image which has been pecked or carved into a rock surface. Engravings typically vary in size and nature, with small abstract geometric forms as well as anthropomorphic figures and animals also depicted. Pigment art is the result of the application of material to a stone to leave a distinct impression. Pigment types include ochre, charcoal and pipeclay. |
| Artefact | An object made by human agency (e.g. stone artefacts). |
| Consultation Requirements | <i>Aboriginal Cultural Heritage Consultation Requirements for Proponents</i> (DECCW, 2010). |
| DCP | Development Control Plan. |
| DECCW | Department of Environment, Climate Change and Water NSW. |
| DPC | Department of Premier and Cabinet. |

| Term | Definition |
|--------------------------|---|
| EP&A Act | <i>NSW Environmental Planning and Assessment Act 1979.</i> |
| Grinding Grooves | The physical evidence of tool making, or food processing activities undertaken by Aboriginal people. The manual rubbing of stones against other stones creates grooves in the rock; these are usually found on flat areas of abrasive rock such as sandstone. |
| Harm | As defined in the NPW Act, to destroy, deface, damage or move an Aboriginal object or destroy, deface or damage a declared Aboriginal place. Harm may be direct or indirect (e.g. through increased visitation or erosion). Harm does not include something that is trivial or negligible. |
| Isolated find | A single artefact found in an isolated context. |
| LALC | Local Aboriginal Land Council: corporate body constituted under the <i>Aboriginal Land Rights Act 1983</i> , having a defined boundary within which it operates. |
| LEP | Local Environment Plan. |
| Midden | Midden sites are indicative of Aboriginal habitation, subsistence and resource extraction. Midden sites are expressed through the occurrence of shell deposits of edible shell species often associated with dark, ashy soil and charcoal. Middens may or may not contain other archaeological materials including stone tools. |
| NPW Act | <i>National Parks and Wildlife Act 1974.</i> |
| NPW Regulation | <i>National Parks and Wildlife Regulation 2019.</i> |
| PAD | Potential Archaeological Deposit: a location considered to have a potential for subsurface archaeological material. |
| RAPs | Registered Aboriginal Parties: Aboriginal persons or organisation who have registered to be consulted on the Project in accordance with the Consultation Requirements. |
| Scarred / Modified Trees | Trees which display signs of human modification in the form of scars left from intentional bark removal for the creation of tools, or which are carved for ceremonial purposes. |

EXECUTIVE SUMMARY

[As of the date of the issue of the present draft ACHA report, consultation with the Aboriginal community had been completed up to and including Stage 3 (gathering information). It is anticipated that a draft ACHA report will be sent to Registered Aboriginal Parties by mid-March 2022 and the ACHA report will be finalised by mid-April 2022]

The current report presents the results of an Aboriginal Cultural Heritage Assessment (ACHA) of 520 Gardeners Road, Alexandria, NSW, legally referred to as Lot 302 DP1231238 ('the subject area'). The ACHA has been undertaken to support a State Significant Development Application seeking approval for a warehouse and distribution centre development within the subject area.

The ACHA was undertaken in accordance with Part 6 of the *National Parks and Wildlife Act 1974* (NPW Act) and Part 5 of the *National Parks and Wildlife Regulation 2019* (NPW Reg). The ACHA was further conducted in accordance with the following guidelines:

- *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water (DECCW), 2010) (the Consultation Guidelines).
- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011) (the Assessment Guidelines).
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010) (the Code of Practice).
- *The Australia ICOMOS Charter for Places of Cultural Significance, The Burra Charter, 2013* (Burra Charter).

The ACHA concluded that:

- No Aboriginal objects or Aboriginal places are registered within the subject area.
- No previous Aboriginal archaeological investigations have been identified that directly address the subject area.
- The subject area is located in the Tuggerah soil landscape and within 200m of a former low order, ephemeral waterway, which are archaeologically sensitive landscape features.
- Historical activities, including construction and demolition of buildings and utilisation of the subject area for industrial purposes, are determined to have caused a high level of ground disturbance across the subject area.
- Geotechnical findings confirm the impact of historical activities on the soil profile, with disturbance being encountered to a minimum depth of 2m below the existing ground surface.
- Previous archaeological investigations from similar contexts near to the subject area identified the potential for archaeological resources dating to the Pleistocene within intact natural soils below historical disturbance.
- There is nil to low potential for Aboriginal sites within the disturbed soil layers to depths of approximately 2m below the existing ground surface.
- The subject area has moderate archaeological potential for artefact scatters / campsites, burials, isolated finds, middens and PADS dating to the Pleistocene within intact natural soil at depths exceeding 2m below the existing ground surface.
- The presence of ground water encountered at depths of up to 2m below the existing ground surface means that archaeological investigation of potential Pleistocene deposits is impractical and difficult to conduct safely.
- [The above assessment of archaeological potential is subject to confirmation by visual inspection]
- [Assessments of significance and impact will be made once RAPs have been given the opportunity to provide feedback during the ongoing consultation process]

Based on the above conclusions, Urbis recommends the following:

- This report should be kept as evidence of the ACHA process having been undertaken in relation to the subject area.
- No further archaeological assessment of the subject area is required in view of the findings of the ACHA.
- The development may proceed with caution, subject to the following archaeological chance finds and human remains procedures being implemented and followed:

Archaeological Finds Procedure

Should any archaeological deposits be uncovered during any site works, the following steps must be followed:

1. All works within the vicinity of the find must immediately stop. The find must not be moved 'out of the way' without assessment.
2. The site supervisor or another nominated site representative must contact either the project archaeologist (if relevant) or Heritage NSW (Enviroline 131 555) to contact a suitably qualified archaeologist.
3. The nominated archaeologist must examine the find, provide a preliminary assessment of significance, record the item and decide on appropriate management measures. Such management may require further consultation with Heritage NSW, preparation of a research design and archaeological investigation/salvage methodology and registration of the find with the Aboriginal Heritage Information Management System (AHIMS).
4. Depending on the significance of the find, reassessment of the archaeological potential of the subject area may be required and further archaeological investigation undertaken.
5. Reporting may need to be prepared regarding the find and approved management strategies.
6. Works in the vicinity of the find can only recommence upon receipt of approval from Heritage NSW.

Human Remains Procedure

In the unlikely event that human remains are uncovered during the proposed works, the following steps must be followed:

1. All works within the vicinity of the find must immediately stop. The find must be cordoned-off and signage installed to avoid accidental impact.
2. The site supervisor or other nominated manager must notify the NSW Police and Heritage NSW (Enviroline 131 555).
3. The find must be assessed by the NSW Police, which may include the assistance of a qualified forensic anthropologist.
4. Management recommendations are to be formulated by the NSW Police, Heritage NSW and site representatives.
5. Works are not to recommence until the find has been appropriately managed.

[The above recommendations are preliminary and based on the desktop assessment alone. The recommendations may change in view of the outcome of the consultation process]

1. INTRODUCTION

Urbis has been engaged by Project Strategy on behalf of Charter Hall ('the proponent') to conduct an Aboriginal Cultural Heritage Assessment (ACHA) of 520 Gardeners Road, Alexandria, NSW, legally referred to as Lot 302 DP1231238 ('the subject area') (Figure 1 and Figure 2). The ACHA has been undertaken to support a State Significant Development Application seeking approval for a warehouse and distribution centre development within the subject area.

The ACHA has been undertaken to investigate whether development of the subject area will harm Aboriginal objects or places that may exist within the subject area and determine whether the subject area presents any Aboriginal archaeological and heritage constraints. The current report Aboriginal Cultural Heritage Assessment Report (ACHAR) presents the results of the ACHA.

1.1. SUBJECT AREA

The subject area is located approximately 6km south of the Sydney CBD, within the City of Sydney Local Government Area (Sydney LGA) and within the boundaries of the Metropolitan Local Aboriginal Land Council (MLALC). It is currently zoned IN1 - General Industrial and SP2 - Infrastructure.

The subject area encompasses approximately 18,988 m² and has frontages to Gardeners Road to the south and Bourke Road to the west. To the north and east it is bounded by the other IN1 - General Industrial zoned properties. Current improvements include a single warehouse building, surrounding hardstand and landscaping along the western and southern boundaries of the subject area.

1.2. PROPOSED WORKS

The proposal (Appendix A) comprises the redevelopment of the subject area as summarised below:

- Construction, fit out and operation of a two-storey warehouse and distribution centre comprising approximately 27,509 m² GFA including:
 - 21,952 m² of warehouse and distribution GFA; and
 - 5,577 m² GFA ancillary office space.
- Provision of 64 bicycle parking spaces at ground floor level and 144 car parking spaces at second floor level.
- Approximately 3,216.8 m² of soft landscaping at ground and second floor levels.
- Replacement of the existing vehicular access from Bourke Road with two new access driveways from Bourke Road.
- Earthworks and upgrades to existing on-site infrastructure.
- Provision of internal vehicle access route and loading docks.
- Building identification signage.
- Operation 24 hours per day seven days per week.

Site preparation and enabling works will including minor bulk earthworks limited to an import of fill to raise the ground level by 0.4m for flood planning purposes. It is understood that construction of the multi-level warehouse and distribution centre will include the sinking of piles to a depth of approximately 18m below the existing ground surface.

1.3. METHODOLOGY

The Planning Secretary's Environmental Assessment Requirements (SEARs) for the proposed development were issued on 18 November 2021. The present ACHA report addresses SEARs Item 18, which is recited in Table 1 below.

Table 1 – SEARs requirements and relevant report sections

| Issue and Assessment Requirements | Documentation |
|--|---|
| <p>18. Aboriginal Cultural Heritage</p> <p>Provide an Aboriginal Cultural Heritage Assessment Report prepared in accordance with relevant guidelines, identifying, describing and assessing any impacts for any Aboriginal cultural heritage values on the site.</p> | <p>Aboriginal Cultural Heritage Assessment Report</p> |

The ACHA was undertaken in accordance with Part 6 of the *National Parks and Wildlife Act 1974* (NPW Act) and Part 5 of the *National Parks and Wildlife Regulation 2019* (NPW Reg. The ACHA was further conducted in accordance with the following guidelines:

- *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water (DECCW, 2010c) (the Consultation Guidelines).
- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (Office of Environment and Heritage 2011) (the Assessment Guidelines).
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010b) (the Code of Practice).
- *The Australia ICOMOS Charter for Places of Cultural Significance, The Burra Charter, 2013* (Burra Charter).

The objectives of the ACHA are to:

- Investigate the presence, or absence, of Aboriginal objects and/or places within and in close proximity to the subject area, and whether those objects and/or places would be impacted by the proposed development.
- Investigate the presence, or absence, of any landscape features that may have the potential to contain Aboriginal objects and/or sites and whether those objects and/or sites would be impacted by the proposed development.
- Document the nature, extent and significance of any Aboriginal objects and/or places and sites that may be located within the subject area.
- Document consultation with the Registered Aboriginal Parties (RAPs) with the aim to identify any spiritual, traditional, historical or contemporary associations or attachments to the subject area and any Aboriginal objects and/or places that might be identified within the subject area.
- Provide management strategies for any identified Aboriginal objects and/or places or cultural heritage values.
- Provide recommendations for the implementation of the identified management strategies.
- Prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) to be included with an application for an Aboriginal Heritage Impact Permit for the proposed development, if required.

Section 3.1 of the Assessment Guidelines specifies the content requirements of an ACHAR, which includes the requirements of Regulation 61 of the NPW Reg. The requirements are listed in Table 2 below, together with the sections of the present ACHAR in which they are addressed.

Table 2 – ACHAR Requirements

| Requirement | Section of Report |
|---|-------------------|
| A description of the Aboriginal objects and declared Aboriginal places located within the area of the proposed activity | Section 3 |
| A description of the cultural heritage values, including the significance of the Aboriginal objects and declared Aboriginal places, that exist across the whole area that will be | Section 5 |

| | |
|--|------------------------|
| affected by the proposed activity and the significance of these values for the Aboriginal people who have a cultural association with the land | |
| How the requirements for consultation with Aboriginal people have been met (as specified in clause 80C of the NPW Regulation) | Section 3 |
| The views of those Aboriginal people regarding the likely impact of the proposed activity on their cultural heritage (if any submissions have been received as a part of the consultation requirements, the report must include a copy of each submission and your response) | Section 3 & Appendix D |
| Actual or likely harm posed to the Aboriginal objects or declared Aboriginal places from the proposed activity, with reference to the cultural heritage values identified | Section 6 |
| Any practical measures that may be taken to protect and conserve those Aboriginal objects or declared Aboriginal places | Section 6 |
| Any practical measures that may be taken to avoid or mitigate any actual or likely harm, alternatives to harm or, if this is not possible, to manage (minimise) harm. | Section 6 |

1.4. AUTHORSHIP

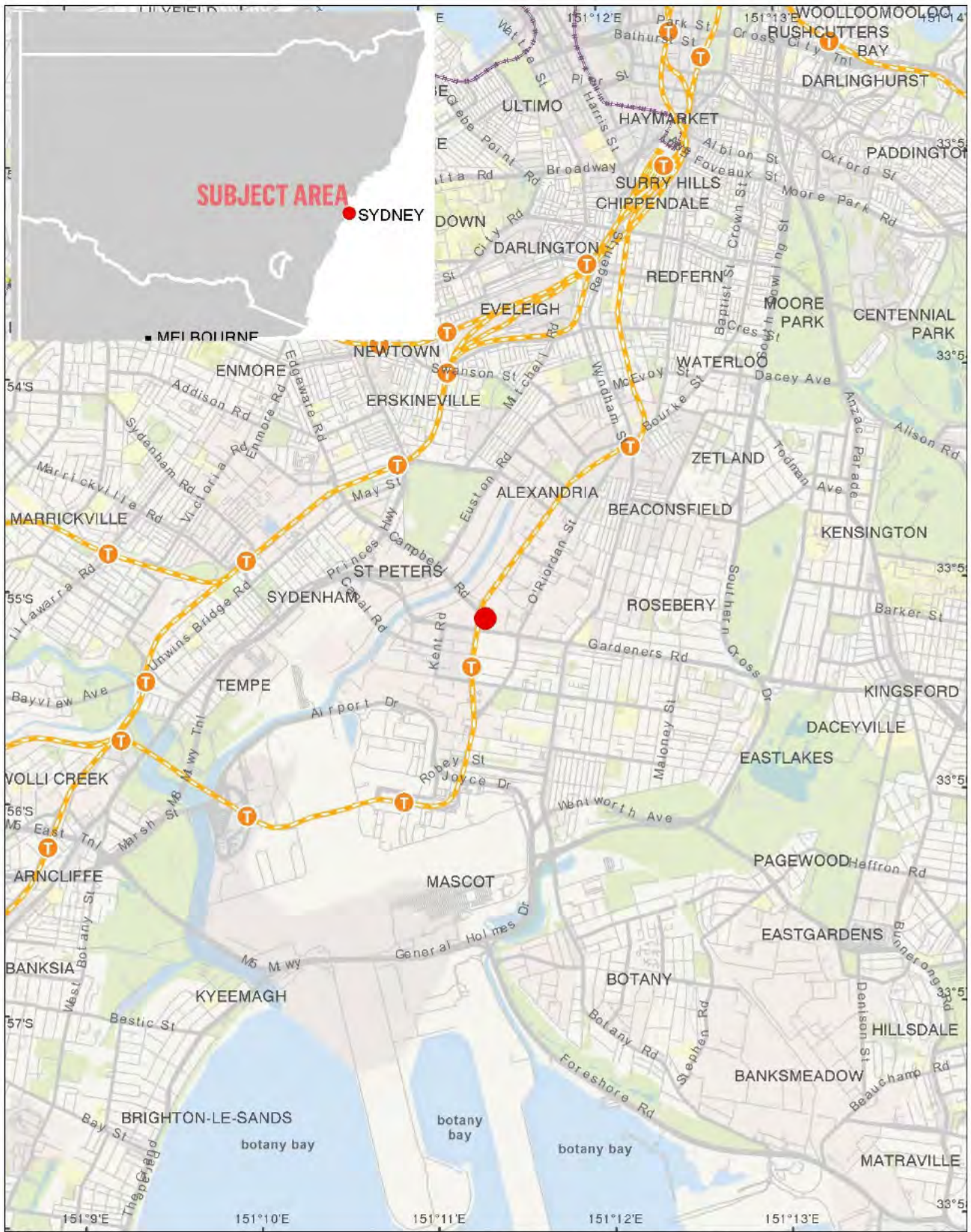
The present report has been prepared by Aaron Olsen (Urbis Consultant Archaeologist) with review and quality control undertaken by Balazs Hansel (Urbis Associate Director, Archaeology).

Aaron Olsen holds a Diploma of Arts (Archaeology) from the University of Sydney, a Bachelor of Science (Honours - First Class in Chemistry) and PhD (Chemistry) from the University of Newcastle and a Masters (Industrial Property) from the University of Technology Sydney. Sam Richards holds a Bachelor of Arts (Archaeology) from the University of Liverpool, United Kingdom. Balazs Hansel holds a Masters (History) and Masters (Archaeology and Museum Studies) from the University of Szeged (Hungary).

1.5. LIMITATIONS

The ACHA was limited to an assessment of the archaeological remains of Aboriginal cultural heritage and does not consider historical archaeological remains or built heritage items.

[The present draft ACHA report has been prepared based on the complete desktop assessment of the subject area. Consultation remains ongoing and, as such, the findings of the present ACHA report are preliminary and an assessment of significance and impact has not yet been made.]



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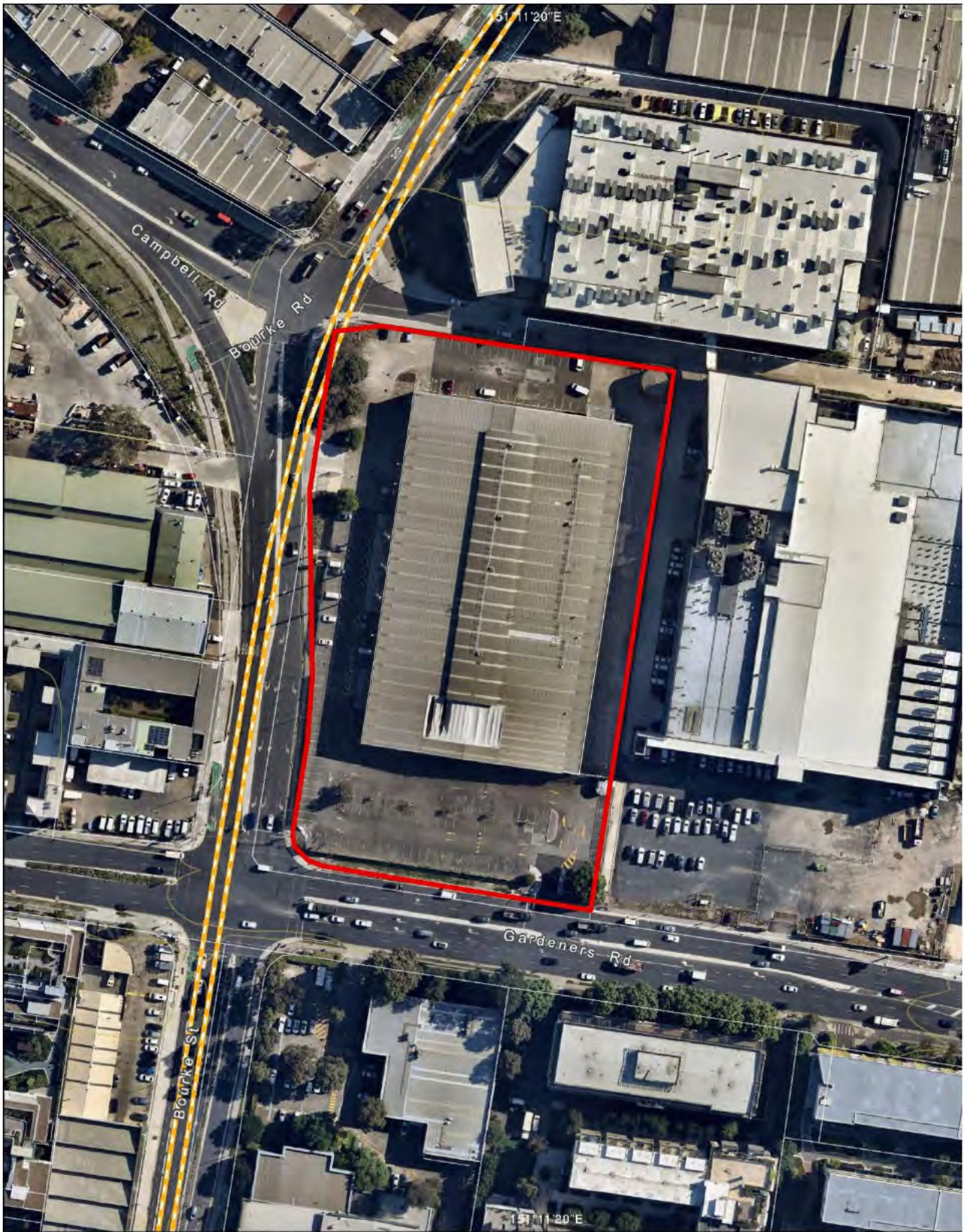
1 KM

Project No: P0032153
Project Manager: Balazs Hansel

● Subject Area

REGIONAL LOCATION
520 Gardeners Road, Alexandria
Charter Hall

Figure 1 – Regional location



GDA 1994 MGA Zone 56

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Project No: P0032153

Project Manager: Balazs Hansel

Subject Area — Contours

SUBJECT AREA

520 Gardeners Road, Alexandria
Charter Hall

Figure 2 – Location of the subject area

2. STATUTORY CONTEXT

2.1. HERITAGE CONTROLS

The protection and management of Aboriginal cultural heritage items, places and archaeological sites within New South Wales is governed by the relevant Commonwealth, State or local government legislation. These are discussed below in relation to the present subject area.

2.1.1. The National Parks and Wildlife Act 1974

Management of Aboriginal objects and places in NSW falls under the statutory control of the *National Parks and Wildlife Act 1974* (NPW Act). Application of the NPW Act is in accordance with the *National Parks and Wildlife Regulation 2019* (NPW Reg).

Section 5 of the NPW Act defines Aboriginal objects and Aboriginal places as follows:

Aboriginal object means any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.

Aboriginal place means any place declared to be an Aboriginal place under section 84 of the NPW Act.

The NPW Act provides statutory protection for Aboriginal objects, defining two tiers of offence against which individuals or corporations who harm Aboriginal objects or Aboriginal places can be prosecuted. The highest tier offences are reserved for knowledgeable harm of Aboriginal objects or knowledgeable desecration of Aboriginal places. Second tier offences are strict liability offences - that is, offences regardless of whether or not the offender knows they are harming an Aboriginal object or desecrating an Aboriginal place - against which defences may be established under the *National Parks and Wildlife Regulation 2009* (NSW) (the NPW Regulation).

It is an offence under section 86 of the NPW Act to harm or desecrate an Aboriginal object or place. Section 87 of the NPW Act specifies that that it is a defence to a prosecution for an offence under section 86 of the NPW Act that the harm or desecration was authorised by an Aboriginal Heritage Impact Permit (AHIP), provided the conditions to which that AHIP was subject were not contravened.

Regulation 61(1) of the NPW Regulation specifies that an application for the issue of an Aboriginal heritage impact permit must be accompanied by an ACHAR. The scope of the ACHAR is specified in Regulation 61(2) and 61(3):

- (2) *A cultural heritage assessment report is to deal with the following matters—*
 - (a) *the significance of the Aboriginal objects or Aboriginal places that are the subject of the application,*
 - (b) *the actual or likely harm to those Aboriginal objects or Aboriginal places from the proposed activity that is the subject of the application,*
 - (c) *any practical measures that may be taken to protect and conserve those Aboriginal objects or Aboriginal places,*
 - (d) *any practical measures that may be taken to avoid or mitigate any actual or likely harm to those Aboriginal objects or Aboriginal places.*
- (3) *A cultural heritage assessment report must include—*
 - (a) *if any submission has been received from a registered Aboriginal party under clause 60 (including any submission on the proposed methodology to be used in the preparation of the report and any submission on the draft report), a copy of the submission, and*
 - (b) *the applicant's response to each such submission.*

The present ACHAR is prepared in accordance with the above requirements.

2.1.2. Environment Protection and Biodiversity Conservation Act 1999

In 2004, a new Commonwealth heritage management system was introduced under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act protects any items listed in the National Heritage List (NHL) and the Commonwealth Heritage List (CHL).

The National Heritage List (NHL) is a list of natural, historic and Indigenous places of outstanding significance to the nation. It was established to protect places that have outstanding value to the nation.

The Commonwealth Heritage List (CHL) was established to protect items and places owned or managed by Commonwealth agencies. The Australian Government Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) is responsible for the implementation of national policy, programs and legislation to protect and conserve Australia's environment and heritage and to promote Australian arts and culture. Approval from the Minister is required for controlled actions which will have a significant impact on items and places included on the NHL or CHL.

2.1.3. Sydney Local Environment Plan 2012

The *Environmental Planning and Assessment Act 1979* (EP&A Act) requires each LGA to produce a Local Environment Plan (LEP). The LEP identifies items and areas of local heritage significance and outlines development consent requirements.

The subject area falls within the City of Sydney Local Government Area (Sydney LGA) and is subject to the Sydney Local Environmental Plan 2012 (Sydney LEP). Under Section 5.10(2) of the Sydney LEP, development consent is required for:

- (a) *demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance)—*
 - (i) *a heritage item,*
 - (ii) *an Aboriginal object,*
 - (iii) *a building, work, relic or tree within a heritage conservation area,*
- (b) *altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,*
- (c) *disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,*
- (d) *disturbing or excavating an Aboriginal place of heritage significance,*
- (e) *erecting a building on land—*
 - (i) *on which a heritage item is located or that is within a heritage conservation area, or*
 - (ii) *on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,*
- (f) *subdividing land—*
 - (i) *on which a heritage item is located or that is within a heritage conservation area, or*
 - (ii) *on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.*

The ACHA was undertaken to determine whether or not Aboriginal archaeological resources are present within the subject area.

2.1.4. Sydney Development Control Plan 2012

The EP&A Act requires each LGA to produce a Development Control Plan (DCP). Not all LGAs provide information regarding Aboriginal cultural heritage and specific development controls to protect Aboriginal cultural heritage.

The subject area is encompassed by the Sydney Development Control Plan 2012 (Sydney DCP).

Section 3.9 of the Sydney DCP makes general provisions for heritage, including Aboriginal cultural heritage. The objectives of Section 3.9 of the Sydney DCP are to

- (a) *Ensure that heritage significance is considered for heritage items, development within heritage conservation areas, and development affecting archaeological sites and places of Aboriginal heritage significance.*
- (b) *Enhance the character and heritage significance of heritage items and heritage conservation areas and ensure that infill development is designed to respond positively to the heritage character of adjoining and nearby buildings and features of the public domain.*

Aboriginal archaeological resources are addressed in Section 3.9.3 of the Sydney DCP, which states:

(1) An archaeological assessment is to be prepared by a suitably qualified archaeologist in accordance with the guidelines prepared by the NSW Office and Environment and Heritage.

(2) For development proposals in Central Sydney, refer to the Central Sydney Archaeological Zoning Plan to determine whether the development site has archaeological potential.

(3) An archaeological assessment is to be submitted as part of the Statement of Environmental Effects for development applications affecting an archaeological site or a place of Aboriginal heritage significance, or potential archaeological site that is likely to have heritage significance.

(4) An archaeological assessment is to include:

(a) an assessment of the archaeological potential of the archaeological site or place of Aboriginal heritage significance;

(b) the heritage significance of the archaeological site or place of Aboriginal heritage significance;

(c) the probable impact of the proposed development on the heritage significance of the archaeological site or place of Aboriginal heritage significance;

(d) the compatibility of the development with conservation policies contained within an applicable conservation management plan or conservation management strategy; and

(e) a management strategy to conserve the heritage significance of the archaeological site or place of Aboriginal heritage significance.

(5) If there is any likelihood that the development will have an impact on significant archaeological relics, development is to ensure that the impact is managed according to the assessed level of significance of those relics.

The ACHA was undertaken to determine whether or not Aboriginal archaeological sites and places of Aboriginal heritage significance are present within the subject area.

2.2. HERITAGE LISTS & REGISTERS

A review of relevant heritage lists and registers was undertaken to determine whether any Aboriginal cultural heritage items are located within the curtilage of, or in proximity to, the subject area.

2.2.1. Australian Heritage Database

The Australian Heritage Database is a database of heritage items included in the World Heritage List, the National Heritage List (NHL), the Commonwealth Heritage list (CHL) and places in the Register of the National Estate. The list also includes places under consideration, or that may have been considered, for any one of these lists.

A search of the Australian Heritage Database was undertaken on 11 November 2021. The search did not identify any heritage items within the curtilage of the subject area.

2.2.2. NSW State Heritage Inventory

The State Heritage Inventory (SHI) is a database of heritage items in NSW which includes declared Aboriginal Places, items listed on the SHR, listed Interim Heritage Orders (IHOs) and items listed of local heritage significance on a local council's LEP.

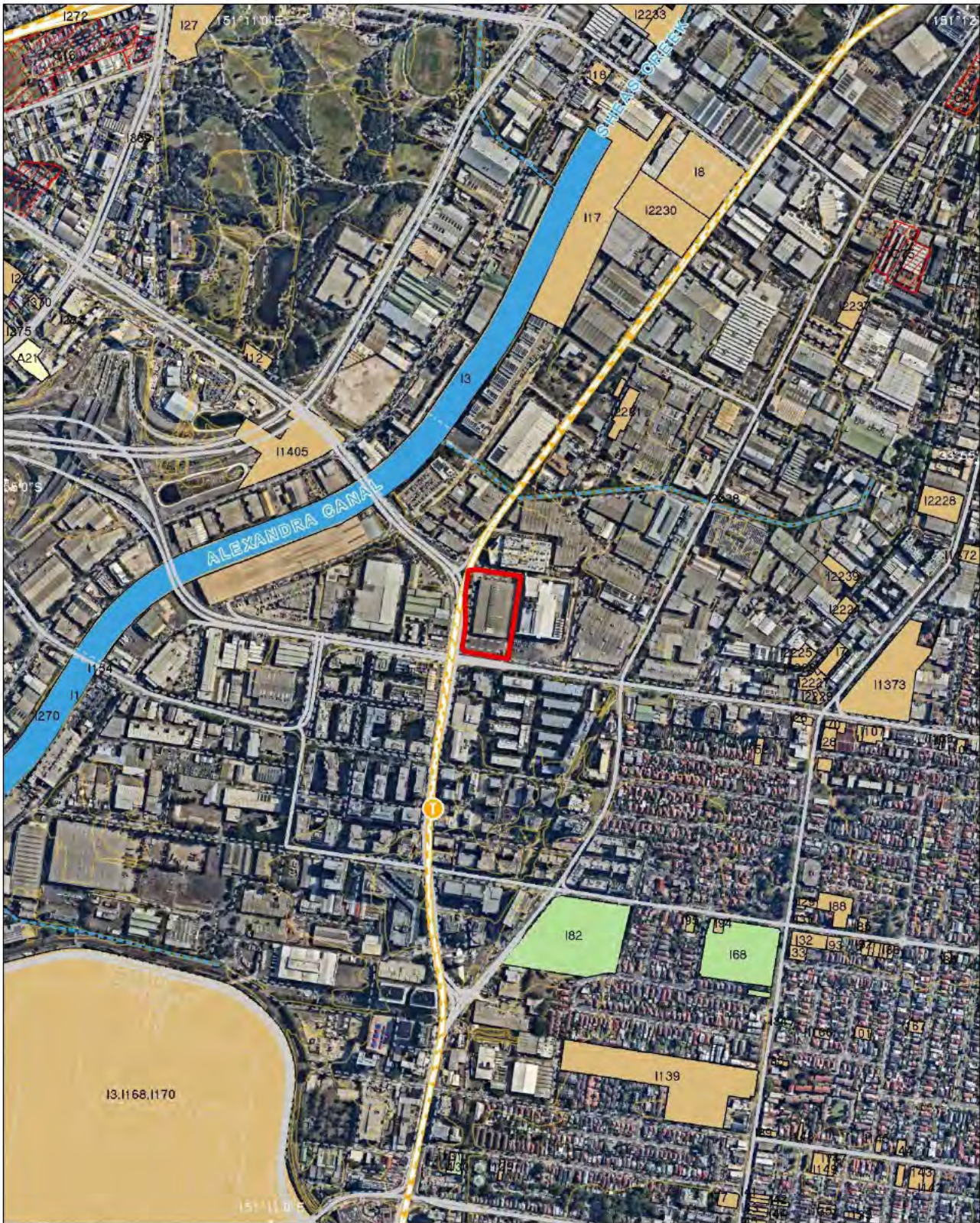
A search of the SHI was undertaken on 11 November 2021. The search did not identify any heritage items within the curtilage of the subject area.

2.3. SUMMARY

The statutory context of the subject area is summarised as follows:

- The present ACHA aims to establish whether any Aboriginal archaeological resources would be harmed by the proposed development of the subject area, thus addressing s.87(2) of the NPW Act, Section 5.10(2) of the Sydney LEP and Section 3.9 of the Sydney DCP.
- Searches of the State Heritage Inventory and Australian Heritage Database did not identify any heritage items within the curtilage of the subject area.

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1 KM

Project No: P0032153

Project Manager: Balazs Hansel

- Subject Area
- Hydrology
- Conservation Area - General
- Item - Archaeological
- Contours
- Item - General
- Item - Landscape

HERITAGE ITEMS

520 Gardeners Road, Alexandria
Charter Hall

Figure 3 – Historical heritage items in proximity to the subject area

3. ABORIGINAL COMMUNITY CONSULTATION

In administering its statutory functions under Part 6 of the *NSW National Parks and Wildlife Act 1974*, the Department of Premier and Cabinet (DPC) requires that Proponent consult with Aboriginal people about the Aboriginal cultural heritage values (cultural significance) of Aboriginal objects and/or places within any given development area in accordance with Clause 80c of the *NSW National Parks and Wildlife Regulation 2019*.

The DPC maintains that the objective of consultation with Aboriginal communities about the cultural heritage values of Aboriginal objects and places is to ensure that Aboriginal people have the opportunity to improve ACHA outcomes by (DECCW 2010a):

- Providing relevant information about the cultural significance and values of Aboriginal objects and/or places.
- Influencing the design of the method to assess cultural and scientific significance of Aboriginal objects and/or places.
- Actively contributing to the development of cultural heritage management options and recommendations for any Aboriginal objects and/or places within the proposed subject area.
- Commenting on draft assessment reports before they are submitted by the Proponent to the DPC.

Consultation in line with the Consultation Requirements (DECCW 2010) is a formal requirement where a Proponent is aware that their development activity has the potential to harm Aboriginal objects or places. The DPC also recommends that these requirements be used when the certainty of harm is not yet established but a proponent has, through some formal development mechanism, been required to undertake a cultural heritage assessment to establish the potential harm their proposal may have on Aboriginal objects and places.

The Consultation Requirements outline a four-stage consultation process that includes the following:

- Stage 1 – Notification of project proposal and registration of interest.
- Stage 2 – Presentation of information about the proposed project.
- Stage 3 – Gathering information about the cultural significance.
- Stage 4 – Review of draft cultural heritage assessment report.

The document also outlines the roles and responsibilities of the DPC, Registered Aboriginal Parties (RAPs) including Local and State Aboriginal Land Councils, and proponents throughout the consultation process.

To meet the requirements of consultation it is expected that proponents will:

- Bring the RAPs, or their nominated representatives, together and be responsible for ensuring appropriate administration and management of the consultation process.
- Consider the cultural perspectives, views, knowledge and advice of the RAPs involved in the consultation process in assessing cultural significance and developing any heritage management outcomes for Aboriginal objects(s) and/or places(s).
- Provide evidence to the DPC of consultation by including information relevant to the cultural perspectives, views, knowledge and advice provided by the RAPs.
- Accurately record and clearly articulate all consultation findings in the final cultural heritage assessment report.
- Provide copies of the cultural heritage assessment report to the RAPs who have been consulted.

The consultation process undertaken to seek active involvement from relevant Aboriginal representatives for the project followed the current NSW statutory guideline, namely, the Consultation Requirements. Section 1.3 of the Consultation Requirements describes the guiding principles of the document. The principles have been derived directly from the principles section of the *Australian Heritage Commission's Ask First: A guide to respecting Indigenous heritage places and values* (Australian Heritage Commission 2002).

The following outlines the process and results of the consultation conducted during this assessment to ascertain and reflect the Aboriginal cultural heritage values of the subject area.

3.1. STAGE 1: NOTIFICATION OF PROJECT AND REGISTRATION OF INTEREST

The aim of Stage 1 of the community consultation process is to identify, notify and register Aboriginal people who hold cultural knowledge relevant to determining the cultural significance of Aboriginal objects and/or places in the subject area.

3.1.1. Native Title

A search of the National Native Title Tribunal (NNTT) registers and databases was undertaken on 16 November 2021. The search identified no Native Title claims or registrations for the subject area. The NNTT was also contacted by email on 16 November 2021 to request a formal search of the NNTT Register. A reply was received on 17 November 2021 indicating that there are no Native Title Determination Applications, Determinations of Native Title, or Indigenous Land Use Agreements over the identified area.

3.1.2. Identification of Cultural Knowledge Holders

To identify Aboriginal people who may be interested in registering as Aboriginal parties for the project, the organisations stipulated in Section 4.1.2 of the Consultation Guidelines were contacted on 18 November 2021 (Table 3). The template for the emails sent to the above-mentioned organisations is included in Appendix C. A total of 52 Aboriginal groups and individuals with a potential interest in the subject area were identified during this stage.

Table 3 – Contacted organisations

| Organisation | Date Notification Sent | Date Response Received |
|--|------------------------|------------------------|
| Office of the Registrar, Aboriginal Land Rights Act 1983 | 18 November 2021 | n/a |
| Heritage NSW, Department of Premier and Cabinet | 18 November 2021 | 26 November 2021 |
| NTS Corp | 18 November 2021 | n/a |
| Greater Sydney Local Land Services | 18 November 2021 | 18 November 2021 |
| Metropolitan Local Aboriginal Land Council | 18 November 2021 | n/a |
| City of Sydney Council | 18 November 2021 | n/a |

In accordance with Section 4.1.3 of the Consultation Guidelines, letters were sent to the 52 identified Aboriginal groups and individuals by either email or post on 13 December 2021 to notify them of the proposed project. The letters included a brief introduction to the project and the project location and set a deadline for response of 7 January 2022, providing more than the minimum 14 days to register an interest required by the Consultation Requirements. A copy of the letter template is included in Appendix C.

Further in accordance with Section 4.1.3 of the Consultation Guidelines, an advertisement was placed in one local newspaper, the Koori Mail. The advertisement was published in the 15 December 2021 edition and registration was open until 7 January 2022, providing more than the minimum 14 days to register an interest required by the Consultation Requirements. A copy of the advertisement is included in Appendix C.

3.1.3. Registration of Interest

A total of 13 groups registered interest in the project as a result of this phase (Table 4). Acknowledgement emails or telephone calls were made by Urbis to all respondents to confirm registration had been received.

In accordance with Section 4.1.6 of the Consultation Guidelines, the list of Registered Aboriginal Parties (RAPs) was provided to Heritage NSW and the Metropolitan Local Aboriginal Land Council on 11 January 2022 (see Appendix C).

Table 4 – Registered Aboriginal Parties

| Organisation/Individual | Contact Person |
|-------------------------|----------------|
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |

3.2. STAGE 2: PRESENTATION OF PROJECT INFORMATION

The aim of Stage 2 of the community consultation process is to provide registered Aboriginal parties with information about the scope of the proposed project and the proposed cultural heritage assessment process.

The aim of Stage 2 of the community consultation process is to provide registered Aboriginal parties with information about the scope of the proposed project and the proposed cultural heritage assessment process.

3.2.1. Information Pack

A Stage 2/3 information pack was sent to registered Aboriginal parties via email on 13 January 2022. The information pack was prepared as a combination of Stage 2 and 3 of the Consultation Guidelines, and included the following information:

- Project overview, location and purpose.
- Proposed works.
- Project history.
- Brief archaeological and environmental background.
- Protocol of gathering information on cultural heritage significance.
- Request for comment on methodology and recommendations for site investigation, and request for any cultural information the respondent wished to share.

A response to the Stage 2/3 information pack was requested by 10 February 2022, providing the 28 days to respond required by the Consultation Requirements. A copy of the Stage 2/3 information pack is included in Appendix C of this report.

3.2.2. Site Inspection and Meeting

A separate communication was sent on 17 February 2022 to all RAPs who responded to the Stage 2/3 information pack by the deadline. The communication invited the RAPs to register for a site inspection and meeting to be held on 22 February 2022, between 10am and 12pm., which formed part of Stage 2/3 of the ACHA process.

The site inspection and meeting were conducted by Sam Richards (Urbis Senior Archaeologist) and Aaron Olsen (Urbis Consultant Archaeologist). The RAPs present at the site inspection and meeting are listed in Table 5. Also present were Lachlan Andrew and Ian Hardy of Project Strategy.

Table 5 – RAPs in attendance at site inspection and meeting

| Group | Representative |
|------------|----------------|
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |

The purpose of the site inspection and meeting was to conduct a thorough briefing with the RAPs about the proposed development, to conduct a walkover of the subject area with the RAPs, to discuss the information provided in the Stage 2/3 document provided and to discuss potential archaeological mitigation strategies.

The archaeological findings of the site inspection are discussed in Section 4.3 below.

3.3. STAGE 3: GATHERING CULTURAL INFORMATION

Stage 3 of the community consultation process is concerned with gathering feedback on a project, proposed methodologies, and obtaining any cultural information that registered Aboriginal parties wish to share. This may include ethno-historical information, or identification of significant sites or places in the local area.

3.3.1. Responses to Information Pack

Five responses were received in relation to the Stage 2/3 information pack. The responses are included in Appendix C. Of the responses received, two provided comments in relation to the subject area, which are addressed in Table 6 below.

Table 6 – RAP responses to the Stage 2/3 Information Pack

| RAP | Response | Urbis Response |
|------------|---|--|
| [REDACTED] | <p>This area is significant to the Darug people due to the evidence of continued occupation, within close proximity to this project site there is a complex of significant sites.</p> <p>Landscapes and landforms are significant to us for the information that they hold and the connection to Darug people. Aboriginal people (Darug) had a complex lifestyle that was based on respect and belonging to the land, all aspects of life and survival did not impact on the land but helped to care for and conserve land and the sustenance that the land provided. As Darug people moved through the land there were no impacts left, although there was evidence of movement and lifestyle, the people moved through areas with knowledge of their areas and followed signs that were left in the landscape. Darug people knew which areas were not to be entered and respected the areas that were sacred.</p> | <p>Urbis thanks [REDACTED] [REDACTED] for their comments and support for the recommendations made in the present report.</p> <p>Urbis acknowledges the importance landscape and landforms and the connectivity of all Aboriginal sites. These factors have been considered when assessing the archaeological potential</p> |

| | | |
|-------------------|--|---|
| | <p>Knowledge of culture, lifestyle and lore have been part of Darug people's lives for thousands of years, this was passed down to the next generations and this started with birth and continued for a lifetime. Darug people spent a lifetime learning and as people grew older they passed through stages of knowledge, elders became elders with the learning of stages of knowledge not by their age, being an elder is part of the kinship system this was a very complicated system based on respect.</p> <p>Darug sites are all connected, our country has a complex of sites that hold our heritage and past history, evidence of the Darug lifestyle and occupation are all across our country, due to the rapid development of Sydney many of our sites have been destroyed, our sites are thousands of years old and within the short period of time that Australia has been developed pre contact our sites have disappeared.</p> <p>...</p> <p>[REDACTED] have received and reviewed the report for 520 Gardeners Road, Alexandria.</p> <p>We support the recommendations set out in this report.</p> | <p>and significance of the subject area.</p> |
| <p>[REDACTED]</p> | <p>"Thank you for your ACHA for 520 Gardeners Road, Alexandria, NSW.</p> <p>We come from the sky, we were brought here by the creator to care for mother earth and shape her as she provides us with resources and provides life, we follow the water ways that were created by the rainbow serpent.</p> <p>We believe in our dreaming, song line's, spirituality and we have a lore and kinship way of life a sophisticated, civilized life.</p> <p>The study area is close to the Cooks River and Muddy Creek two main water ways that have been created by the rainbow serpent and have creation stories behind them and the flora and fauna surrounding them. These water ways are utilised by Aboriginal people as fresh water source and other resources in an abundance. There is also access the saltwater resources and room for acquire culture withing the area.</p> <p>Is there room for cultural interpretation within design and or native land scaping to highlight what the area would provide rich resources and an abundance of flora and fauna. It is important to incorporated this into projects in some way so we are not losing our natural landscape due to development.</p> <p>We would like to agree to your ACHA, and we support your report, we look forward to further consultation on this project."</p> | <p>Urbis thanks [REDACTED] [REDACTED] for their comments and support for the proposed methodology.</p> <p>Urbis acknowledges the significance of waterways, such as Cooks River and Muddy Creek, within the local area to Aboriginal people. These factors have been considered when assessing the archaeological potential and significance of the subject area.</p> <p>Urbis notes the recommendation for a cultural interpretation plan and/or native landscaping and confirm that native planting forms part of the proposed landscaping.</p> |

3.3.2. Feedback from Site Inspection and Meeting

During the site inspection and meeting of 22 February 2022, RAPs were given the opportunity to provide verbal feedback. RAPs were also provided with the opportunity to submit written information via email. The RAPs opted to provide feedback based on the site inspection following the Stage 4 review of the draft ACHA report.

3.4. STAGE 4: REVIEW OF DRAFT ACHAR

The aim of Stage 4 of the community consultation process is to prepare and finalise an ACHAR with input from Registered Aboriginal Parties.

[The draft ACHA will be sent to RAPs for review and comment after their feedback as part of consultation Stage 3 is obtained. The RAPs comments from Stage 4 will further inform the final conclusions and recommendations of the ACHA]

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4. ABORIGINAL CULTURAL HERITAGE

An assessment of Aboriginal cultural heritage within a particular subject area requires an understanding of the archaeological and environmental contexts in which the area is situated. The following is a review and analysis of those contexts for the present subject area.

4.1. ARCHAEOLOGICAL CONTEXT

A summary of background research for Aboriginal cultural heritage resources within and around the subject area is provided below, including search results from the Aboriginal Heritage Information Management System (AHIMS) and consideration of previous archaeological investigations pertinent to the subject area.

4.1.1. Past Aboriginal Land Use

Due to the absence of written records, much of our understanding of Aboriginal life pre-colonisation is informed by the histories documented in the late 18th and early 19th century by European observers. These histories provide an inherently biased interpretation of Aboriginal life both from the perspective of the observer but also through the act of observation. The social functions, activities and rituals recorded by Europeans may have been impacted by the Observer Effect, also known as the Hawthorne Effect. According to the Observer/Hawthorne Effect, individuals will modify their behaviour in response to their awareness of being observed. With this in mind, by comparing/contrasting these early observations with archaeological evidence is possible to establish a general understanding of the customs, social structure, languages and beliefs of Aboriginal people (Attenbrow 2010).

The archaeological record provides evidence of the long occupation of Aboriginal people in Australia. Current archaeological establishes occupation of the Australian mainland by as early as 65,000 years before present (BP) (Clarkson et al. 2017). The oldest date for a site in the Sydney region is at Pitt Town on the Hawkesbury River, which is dated to around 36,000 BP (Williams et al. 2014). Older occupation sites along the now submerged coastline would have been flooded around 10,000 years BP, with subsequent occupation concentrating along the current coastlines and rivers (Attenbrow 2010). The archaeological record indicates that Aboriginal people were occupying the region around the subject area well before the arrival of the First Fleet in 1788.

Given the early contact with Aboriginal people in the Sydney region, more is known about these groups than those that inhabited regional areas. The Aboriginal population in the greater Sydney region is estimated to have been between around 4000 and 8000 people at the time of European contact (Attenbrow 2010). The area around Alexandria, including the present subject area, was inhabited by the Gadigal (also Cadigal), belonging to the Eora people (Tench 1791). It is believed that the Gadigal people inhabited areas south of Port Jackson, from South Head in the east to Petersham in the west and the Cooks River in the south (Tindale 1974).

The archaeological record is limited to materials and objects that were able to withstand degradation and decay. As a result, the most common type of Aboriginal objects remaining in the archaeological record are stone artefacts. Flaked artefacts are typically the most common type of stone artefact encountered, in part due to their long and ubiquitous use, but also due to their high discard rate and the large amount of waste produced during manufacture. However, ground edged tools are also known to have been utilised by Aboriginal people in the Sydney region (Tench 1791). Stone technology and raw material utilisation changed over time. Until about 8,500 BP, stone tool technology remained fairly static with unifacial flaking being dominant and a preference for silicified tuff, quartz and some unheated silcrete evident. After about 4,000 BP, bipolar flaking and backed artefacts appear more frequently and ground stone axes are first observed (Attenbrow 2010:102; JMCHM 2006). From about 1,500 BP, there is evidence of a decline in stone tool manufacture, possibly due to an increase in the use of organic materials, changes in the way tools were made or changes in tool preferences (Attenbrow 2010). After European contact, Aboriginal people of the Sydney region continued to manufacture tools, sometimes with new materials such as bottle glass or ceramics (e.g. Ngara Consulting 2003).

Other materials, such as shell and bone, also survive in the archaeological record under certain conditions. There is evidence of reliance on river resources in the form of shell middens in the lands occupied by the Gadigal people. In the 1890s, dugong bones were discovered at Shea Creek during the construction of the Alexandra Canal, St Peters, approximately 750m west of the present subject area. The bones exhibited transverse and oblique cuts, which have been attributed to butchering by Aboriginal people (Etheridge et al. 1896). The dugong bones have been dated to around 5520±70 BP (Haworth et al. 2004).

Based on the above background, it is possible that similar evidence of Aboriginal occupation will also be present within original and/or intact topsoils throughout the Sydney urban area, including the region surrounding the present subject area.

4.1.2. Previous Archaeological Investigations

Previous archaeological investigations may provide invaluable information on the spatial distribution, nature and extent of archaeological resources in a given area. While no archaeological reports relating directly to the present subject area have been identified, a number of Aboriginal archaeological investigations have been undertaken in the surrounding area. Summaries of the most pertinent reports to the subject area are provided below.

Extent, 2017. Alexandria Park Community School, 7-11 Park Road Alexandria, Preliminary Aboriginal Archaeological Assessment

Extent undertook a preliminary archaeological assessment of the Alexandria Park Community School at 7-11 Park Road, Alexandria, located approximately 2km north of the present subject area. The assessment identified no Aboriginal objects within the study area. However, the study area is located within the sandy Tuggerah soil landscape and on the margins of the former Sheas Creek swamp, both of which are considered archaeologically sensitive landforms. While historical development and occupation of the study area caused some ground disturbance, it was determined that there was moderate to high potential for archaeological resources below capping fill layers. The Preliminary Aboriginal Archaeological Assessment recommended that a formal ACHA, including Aboriginal community consultation and a staged program of archaeological test excavations, be undertaken.

Artefact, 2016a. Sydney Metro Chatswood to Sydenham, Aboriginal Cultural Heritage Assessment.

Artefact undertook an Aboriginal Cultural Heritage Assessment (ACHA) in October 2016 for the Sydney Metro City & Southwest Chatswood to Sydenham project (SSI 7400). The ACHA followed an earlier Aboriginal Archaeological Assessment undertaken for the study area (Artefact, May 2016a; see below). The ACHA encompassed the Marrickville dive site, located approximately 1.9km north-west of the present subject area. The ACHAR reiterated the finding that the site had moderate to high archaeological potential, based on the presence of natural sediments below built structures. Archaeological test excavation was recommended as a harm mitigation measure where intact soil profiles are encountered with the potential to contain archaeological deposits.

Artefact, 2016b. Sydney Metro Chatswood to Sydenham, Aboriginal Heritage – Archaeological Assessment.

As part of the Sydney Metro City & Southwest Chatswood to Sydenham project (SSI 7400), an Aboriginal archaeological assessment of the proposed dive site at Marrickville was undertaken by Artefact in May 2016. The report notes that the site is likely to have been originally located on the margin of a low-lying drainage channel, which was canalised during industrial and commercial development of the area. Given the discovery of butchered dugong bones in nearby Shea Creek during the construction of Alexandra Canal in the 1890s (Etheridge et al. 1896), the area may have been a tidally influenced estuary utilised by Aboriginal people for resources. Geotechnical information from boreholes placed in the nearby Murray Street easement and the Edgware Road easement indicate a soil profile consisting of between 0.7–1.3 m of fill overlying a 0.6 m of thick silty clay alluvium layer, which overlies residual sediments to a depth of 7.5 m. Despite an extensive built environment and drainage modification, the deep nature of the residual underlying sediments indicates that there is likely to be some remaining archaeological potential at the site. The report concludes that there is moderate-high archaeological potential for Aboriginal objects in sub-surface contexts where there have not been extensive sub-surface impacts. The report recommended further archaeological investigation of the site, potentially including archaeological test and salvage excavation, where surviving natural soils are identified.

AHMS, 2012. Aboriginal and Historical Archaeological Impact Assessment Eastlakes Shopping Centre, Eastlakes, NSW

Archaeological and Heritage Management Solutions Pty Ltd (AHMS) undertook an Aboriginal and historical archaeological impact assessment of the Eastlakes Shopping Centre, Eastlakes, located approximately 2.2km west of the present subject area. The study area is located within the Tuggerah soil landscape. The assessment determined that historical land use is likely to have destroyed later archaeological deposit. However, as the soil profile beneath the study area was not fully known, it was determined that there is the potential for older Pleistocene period (>11,000 BP) soil profiles to survive intact. It was further noted that should Aboriginal archaeological remains from the Pleistocene period be retained within the study area, they would

be considered to have high scientific and cultural significance. It was recommended that an archaeologist should be engaged to prepare briefing documents for site workers and a monitoring plan that would apply to the excavation of the subject site during development works.

The previous archaeological investigations discussed above address similar contexts to the present subject area, including the Tuggerah soil landscape or other intact natural soils below a modern fill layer. Each report acknowledges the possibility of subsurface deposits within the intact subsurface soils, potentially dating to the Pleistocene period. Consequently, the reports acknowledge some potential for subsurface remains and recommend either archaeological excavation or monitoring.

4.1.3. AHIMS Database

The Aboriginal Heritage Information Management System (AHIMS) database comprises previously registered Aboriginal archaeological objects and cultural heritage places in NSW and it is managed by the Department of Premier and Cabinet (DPC) under Section 90Q of the NPW Act. 'Aboriginal objects' is the official term used in AHIMS for Aboriginal archaeological sites. The terms 'Aboriginal sites', 'AHIMS sites' and 'sites' are used herein to describe the nature and spatial distribution of archaeological resources in relation to the subject area.

A search of the Aboriginal Heritage Information Management System (AHIMS) was carried out on 11 November 2021 (AHIMS Client Service ID: 638083) for an area of approximately 10km x 10km. A summary of all previously registered Aboriginal sites within the extensive search area is provided in Table 7 and their spatial distribution is shown in Figure 4. The Basic and Extensive AHIMS search results are included in Appendix A. The results of the search are discussed below.

Table 7 – Summary of extensive AHIMS search (AHIMS Client Service ID: 638083)

| Site Type | Context | Total | Percentage |
|------------------------------------|---------|-----------|-------------|
| PAD | Open | 16 | 40% |
| Artefact Scatter | Open | 9 | 23% |
| Isolated Find | Open | 3 | 8% |
| Midden | Open | 3 | 8% |
| Hearth | Open | 2 | 5% |
| Aboriginal Gathering | Open | 1 | 3% |
| Art | Open | 1 | 3% |
| Artefact Scatter with Contact Site | Open | 1 | 3% |
| Artefact Scatter with PAD | Open | 1 | 3% |
| Burial with Midden | Open | 1 | 3% |
| Shelter with Art | Closed | 1 | 3% |
| Shelter with Art and Midden | Closed | 1 | 3% |
| Total | | 40 | 100% |

The AHIMS search identified no Aboriginal objects and no Aboriginal places within the curtilage of the subject area. The nearest registered Aboriginal object is the Shea's Creek Dugong site (██████████), located approximately 750m to the west of the subject area (see also Section 4.1.1).

In the broader search area, a total of 45 Aboriginal objects and no Aboriginal places are registered. Four were identified as 'not a site' in the search results and one was identified as a duplicate, reducing the total number of identified Aboriginal objects to 40 (Table 7).

It is evident from the AHIMS search results that there is a paucity of registered Aboriginal objects within the vicinity of the present subject area. While this may indicate low Aboriginal land use, it is important to note that the AHIMS register does not represent a comprehensive list of all Aboriginal objects or sites in a specified area. Most registered sites in urban area are identified through targeted surveys for infrastructure and maintenance works, with the restrictions on extent and scope of those developments. Therefore, a further (or alternative) explanation for the paucity of registered Aboriginal sites near the subject area is a lack of archaeological investigation rather than low Aboriginal land use.

4.1.4. Conclusions Drawn from Archaeological Context

The following conclusions are drawn from the archaeological background information, including AHIMS results and pertinent regional archaeological investigations:

- No Aboriginal objects or Aboriginal places are registered within the subject area.
- No previous Aboriginal archaeological investigations have been identified that directly address the subject area.
- Previous archaeological investigations from similar contexts near to the subject area identified the potential for archaeological resources dating to the Pleistocene within intact natural soils below modern fill layers.

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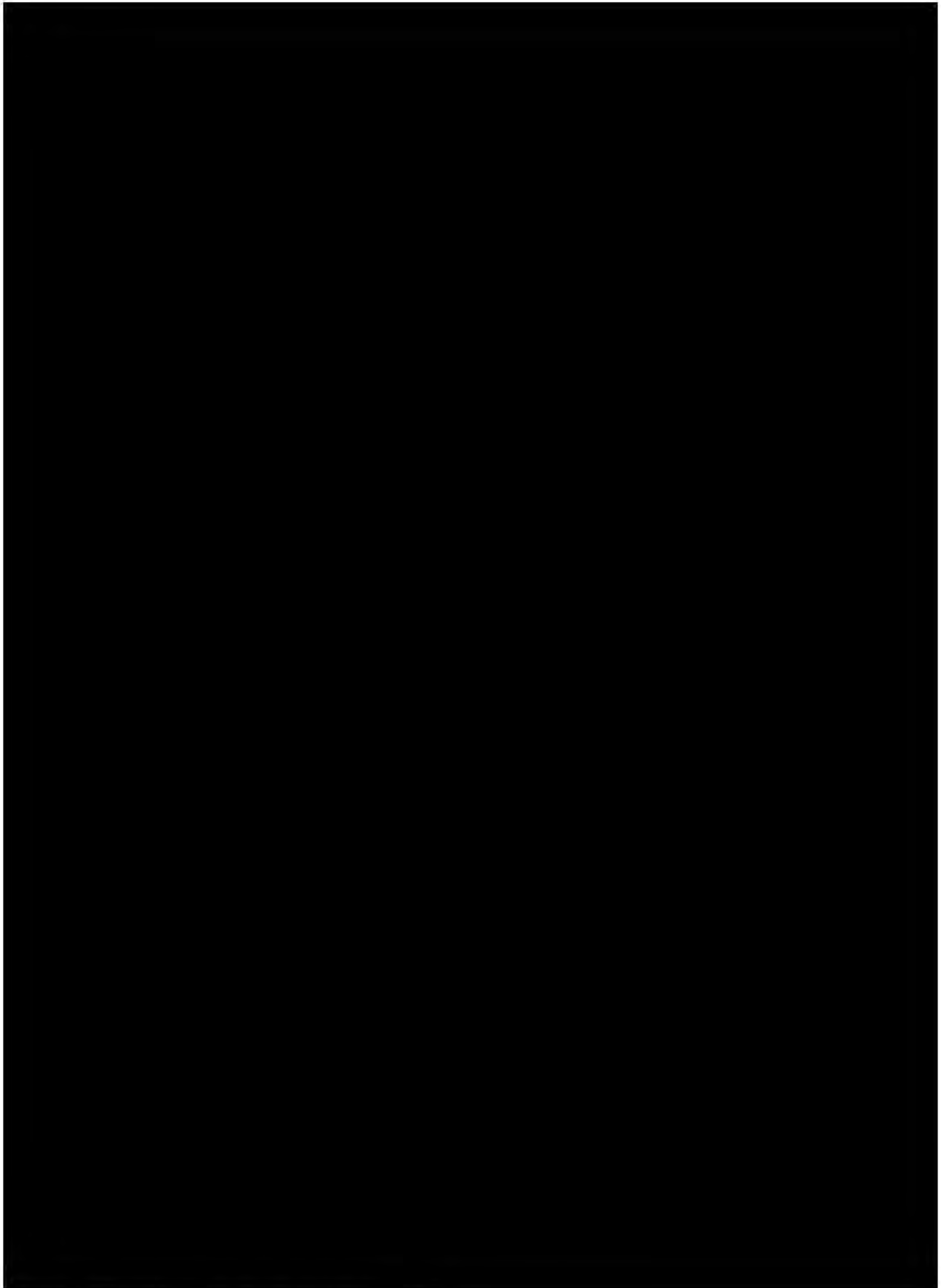


Figure 4 – Map of AHIMS sites in extensive search area

4.2. ENVIRONMENTAL CONTEXT

The environmental context of a subject area is relevant to its potential for Aboriginal objects and places. Aboriginal objects may be associated with certain landscape features that played a part in the everyday lives and traditional cultural activities of Aboriginal people. Landscape features that are considered indicative of archaeological potential include rock shelters, sand dunes, waterways, waterholes and wetlands. Conversely, disturbance to the landscape after Aboriginal use may reduce the potential for Aboriginal objects and places. An analysis of the landscape within and near to the subject area is provided below.

4.2.1. Soil Landscape and Geology

Certain soil landscapes and geological features are associated with greater archaeological potential for Aboriginal objects and places. For example, sand dune systems are associated with the potential presence of burials and sandstone outcrops are associated with the potential presence of grinding grooves and rock art. The depth of natural soils is also relevant to the potential for archaeological materials to be present, especially in areas where disturbance is high. In general, as disturbance level increases, the integrity of any potential archaeological resource decreases. However, disturbance might not remove the archaeological potential even if it decreases integrity of the resources substantially.

The NSW Soil and Land Information System (SALIS) provides information on expected soil landscapes within NSW. The subject area is identified as lying entirely within the Tuggerah soil landscape (Figure 6). The Tuggerah soil landscape is described as residing upon gently undulating to rolling coastal dunefields. Soils are described as deep (>200 cm) Podzols (Uc2.31, Uc2.32, Uc2.34) on dunes and Podzols/Humus Podzol intergrades (Uc2.23, Uc2.21, Uc2.3, Uc4.33) on swales. Dominant soil materials include loose speckled grey-brown loamy sand, bleached loose sand, grey-brown mottled sand, black soft sandy organic pan, brown soft sandy iron pan and yellow massive sand.

A geotechnical investigation of the subject area was undertaken by PSM to determine the subsurface conditions of the subject area (PSM 2021). The report presents the findings from two new boreholes and one previous borehole. The geotechnical findings are consistent with the subject area being located in the sandy Tuggerah soil landscape, with intact natural sand being found at a depth of between 2 and 2.35 below the ground surface. Above that depth, modern fill and pavement were encountered, indicating disturbance of the natural soil profile to a significant depth. Groundwater was encountered at a depth of 2 to 2.5 m below the ground surface, approximately corresponding with the depth of the natural sand body. It is likely that the intact natural soils date to the Pleistocene (>11,000 BP).

The sandy soils of the Tuggerah soil landscape are considered archaeologically sensitive. However, ground disturbance to a depth of 2m below the existing ground surface significantly reduces the likelihood of Aboriginal objects being retained.

Table 8 – Geotechnical borehole findings

| Inferred Unit | Encountered Depth to Top of Unit (m) | Description |
|---------------|--------------------------------------|--|
| Pavement | 0.13 - 0.18 | Concrete underlying asphalt pavement. |
| Fill | 0.25 - 0.32 | Gravelly sand, brown to grey, dry, poorly sorted subangular to subrounded fine to medium coarse grains, with inclusions of gravel up to 40mm, thickness ranging from approximately 1.7 to 1.75m. |
| Sand | 2.0 - 2.35 | Medium dense to dense silty sand to sand, thickness ranging from approximately 12.65 to 13.3 m, interbedded with bands of clay and silty clay up to 500mm thick. A clay layer up to 0.75m thick (between 2.6 and 3.3 m) could be observed in this unit (in CPT03). The clay is observed to be soft to firm consistency. |
| Clay | 15.0 - 15.3 | Firm to very stiff clay to silty clay, orange grey to brown-grey thickness ranging from approximately 8.1 to 11.33 m. |
| Bedrock A | 23.1 - 26.6 | Shale, extremely to highly weathered, very low strength. |
| Bedrock B | 25.4 - 27.5 | Shale, moderate grey to dark grey, low to medium strength. |

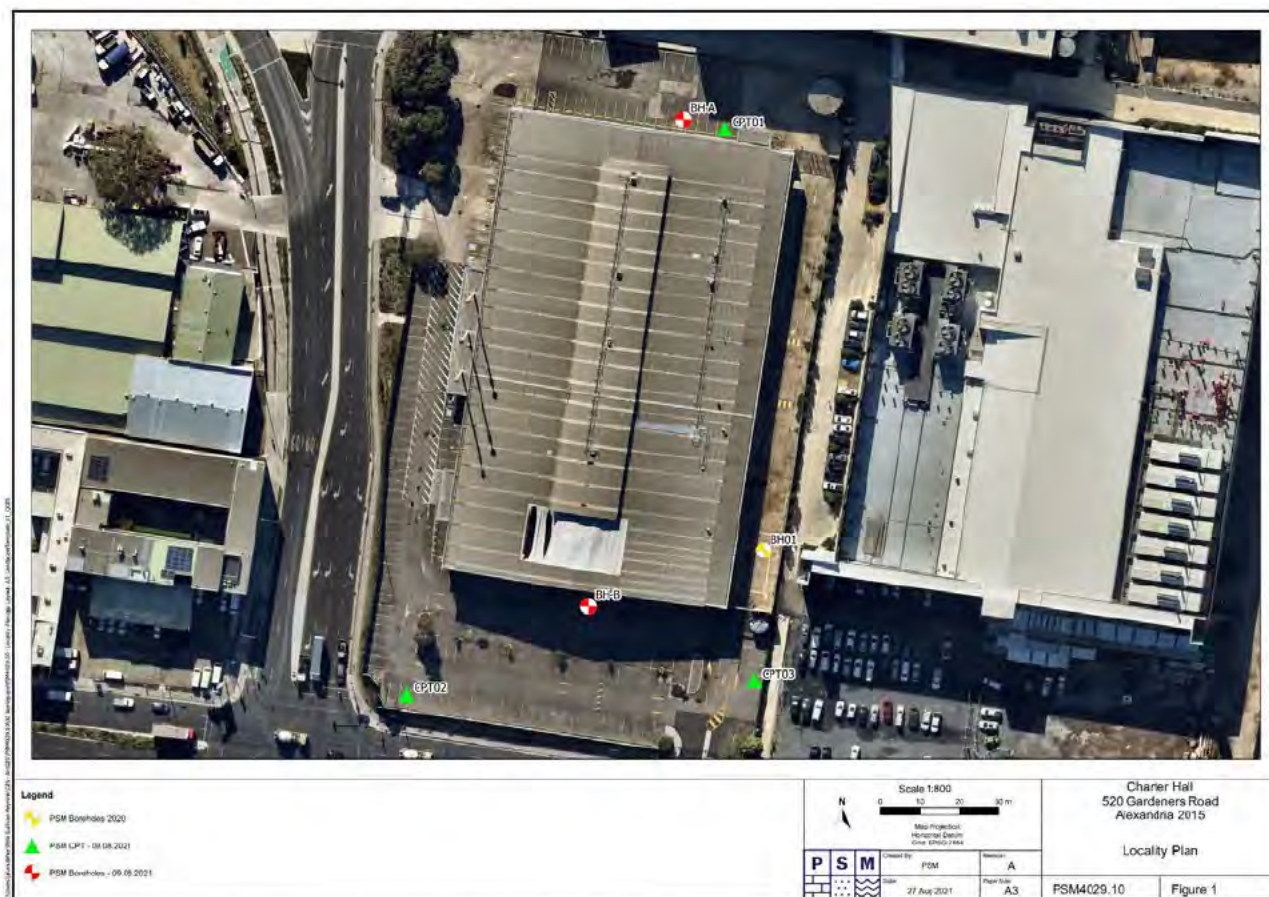


Figure 5 – Location of geotechnical boreholes within subject area

Source: PSM

4.2.2. Topography

Certain landform elements are associated with greater archaeological potential for Aboriginal objects and places. Areas that are located on a ridge top, ridge line or headland, located within 200m below or above a cliff face or within 20m of or in a cave, rock shelter or cave mouth are considered sensitive areas for Aboriginal objects and places.

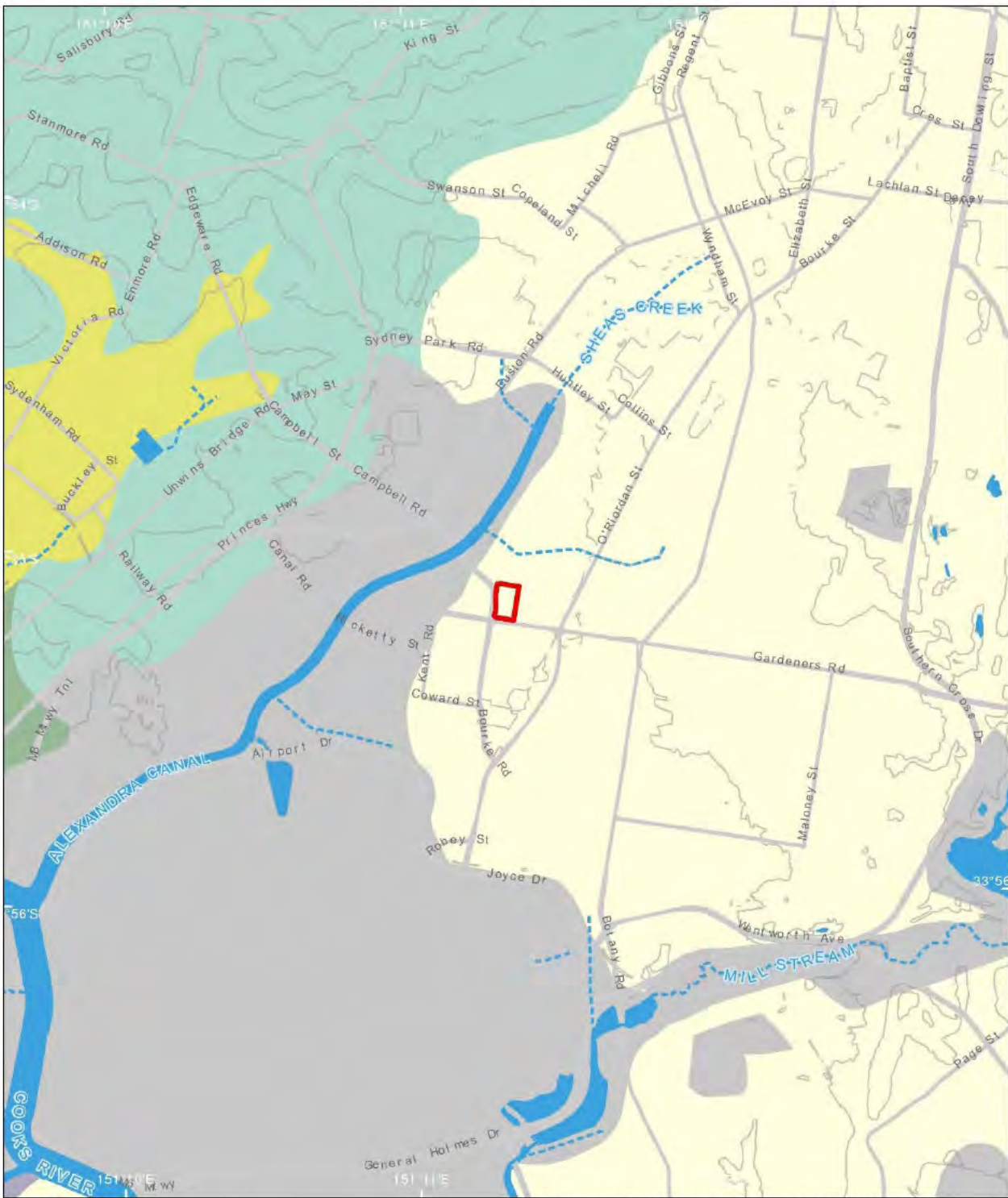
The subject area has a generally flat topography. It is not associated with any topographic features that are considered to be archaeologically sensitive.

4.2.3. Vegetation

The presence of certain types of vegetation within in an area may be indicative of archaeological potential for certain site types, such as modified trees, or more generally of the habitability of an area for Aboriginal people.

The original vegetation of the Tuggerah soil landscape would have comprised dry sclerophyll eucalypt and apple woodland. Dominant tree species likely included smooth-barked apple (*Angophora costata*), Sydney peppermint (*Eucalyptus piperita*) and old man banksia (*Banksia aemula*). The shrubby sclerophyllous understorey likely included many species including bracken (*Pteridium esculentum*), Christmas bush (*Ceratopetalum gummiferum*), woody pear (*Xylomelum pyriforme*) and prickly moses (*Acacia ulicifolia*). The variety of floral and faunal species in the subject area could have been utilised by Aboriginal people for medicinal, ceremonial and subsistence purposes.

As discussed in Section 4.2.5, historical development has resulted in the clearance of all original vegetation. There is therefore no possibility of culturally modified trees being retained.



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SOIL LANDSCAPES AND HYDROLOGY

520 Gardeners Road, Alexandria
Charter Hall

Figure 6 – Soil Landscapes and Hydrology

4.2.4. Hydrology

Proximity to a body of water is a factor in determining archaeological potential. Areas within 200m of the whole or any part of a river, stream, lake, lagoon, swamp, wetlands, natural watercourse or the high-tide mark of shorelines (including the sea) are considered sensitive areas for Aboriginal objects and places.

The nearest extant waterway to the subject area is the Alexandra Canal, approximately 250m to the north-west, which is the path of the former Shea's Creek (Figure 6). However, a map of the Parish of Alexandria from 1900 shows a tributary of Shea's Creek along the eastern boundary of the subject area (Figure 7). The tributary was likely an ephemeral stream that has now been incorporated into stormwater drainage system.

As the subject area is located within 200m of a former waterway, the hydrology of the subject area is considered to be archaeologically sensitive. However, as noted in Section 4.2.1 above, ground disturbance to a depth of 2m below the existing ground surface significantly reduces the likelihood of Aboriginal objects being retained.

4.2.5. Historical Ground Disturbance

Historical ground disturbance, either through human activity (e.g. soil ploughing, construction of buildings and clearing of vegetation) or natural processes (e.g. erosion) reduce the spatial and vertical integrity of archaeological resources within a subject area and expose sub-surface deposits. Ground disturbance can thus reduce the archaeological potential of a site.

The subject area is located within a 1400-acre land grant made to William Hutchison in 1823 (Figure 7). Hutchison's grant, which he named 'Waterloo Estate', changed hands several times over the 19th century, before being subdivided in the 1880s (The Dictionary of Sydney). The subject area appears to have been largely undeveloped until the 20th century.



Figure 7 – Detail of map of Parish of Alexandria, 1900; the subject area (red dot) is shown located to a tributary stream of Shea's Creek (arrow)

Source: NSWLRS

An aerial photograph of the subject area from 1943 (Figure 8) shows that it had been developed for industrial purposes by this time. The subject area had been entirely cleared of vegetation. A large warehouse occupies much of the eastern half of the subject area, with a single smaller structure present in the western portion. A number of stockpiles of goods are also evident. Scarring of the ground is evident across the remainder the subject area, likely due to the movement of vehicles and storage of goods.



Figure 8 – Aerial photograph of subject area (outlined in red), 1943

Source: NSW Government Spatial Services, Historical Imagery Viewer

By 1955, the earlier warehouse had been expanded to occupy most of the subject area, with only two small strips of land along the western and southern boundary remaining outside building footprints (Figure 9). Within those strips of land, access roads and are evident, along with further evidence of storage of goods.

By 1996, the former warehouses had been demolished and the existing warehouse built (Figure 10). The existing warehouse largely overlaps with the footprint of the earlier warehouse, albeit slightly smaller. The area immediately surrounding the warehouse had been paved for vehicle access and parking. A strip of land along the western and southern boundary had been landscaped, with planting of trees and grass.

It is apparent from the above analysis that the subject area has been exposed to various activities that are likely to have caused ground disturbance since at least the mid-20th century, including land clearance. The entire subject area is assessed to have been subjected to a high level of ground disturbance associated with land clearance, the construction and demolition of buildings and the utilisation of the subject area for industrial purposes, including storage of goods and vehicle traffic. The assessed disturbance to the ground surface is reflected in the geotechnical evidence, which found a layer of human modified material to a depth of at least 2m below the ground surface (see Section 4.2.1 above).

The high level of historical ground disturbance to which the subject area has been subjected is likely to have significantly reduced the potential for Aboriginal objects to be retained.



Figure 9 – Aerial photograph of subject area (outlined in red), 1955
Source: NSW Government Spatial Services, Historical Imagery Viewer



Figure 10 – Aerial photograph of subject area (outlined in red), 1996
Source: NSW Government Spatial Services, Historical Imagery Viewer

4.2.6. Conclusions Drawn from Environmental Context

The following conclusions are drawn from the above assessment of the environmental context of the subject area:

- The subject area is located in the Tuggerah soil landscape and within 200m of a former low order, ephemeral waterway, which are considered archaeologically sensitive landscape features.
- Historical activities, including construction and demolition of buildings and utilisation of the subject area for industrial purposes, are determined to have caused a high level of ground disturbance across the subject area.
- Geotechnical findings confirm the impact of historical activities on the soil profile, with disturbance being encountered to a minimum depth of 2m below the existing ground surface.

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4.3. VISUAL INSPECTION

[The results of a visual inspection of the subject area by a qualified archaeologist will be included in the ACHA report prior to sending to the RAPs during Stage 2]

4.4. PREDICTIVE MODEL

A predictive model may be used to estimate the nature and distribution of evidence of Aboriginal land use in a subject area. A predictive model should consider variables that may influence the location, distribution and density of sites, features or artefacts within a subject area. Variables typically relate to the environment and topography, such as soils, landscape features, slope, landform and cultural resources.

The general process archaeologists employ to determine the likelihood of any particular site type (artefact scatter, shelter, midden etc) occurring within a given subject area requires the synthesis of information for general distribution of archaeological sites within the wider area including:

- Detailed analysis of previous archaeological investigations within the same region.
- Presence or absence of landscape features that present potential for archaeological resources (human occupation, use) such as raised terraces adjacent to permeant water.
- Analysis of the geology and soil landscape within the subject area which allows for a determination to be made of the type of raw material that would have been available for artefact production (silcrete, tuff, quartz etc) and the potential for the accumulation of archaeological resource within the subject area.
- Investigation of and determination of the level of disturbance/historical land use within the subject area which may impact on or remove entirely any potential archaeological material.

An indicative process of determining the likelihood of a given site occurring within a subject area is provided in Table 9 below.

Table 9 – Indicative process for determining the potential presence of a site

| Likelihood | Indicative subject area context | Indicative action |
|------------|--|---|
| High | Low level of ground disturbance in combination with at least one archaeologically sensitive landscape feature or Aboriginal object (either registered or newly identified) within the subject area. | Detailed archaeological investigation including but not limited to survey, test excavation and potentially (depending on density and/or significance of archaeological deposit) salvage excavation. |
| Moderate | Moderate level of ground disturbance in combination with at least one archaeologically sensitive landscape feature or Aboriginal object (either registered or newly identified) within the subject area. | Detailed archaeological investigation including but not limited to survey, test excavation and potentially (depending on density and/or significance of archaeological deposit) salvage excavation. |
| Low | High level of ground disturbance in combination with at least one archaeologically sensitive landscape feature or Aboriginal object (either registered or newly identified) within the subject area. | Employ chance finds procedure and works can continue without further archaeological investigation. |
| Nil | Complete ground disturbance (i.e. complete removal of natural soil landscape); or no archaeologically sensitive landscape features and no archaeological sites within subject area. | Employ chance finds procedure and works can continue without further archaeological investigation. |

4.4.1. Typical Site Types

A range of Aboriginal site types are known to occur within New South Wales. Site types that are typically encountered in the Cumberland Plain are described below.

Art sites can occur in the form of rock engravings or pigment on sandstone outcrops or within shelters. An engraving is some form of image which has been pecked or carved into a rock surface. Engravings typically vary in size and nature, with small abstract geometric forms as well as anthropomorphic figures and animals also depicted. In the Sydney region engravings tend to be located on the tops of Hawkesbury Sandstone ridges where vistas occur. Pigment art is the result of the application of material to a stone to leave a distinct impression. Pigment types include ochre, charcoal and pipeclay. Pigment art within the Sydney region is usually located in areas associated with habitation and sustenance.

Artefact Scatters/Camp Sites represent past Aboriginal subsistence and stone knapping activities and include archaeological remains such as stone artefacts and hearths. This site type usually appears as surface scatters of stone artefacts in areas where vegetation is limited, and ground surface visibility increases. Such scatters of artefacts are also often exposed by erosion, agricultural events such as ploughing, and the creation of informal, unsealed vehicle access tracks and walking paths. These types of sites are often located on dry, relatively flat land along or adjacent to rivers and creeks. Camp sites containing surface or subsurface deposit from repeated or continued occupation are more likely to occur on elevated ground near the most permanent, reliable water sources. Flat, open areas associated with creeks and their resource-rich surrounds would have offered ideal camping areas to the Aboriginal inhabitants of the local area.

Bora / Ceremonial Sites are locations that have spiritual or ceremonial values to Aboriginal people. Aboriginal ceremonial sites may comprise natural landforms and, in some cases, will also have archaeological material. Bora grounds are a ceremonial site type, usually consisting of a cleared area around one or more raised earth circles, and often comprised of two circles of different sizes, connected by a pathway, and accompanied by ground drawings or mouldings of people, animals or deities, and geometrically carved designs on the surrounding trees.

Burials of the dead often took place relatively close to camp site locations. This is due to the fact that most people tended to die in or close to camp (unless killed in warfare or hunting accidents), and it is difficult to move a body long distance. Soft, sandy soils on, or close to, rivers and creeks allowed for easier movement of earth for burial; and burials may also occur within rock shelters or middens. Aboriginal burial sites may be marked by stone cairns, carved trees or a natural landmark. Burial sites may also be identified through historic records or oral histories.

Contact Sites are most likely to occur in locations of Aboriginal and settler interaction, such as on the edge of pastoral properties or towns. Artefacts located at such sites may involve the use of introduced materials such as glass or ceramics by Aboriginal people or be sites of Aboriginal occupation in the historical period.

Grinding Grooves are the physical evidence of tool making or food processing activities undertaken by Aboriginal people. The manual rubbing of stones against other stones creates grooves in the rock; these are usually found on flat areas of abrasive rock such as sandstone. They may be associated with creek beds, or water sources such as rock pools in creek beds and on platforms, as water enables wet-grinding to occur.

Isolated Finds represent artefactual material in singular, one-off occurrences. Isolated finds are generally indicative of stone tool production, although can also include contact sites. Isolated finds may represent a single item discard event or be the result of limited stone knapping activity. The presence of such isolated artefacts may indicate the presence of a more extensive, in situ buried archaeological deposit, or a larger deposit obscured by low ground visibility. Isolated artefacts are likely to be located on landforms associated with past Aboriginal activities, such as ridgelines that would have provided ease of movement through the area, and level areas with access to water, particularly creeks and rivers.

Middens are indicative of Aboriginal habitation, subsistence and resource extraction. Midden sites are expressed through the occurrence of shell deposits of edible shell species often associated with dark, ashy soil and charcoal. Middens often occur in shelters, or in eroded or collapsed sand dunes. Middens occur along the coast or in proximity to waterways, where edible resources were extracted. Midden may represent a single meal or an accumulation over a long period of time involving many different activities. They are also often associated with other artefact types.

Modified Trees are evidence of the utilisation of trees by Aboriginal people for various purposes, including the construction of shelters (huts), canoes, paddles, shields, baskets and bowls, fishing lines, cloaks, torches and bedding, as well as being beaten into fibre for string bags or ornaments. The removal of bark exposes the

heart wood of the tree, resulting in a scar. Trees may also have been scarred in order to gain access to food resources (e.g. cutting toeholds so as to climb the tree and catch possums or birds), or to mark locations such as tribal territories. Such scars, when they occur, are typically described as scarred trees. These sites most often occur in areas with mature, remnant native vegetation. The locations of scarred trees often reflect an absence of historical clearance of vegetation rather than the actual pattern of scarred trees. Carved trees are different from scarred trees, and the carved designs may indicate totemic affiliation; they may also have been carved for ceremonial purposes or as grave markers.

Potential Archaeological Deposits (PADs) are areas where there is no surface expression of stone artefacts, but due to a landscape feature there is a strong likelihood that the area will contain buried deposits of stone artefacts. Landscape features which may feature in PADs include proximity to waterways, particularly terraces and flats near third order streams and above; ridge lines, ridge tops and sand dune systems.

Shelters are places of Aboriginal habitation. They take the form of rock overhangs which provided shelter and safety to Aboriginal people. Suitable overhangs must be large and wide enough to have accommodated people with low flooding risk. Due to the nature of these sites, with generic rock overhangs common particularly in areas with an abundance of sandstone, their use by Aboriginal people is generally confirmed through the correlation of other site types including middens, art, PAD and/or artefactual deposits.

4.4.2. Assessment of Archaeological Potential

The likelihood of the site types described in 4.4.1 above occurring within the present subject area is assessed in Table 10 below.

[The following assessment of archaeological potential is subject to confirmation by visual inspection]

Table 10 – Predictive Model

| Site Type | Assessment | Potential |
|--------------------------------------|--|-----------------|
| Art | The subject area does not include any visible sandstone outcrops or rock overhangs that would be indicative of the potential for rock art (Section 4.2.2). The likelihood of any concealed rock overhangs or sandstone outcrops being present within the subject area is considered to be negligible. | Nil |
| Artefact Scatters / Campsites | The subject area is located within the soft, sandy Tuggerah soil landscape (Section 4.2.1) and is located in proximity to a former low-order natural waterway (Section 4.2.4), both of which are indicative of likely past Aboriginal land use and the potential for artefact scatters / campsites. A high level of historical ground disturbance across the entire subject significantly reduces the potential for artefact scatters / campsites from the Holocene (Section 4.2.5). However, there is moderate potential for the presence of artefact scatters / campsites from the Pleistocene in the underlying natural sand body at depths of at least 2 to 2.35m. | Moderate |
| Bora / Ceremonial | The subject area is located within the soft, sandy Tuggerah soil landscape (Section 4.2.1) and is located in proximity to a former low-order natural waterway (Section 4.2.4), both of which are indicative of likely past Aboriginal land use and the potential for bora / ceremonial sites. However, due to the high level of historical ground disturbance across the entire subject area (Section 4.2.5) and susceptibility of bora / ceremonial sites to disturbance, the likelihood of such sites being retained is considered to be low. | Low |

| Site Type | Assessment | Potential |
|-------------------------|--|-----------------|
| Burial | The subject area is located within the soft, sandy Tuggerah soil landscape (Section 4.2.1) and is located in proximity to a former low-order natural waterway (Section 4.2.4). A high level of historical ground disturbance across the entire subject significantly reduces the potential for burials from the Holocene (Section 4.2.5). However, there is moderate potential for the presence of burials from the Pleistocene in the underlying natural sand body at depths of at least 2 to 2.35m. | Moderate |
| Contact site | The location of the subject area within an area of early European settlement is indicative of the potential for contact sites (Section 4.2.5). However, a high level of historical ground disturbance across the entire subject significantly reduces the potential for contact sites to be retained (Section 4.2.5). | Low |
| Grinding Grooves | The subject area does not include any visible sandstone outcrops that would be indicative of the potential for grinding grooves (Section 4.2.2). The likelihood of any concealed sandstone outcrops being present within the subject area is considered to be negligible. | Nil |
| Isolated Finds | The subject area is located within the soft, sandy Tuggerah soil landscape (Section 4.2.1) and is located in proximity to a former low-order natural waterway (Section 4.2.4), both of which are indicative of likely past Aboriginal land use and the potential for isolated finds. A high level of historical ground disturbance across the entire subject significantly reduces the potential for isolated finds from the Holocene (Section 4.2.5). However, there is moderate potential for the presence of isolated finds from the Pleistocene in the underlying natural sand body at depths of at least 2 to 2.35m. | Moderate |
| Midden | The subject area is located within the soft, sandy Tuggerah soil landscape (Section 4.2.1) and is located in proximity to a former low-order natural waterway (Section 4.2.4). A high level of historical ground disturbance across the entire subject significantly reduces the potential for middens from the Holocene (Section 4.2.5). However, there is moderate potential for the presence of middens from the Pleistocene in the underlying natural sand body at depths of at least 2 to 2.35m. | Moderate |
| Modified Trees | Historical development of the subject area has resulted in clearance of all vegetation, removing any potential for the presence of modified trees (Section 4.2.3). | Nil |
| PAD | The subject area is located within the soft, sandy Tuggerah soil landscape (Section 4.2.1) and is located in proximity to a former low-order natural waterway (Section 4.2.4), both of which are indicative of likely past Aboriginal land use and the potential for archaeological deposits. A high level of historical ground disturbance across the entire subject significantly reduces the potential for archaeological deposits from the Holocene (Section 4.2.5). However, there is moderate potential for the presence of archaeological deposits from the Pleistocene in the underlying natural sand body at depths of at least 2 to 2.35m. | Moderate |

| Site Type | Assessment | Potential |
|-----------|---|-----------|
| Shelters | The subject area does not include any rock overhangs that would be indicative of the potential for shelters (Section 4.2.2). The likelihood of any concealed rock overhangs being present within the subject area is considered to be negligible. | Nil |

4.5. SUMMARY

The assessments of the archaeological and environmental contexts of the subject area are summarised as follows:

- No Aboriginal objects or Aboriginal places are registered within the subject area.
- No previous Aboriginal archaeological investigations have been identified that directly address the subject area.
- The subject area is located in the Tuggerah soil landscape and within 200m of a former low order, ephemeral waterway, which are archaeologically sensitive landscape features.
- Historical activities, including construction and demolition of buildings and utilisation of the subject area for industrial purposes, are determined to have caused a high level of ground disturbance across the subject area.
- Geotechnical findings confirm the impact of historical activities on the soil profile, with disturbance being encountered to a minimum depth of 2m below the existing ground surface.
- Previous archaeological investigations from similar contexts near to the subject area identified the potential for archaeological resources dating to the Pleistocene within intact natural soils below historical disturbance.
- There is nil to low potential for Aboriginal sites within the disturbed soil layers to depths of approximately 2m below the existing ground surface.
- The subject area has moderate archaeological potential for artefact scatters / campsites, burials, isolated finds, middens and PADS dating to the Pleistocene within intact natural soil at depths exceeding 2m below the existing ground surface.
- [The above assessment of archaeological potential is subject to confirmation by visual inspection]

5. SIGNIFICANCE ASSESSMENT

The following is an assessment and discussion of the cultural significance of the subject area, made in consultation with the RAPs. The assessment follows principles and procedures outlined in the Burra Charter the Assessment Guidelines.

The Burra Charter defines cultural significance as being derived from the following values: social or cultural value, historic value, scientific value and aesthetic value. Aesthetic, historic, scientific and social values are commonly interrelated. All assessments of heritage values occur within a social and historic context. Therefore, all potential heritage values will have a social component.

Assessment of each value should be graded in terms that allow the significance to be described and compared (e.g. high, moderate, or low). In applying these criteria, consideration should be given to:

- *Research potential: does the evidence suggest any potential to contribute to an understanding of the area and/or region and/or state's natural and cultural history?*
- *Representativeness: how much variability (outside and/or inside the subject area) exists, what is already conserved, how much connectivity is there?*
- *Rarity: is the subject area important in demonstrating a distinctive way of life, custom, process, land-use, function or design no longer practised? Is it in danger of being lost or of exceptional interest?*
- *Education potential: does the subject area contain teaching sites or sites that might have teaching potential?*

Heritage significance is assessed by considering each cultural or archaeological site against the significance criteria set out in the Assessment Guidelines. The Assessment Guidelines require that the assessment and justification in a statement of significance includes a discussion of whether any value meets the following criteria:

- Does the subject area have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons? – social value.
- Is the subject area important to the cultural or natural history of the local area and/or region and/or state? – historic value.
- Does the subject area have potential to yield information that will contribute to an understanding of the cultural or natural history of the local area and/or region and/or state? – scientific (archaeological) value.
- Is the subject area important in demonstrating aesthetic characteristics in the local area and/or region and/or state? – aesthetic value.

5.1. ASSESSMENT OF HERITAGE VALUES

The following assessment of the social or cultural, historic, scientific and aesthetic values of the subject area has been prepared in accordance with the Assessment Guidelines.

In acknowledgment that the Aboriginal community themselves are in the best position to identify heritage values, the assessment is informed by consultation with the Aboriginal community. Consultation with Aboriginal people should provide insight into past events. The RAPs were invited to provide comment and input into this ACHAR and to the assessment of cultural heritage values for the subject area, as documented in this report. Any culturally sensitive values identified have not been explicitly included in the report or made publicly available. Any such values would be documented and lodged with the knowledge holder providing the information.

5.1.1. Social or Cultural Value

Social or cultural value encompasses the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment for Aboriginal people. Social or cultural value is how people express their connection with a place and the meaning that place has for them. Places of social or cultural value have associations with contemporary community identity. These places can have associations with tragic or warmly remembered experiences, periods, or events. Communities can experience a sense of loss should a place of social or cultural value be damaged or destroyed. Social or cultural values can therefore only be identified through consultation with Aboriginal people.

[Any assessment of social and cultural value must be made with the input of the RAPs. The assessment of social and cultural value will therefore be made once RAPs have had the opportunity to provide feedback during the consultation process]

5.1.2. Historic Value

Historic value encompasses the history of aesthetics, science and society. A place may have historic value because it is associated with a historic figure, event, phase or activity in an Aboriginal community. The significance of a place will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment. Places may also have 'shared' historic values with other (non-Aboriginal) communities.

Places of post-contact Aboriginal history have generally been poorly recognised in investigations of Aboriginal heritage. Consequently, the Aboriginal involvement and contribution to important regional historical themes is often missing from accepted historical narratives. For this reason, it is often necessary to collect oral histories along with archival or documentary research to gain a sufficient understanding of historic values.

No historical associations between Aboriginal people and the subject area have been identified. The subject area has therefore been assessed as having low historic value insofar as it relates to Aboriginal cultural heritage.

[The above preliminary assessment of historic value will be reviewed and finalised once RAPs have had the opportunity to provide feedback during the consultation process]

5.1.3. Scientific (Archaeological) Value

Scientific value relates to the importance of a landscape, area, place or object because of its rarity, representativeness and the extent to which it may contribute to further understanding and information. Information about scientific value will be gathered through any archaeological investigation undertaken. Archaeological investigations must be carried out according to the Code of Practice.

The archaeological potential of the subject area has assessed to be moderate for artefact scatters / campsites, burials, isolated finds, middens and PADS within intact natural soil. Any intact archaeological deposits would lie at depths of at least 2m below the existing ground surface and would likely date to the Pleistocene period. Owing to the rareness of such resources, any recoverable Aboriginal objects from this period would be of high scientific value. However, the potential for the subject area to yield information that will contribute to an understanding of Aboriginal cultural heritage is significantly reduced by the practical and safety limitations of archaeological excavation at depths exceeding 2m (and up to approximately 18m to encompass the full depth of the proposed impact), compounded by the presence of ground water below at these depths. The subject area has therefore been assessed as having low scientific value insofar as it relates to Aboriginal cultural heritage.

[The above preliminary assessment of scientific value will be reviewed and finalised once RAPs have had the opportunity to provide feedback during the consultation process]

5.1.4. Aesthetic Value

Aesthetic value of a place relates to the sensory, scenic, architectural and creative aspects of a place. It may include visual aspects, such as form, scale, colour, texture and material of the fabric, and the smells and sounds associated with the place and its use.

It is evident that the subject area is highly disturbed through land clearance, the construction and demolition of buildings and its utilisation for industrial purposes, including storage of goods and vehicle traffic. The present visual appearance and other sensory aspects of the subject area are unlikely to resemble those of the landscape of the local area as it existed prior to European contact. The subject area has therefore been assessed as having low aesthetic value insofar as it relates to Aboriginal cultural heritage.

[The above preliminary assessment of aesthetic value will be reviewed and finalised once RAPs have had the opportunity to provide feedback during the consultation process]

5.2. STATEMENT OF SIGNIFICANCE

[A statement of significance will be made once RAPs have had the opportunity to provide feedback during the consultation process]

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6. IMPACT ASSESSMENT

The following is an assessment of the potential impact of the proposed development on any Aboriginal objects and/or Aboriginal places within the subject area and the possible strategies for avoiding or minimising harm to those Aboriginal objects and/or Aboriginal places.

The potential harm to Aboriginal objects and Aboriginal places that is likely to be caused by a proposed activity is the effect of that activity on the Aboriginal heritage values identified above. According to the NPW Act, "harm" to an object or place includes any act or omission that:

- Destroys, defaces, or damages the object or place.
- Moves the object from the land on which it had been situated.
- Causes or permits the object or place to be harmed.

Harm does not include something that is trivial or negligible, such as picking up and replacing a small stone artefact, breaking a small Aboriginal object below the surface when you are gardening, crushing a small Aboriginal object when you walk on or off a track, picnicking, camping or other similar recreational activities.

The Assessment Guidelines define harm to Aboriginal objects and Aboriginal places as being either direct or indirect:

- **Direct harm** may occur as the result of any activity which disturbs the ground including, but not limited to, site preparation activities, installation of services and infrastructure, roadworks, excavation, flood mitigation measures.
- **Indirect harm** may affect sites or features located immediately beyond or within the area of the proposed activity. Examples include, but are not limited to, increased impact on art in a shelter from increased visitation, destruction from increased erosion and changes in access to wild food resources.

The present assessment of potential harm follows the principles of ecologically sustainable development (ESD), in particular the precautionary principle and the principle of inter-generational equity:

- The **precautionary principle** states that full scientific certainty about the threat of harm should never be used as a reason for not taking measures to prevent harm from occurring.
- The **principle of inter-generational equity** holds that the present generation should make every effort to ensure the health, diversity and productivity of the environment, which includes cultural heritage, is available for the benefit of future generations. If a site type that was once common in an area becomes rare, the loss of that site (and site type) will result in an incomplete archaeological record and will negatively affect intergenerational equity.

Consideration of potential harm to Aboriginal objects and Aboriginal places according to ESD principles allows for an understanding of the cumulative impact of the proposed activity and an understanding of how harm can be avoided or minimised, if possible.

6.1. ASSESSMENT OF POTENTIAL HARM

The potential harm to Aboriginal objects or Aboriginal places arising from the proposed works relates to the sinking of piles for construction of the new warehouse and distribution centre. It is understood that the sinking of piles will impact the ground to a depth of approximately 18m below the existing ground surface, including intact natural soil at a depth from approximately 2 to 2.35m below the existing ground surface.

The desktop assessment undertaken as part of the present ACHA has determined that there are no known Aboriginal objects or Aboriginal places within the subject area. The archaeological potential of the subject area has assessed to be moderate for artefact scatters / campsites, burials, isolated finds, middens and PADS within intact natural soil at depths exceeding 2m below the existing ground surface. As such, there is moderate potential for harm to Aboriginal objects due to the sinking of piles.

[Based on the above preliminary assessment of values, the proposed development is unlikely to harm any significant Aboriginal objects. Re-assessment of the potential for harm to significant Aboriginal objects will be undertaken during consultation based on information received from RAPs and visual inspection of the subject area.]

6.2. AVOIDANCE OF HARM

All practicable measures must be taken to avoid harm and conserve any significant Aboriginal objects and/or Aboriginal places, along with their cultural heritage values. Avoidance and conservation measures must be feasible and within the financial viability of the proposed activity.

[The preliminary assessment above has determined that the proposed development is unlikely to harm any significant Aboriginal objects. Re-assessment of avoidance measures will be undertaken in consultation with RAPs once the potential for harm has been reassessed during consultation]

6.3. MINIMISATION OF HARM

If harm to Aboriginal objects and/or Aboriginal places is unavoidable, management strategies must be considered to minimise the harm. The type of management strategies proposed must be appropriate to the significance of Aboriginal heritage values, Aboriginal objects and/or Aboriginal places. Mitigation measures must be feasible and within the financial viability of the proposed activity.

[The preliminary assessment above has determined that the proposed development is unlikely to harm any significant Aboriginal objects. Re-assessment of minimisation measures will be undertaken in consultation with RAPs once the potential for harm has been reassessed during consultation]

DRAFT

7. CONCLUSIONS & RECOMMENDATIONS

The ACHA of 520 Gardeners Road, Alexandria, NSW, legally referred to as Lot 302 DP1231238, concluded that:

- No Aboriginal objects or Aboriginal places are registered within the subject area.
- No previous Aboriginal archaeological investigations have been identified that directly address the subject area.
- The subject area is located in the Tuggerah soil landscape and within 200m of a former low order, ephemeral waterway, which are archaeologically sensitive landscape features.
- Historical activities, including construction and demolition of buildings and utilisation of the subject area for industrial purposes, are determined to have caused a high level of ground disturbance across the subject area.
- Geotechnical findings confirm the impact of historical activities on the soil profile, with disturbance being encountered to a minimum depth of 2m below the existing ground surface.
- Previous archaeological investigations from similar contexts near to the subject area identified the potential for archaeological resources dating to the Pleistocene within intact natural soils below historical disturbance.
- There is nil to low potential for Aboriginal sites within the disturbed soil layers to depths of approximately 2m below the existing ground surface.
- The subject area has moderate archaeological potential for artefact scatters / campsites, burials, isolated finds, middens and PADS dating to the Pleistocene within intact natural soil at depths exceeding 2m below the existing ground surface.
- The presence of ground water encountered at depths of up to 2m below the existing ground surface means that archaeological investigation of potential Pleistocene deposits is impractical and difficult to conduct safely.
- [The above assessment of archaeological potential is subject to confirmation by visual inspection]
- [Assessments of significance and impact will be made once RAPs have been given the opportunity to provide feedback during the ongoing consultation process]

Based on the above conclusions, Urbis recommends the following:

- This report should be kept as evidence of the ACHA process having been undertaken in relation to the subject area.
- No further archaeological investigation of the subject area is required in view of the findings of the ACHA.
- The development may proceed with caution, subject to the following archaeological chance finds and human remains procedures being implemented and followed:

Archaeological Finds Procedure

Should any archaeological deposits be uncovered during any site works, the following steps must be followed:

1. All works within the vicinity of the find must immediately stop. The find must not be moved 'out of the way' without assessment.
2. The site supervisor or another nominated site representative must contact either the project archaeologist (if relevant) or Heritage NSW (Enviroline 131 555) to contact a suitably qualified archaeologist.
3. The nominated archaeologist must examine the find, provide a preliminary assessment of significance, record the item and decide on appropriate management measures. Such management may require further consultation with Heritage NSW, preparation of a research design and archaeological investigation/salvage methodology and registration of the find with the Aboriginal Heritage Information Management System (AHIMS).

4. Depending on the significance of the find, reassessment of the archaeological potential of the subject area may be required and further archaeological investigation undertaken.
5. Reporting may need to be prepared regarding the find and approved management strategies.
6. Works in the vicinity of the find can only recommence upon receipt of approval from Heritage NSW.

Human Remains Procedure

In the unlikely event that human remains are uncovered during the proposed works, the following steps must be followed:

1. All works within the vicinity of the find must immediately stop. The find must be cordoned-off and signage installed to avoid accidental impact.
2. The site supervisor or other nominated manager must notify the NSW Police and Heritage NSW (Enviroline 131 555).
3. The find must be assessed by the NSW Police, which may include the assistance of a qualified forensic anthropologist.
4. Management recommendations are to be formulated by the NSW Police, Heritage NSW and site representatives.
5. Works are not to recommence until the find has been appropriately managed.

[The above recommendations are preliminary and based on the desktop assessment alone. The recommendations may change in view of the outcome of the consultation process]

8. REFERENCES

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DISCLAIMER

This report is dated 15 March 2022 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Charter Hall (**Instructing Party**) for the purpose of an Aboriginal Cultural Heritage Assessment (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A

PROPOSED DEVELOPMENT

DRAFT

| SHEET | NAME | ISSUE DATE |
|--------|--------------------------------|------------|
| DA-000 | Cover | 26.11.21 |
| DA-001 | Site Analysis and Context Plan | |
| DA-002 | Existing and Demolition Plan | |
| DA-005 | Site and Roof Plan | 26.11.21 |
| DA-010 | Ground Floor Plan | 26.11.21 |
| DA-011 | Ground Floor Plan - Mezzanine | 26.11.21 |
| DA-012 | Level 01 | 26.11.21 |
| DA-013 | Level 01 - Mezzanine | 26.11.21 |
| DA-014 | Level 2 and Car Park | 11.11.21 |
| DA-031 | Elevation - North and South | 26.11.21 |
| DA-032 | Elevation - East and West | 26.11.21 |
| DA-039 | External Materials | |
| DA-041 | Section - Sheet 01 | 26.11.21 |
| DA-091 | Area Plans | 26.11.21 |
| DA-095 | Landscape Area | 26.11.21 |
| DA-097 | Perspective - Sheet 01 | 26.11.21 |



Charter Hall - Alexandria

11596
 FOR INFORMATION
 26.11.21



- PROPERTY BOUNDARY
- EXISTING ESEMENTS
- 0.2 m Minor Contour Line
- 1.0 m Major Contour Line
- Sun Path
- Wind Direction
- Pylon Sign
- Existing Trees
- Bus Stop
- Pedestrian Access
- Vehicle Access
- Views
- Vibration
- Noise



Client

Builder

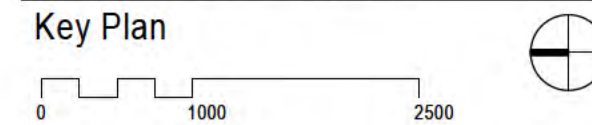
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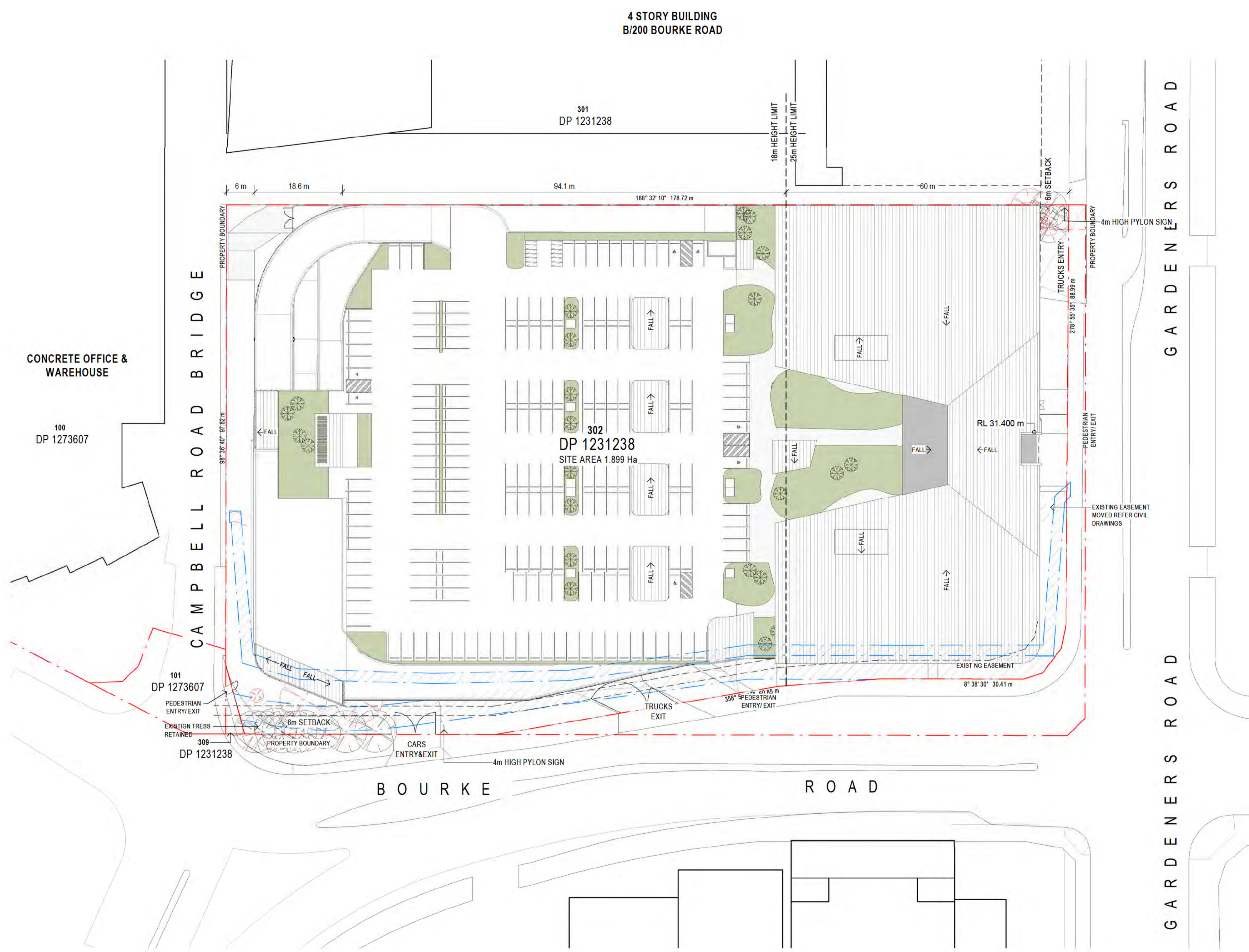
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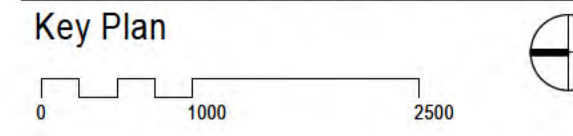
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Charter Hall - Alexandria

Project Address
**520 Gardeners Rd.
Alexandria, NSW 2015**

Drawing Title
Site and Roof Plan

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| 5 | For Information | 11.11.21 |
| 4 | For Information | 29.10.21 |
| 3 | For Information | 08.10.21 |
| 2 | For Information | 14.09.21 |
| 1 | For Information | 07.09.21 |

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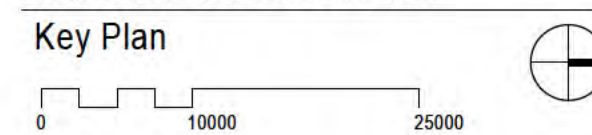


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Charter Hall - Alexandria
 Project Address
520 Gardeners Rd. Alexandria, NSW 2015

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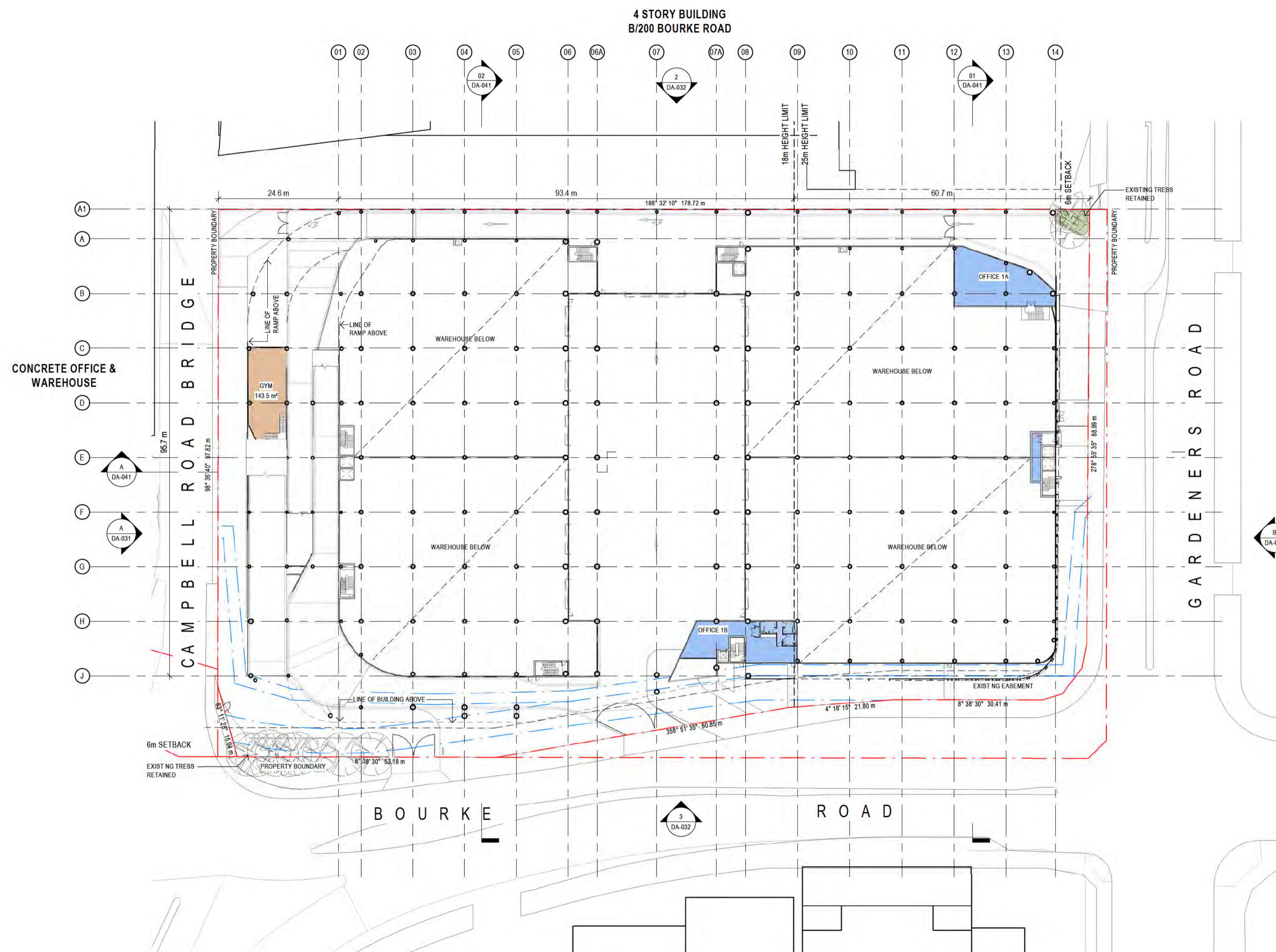
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Client

 Builder

Project Name
Charter Hall - Alexandria
 Project Address
520 Gardeners Rd. Alexandria, NSW 2015

Drawing Title
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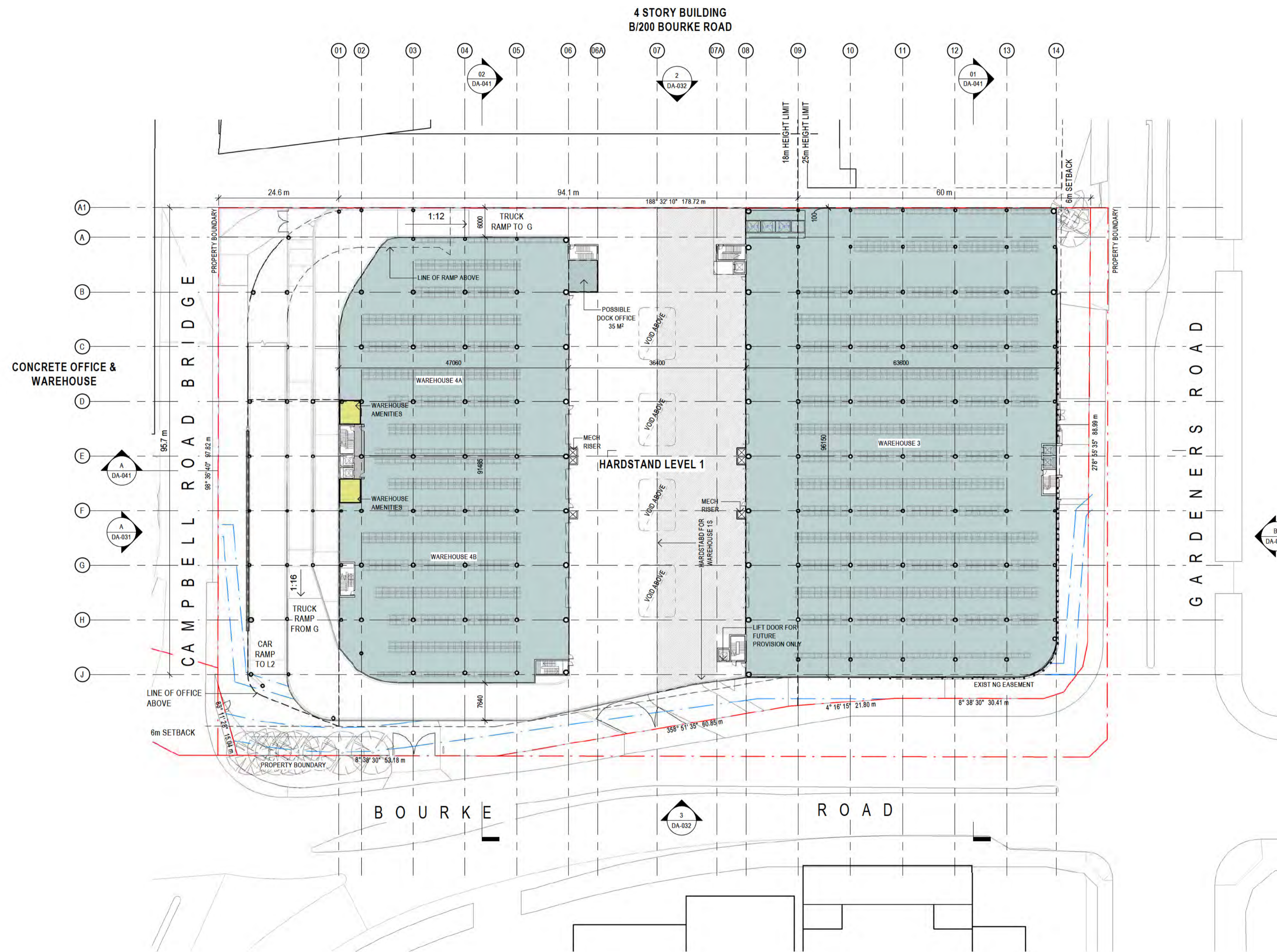
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520 Gardeners Rd. Alexandria, NSW 2015

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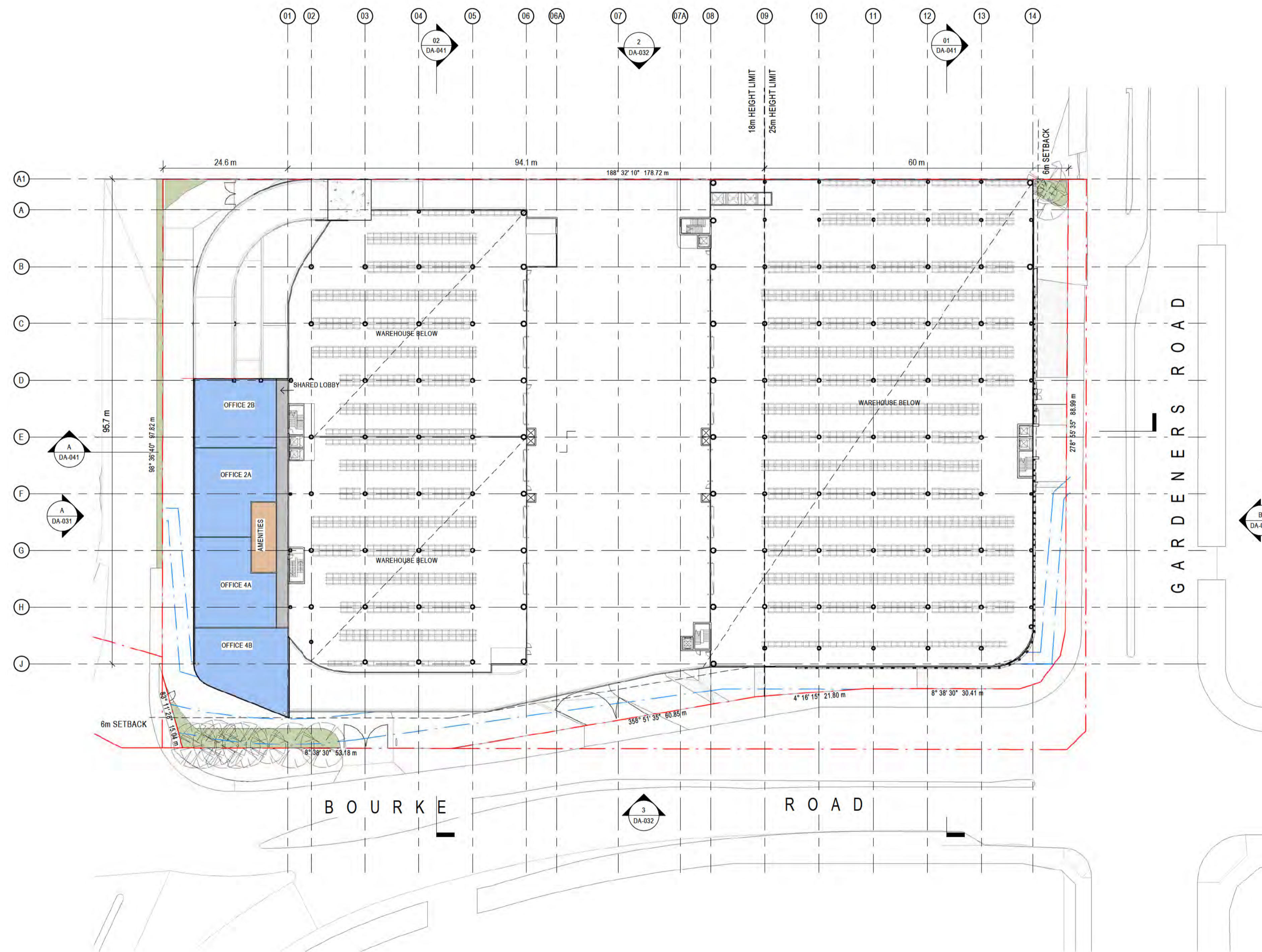
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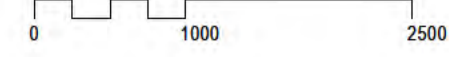
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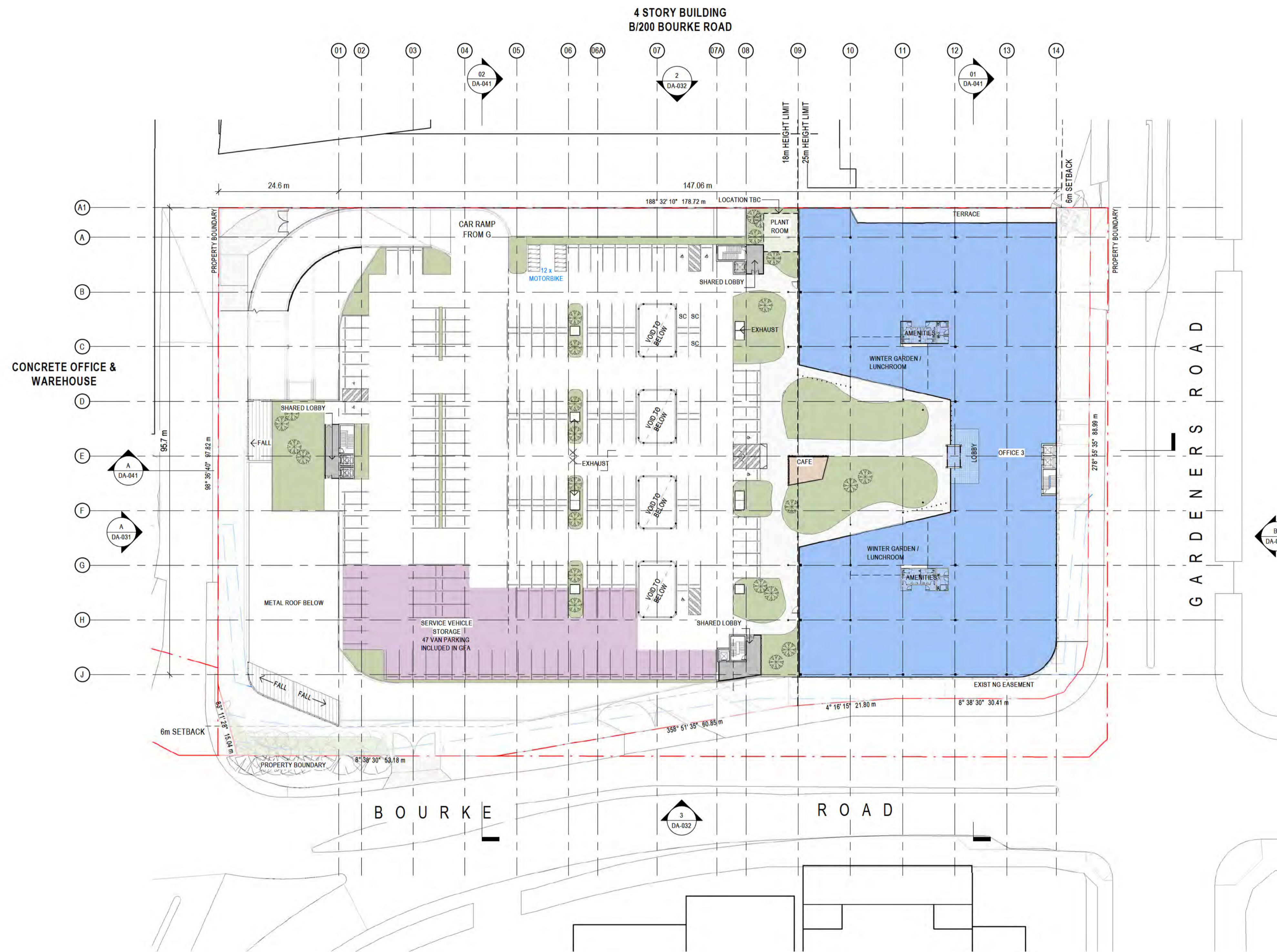
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FOR INFORMATION



Project Name
Charter Hall - Alexandria

Project Address
520 Gardeners Rd. Alexandria, NSW 2015

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B ELEVATION SOUTH
DA-010 1:300



A ELEVATION NORTH
DA-010 1:300

FOR INFORMATION



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Charter Hall - Alexandria

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520 Gardeners Rd. Alexandria, NSW 2015

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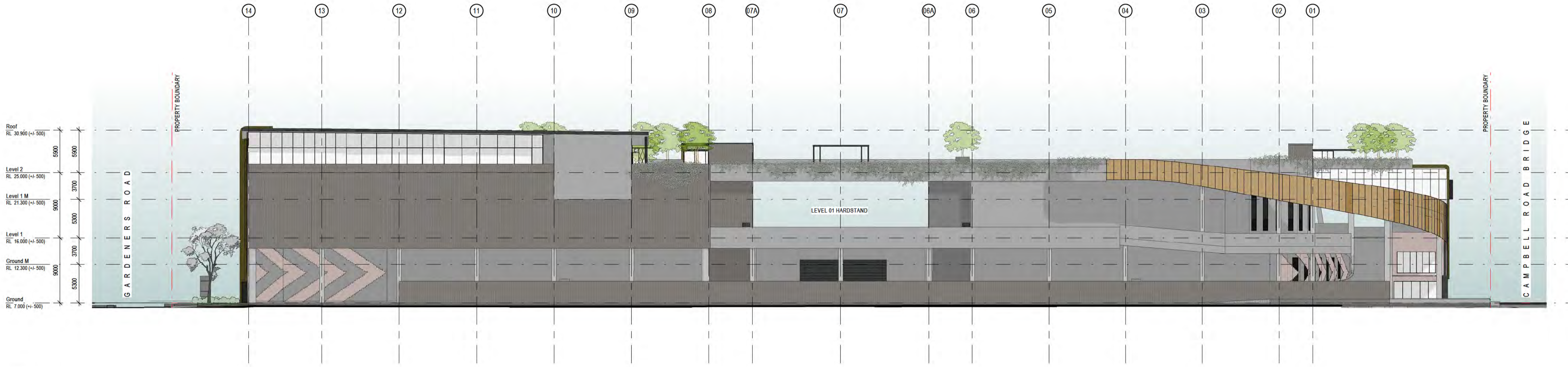
nettleton tribe partnership Pty Ltd ABN 58 161 683 122
117 Willoughby Road, Crows Nest, NSW 2065
t +61 2 9431 8431
e. sydney@nettletontribe.com.au w. nettletontribe.com.au

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2 ELEVATION EAST
DA-010 1:300



3 ELEVATION WEST
DA-010 1:300



Builder

Project Name
Charter Hall - Alexandria
Project Address
520 Gardeners Rd. Alexandria, NSW 2015

Drawing Title
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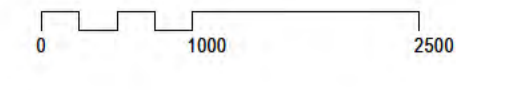
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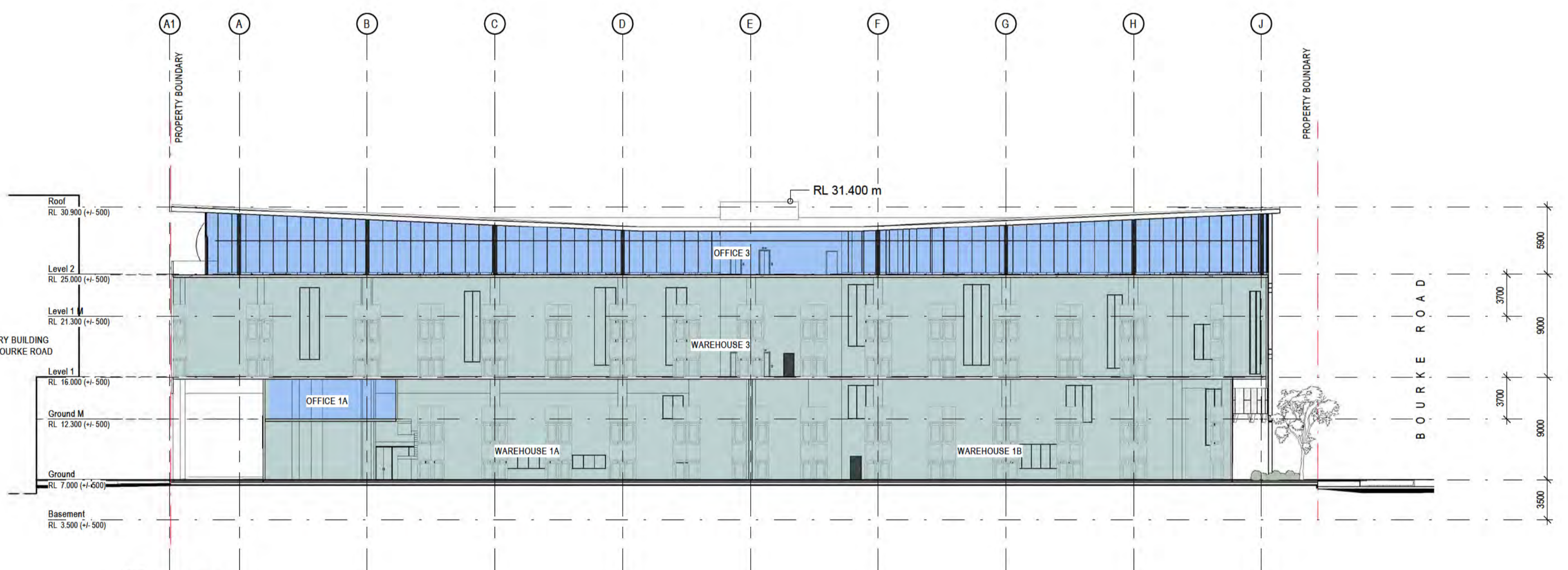
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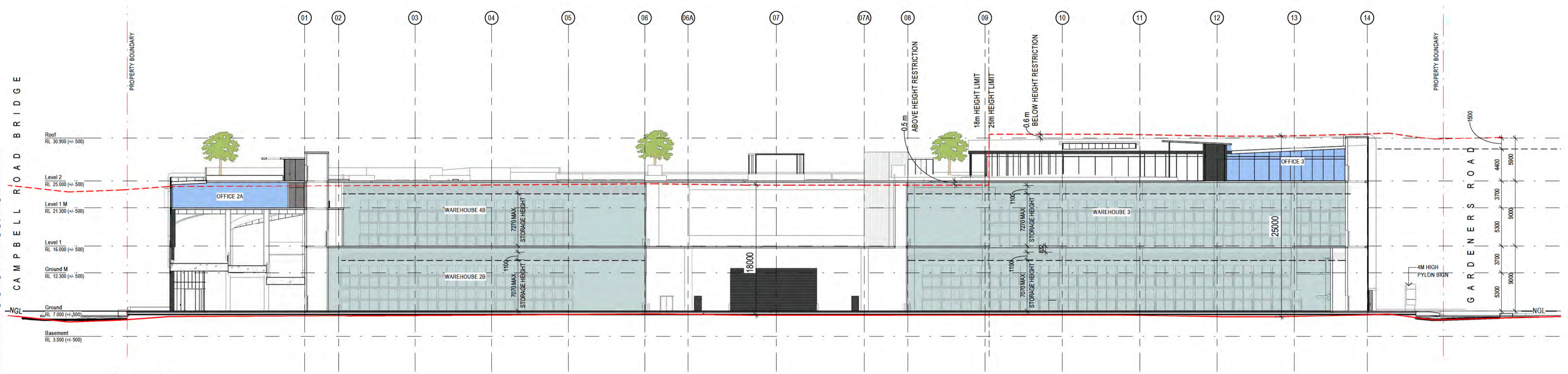
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02 SECTION 02
DA-010 1:300



01 SECTION 01
DA-010 1:300



A SECTION A
DA-010 1:300

FOR INFORMATION

Client

Builder

Project Name
Charter Hall - Alexandria

Project Address
520 Gardeners Rd. Alexandria, NSW 2015

Drawing Title
Section - Sheet 01

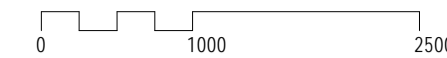
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Issue: 7

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117 Willoughby Road, Crows Nest, NSW 2065
t +61 2 9431 6431
e. sydney@nettletontribe.com.au w. nettletontribe.com.au

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Key Plan



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FOR INFORMATION



Builder

Project Name
Charter Hall - Alexandria
 Project Address
520 Gardeners Rd. Alexandria, NSW 2015

Drawing Title
 Perspective - Sheet 01

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nettleon tribe partnership Pty Ltd ABN 58 161 683 122
 117 Willoughby Road, Crows Nest, NSW 2065
 t +61 2 9431 6431
 e: sydney@nettleontribe.com.au w: nettleontribe.com.au

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APPENDIX B

BASIC AND EXTENSIVE AHIMS SEARCH RESULTS

DRAFT

Urbis Pty Ltd - Angel Place L8 123 Pitt Street

Date: 11 November 2021

Level 8 123 Angel Street
Sydney New South Wales 2000

Attention: Aaron Olsen

Email: aolsen@urbis.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 327509.595 - 337632.187, Northings : 6240200.474 - 6250400.282 with a Buffer of 0 meters, conducted by Aaron Olsen on 11 November 2021.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

| | |
|-----------|--|
| 45 | Aboriginal sites are recorded in or near the above location. |
| 0 | Aboriginal places have been declared in or near the above location. * |

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.



AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 520Garden_10km

Client Service ID : 638084

Report generated by AHIMS Web Service on 11/11/2021 for Aaron Olsen for the following area at Datum :GDA, Zone : 56, Eastings : 327509.595 - 337632.187, Northings : 6240200.474 - 6250400.282 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 45

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.



AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 520Garden_10km

Client Service ID : 638084

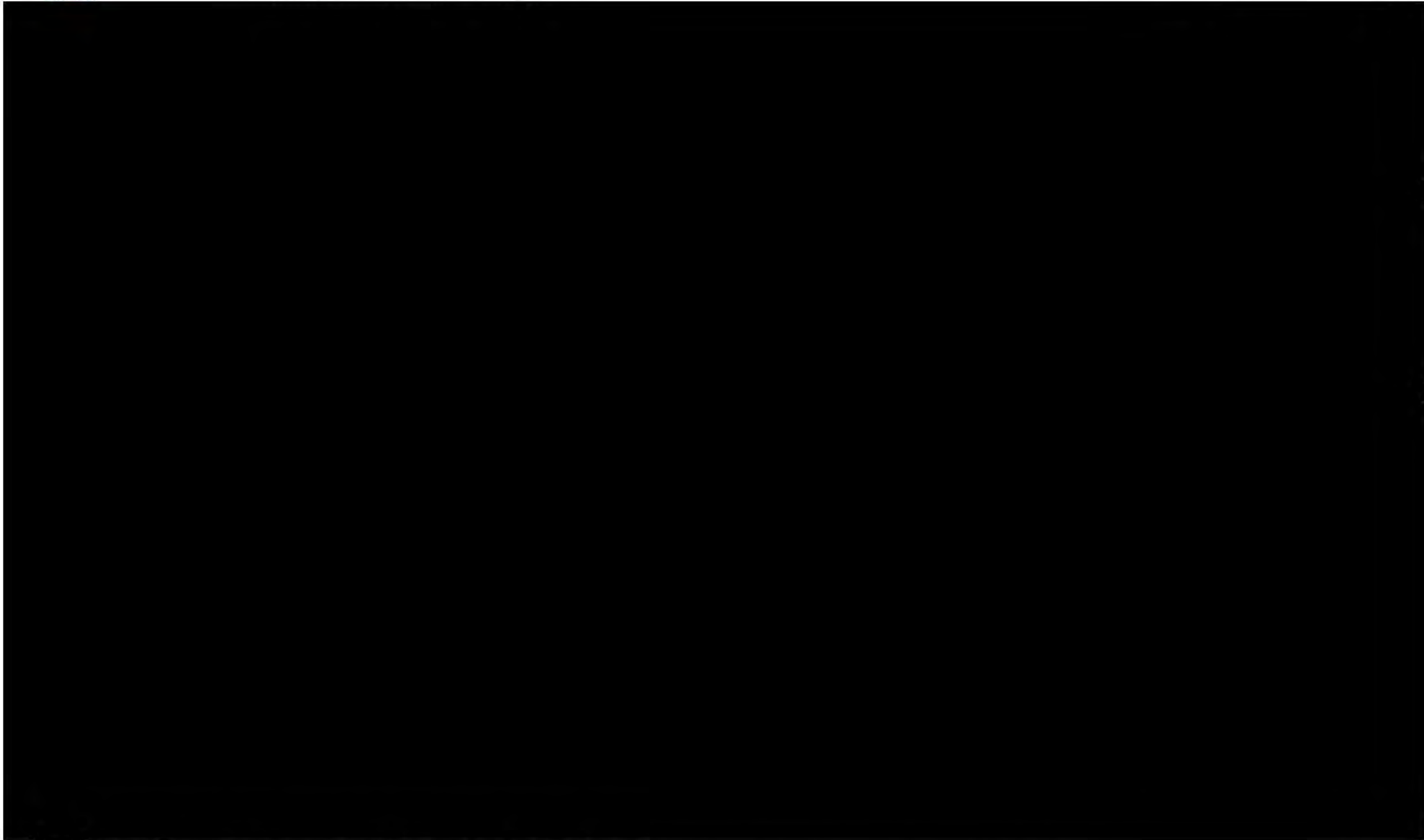
Report generated by AHIMS Web Service on 11/11/2021 for Aaron Olsen for the following area at Datum :GDA, Zone : 56, Eastings : 327509.595 - 337632.187, Northings : 6240200.474 - 6250400.282 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 45

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.



AHIMS Web Services (AWS)

Extensive search - Site list report



6250400.282 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 45

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

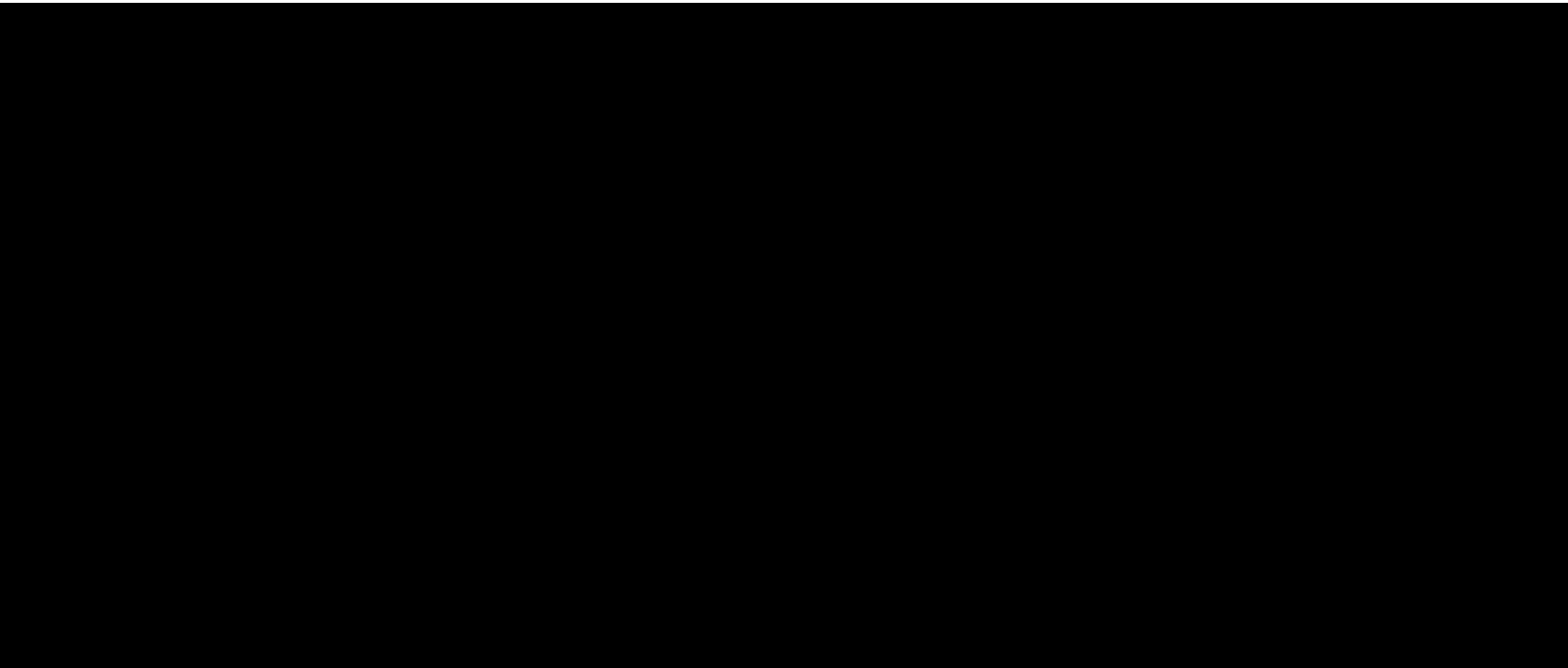


AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 520Garden_10km

Client Service ID : 638084



**** Site Status**

Valid - The site has been recorded and accepted onto the system as valid

Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

Not a site - The site has been originally entered and accepted onto AH MS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 11/11/2021 for Aaron Olsen for the following area at Datum :GDA, Zone : 56, Eastings : 327509.595 - 337632.187, Northings : 6240200.474 - 6250400.282 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 45

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

APPENDIX C

REGISTERED ABORIGINAL PARTY CONSULTATION LOG

DRAFT

| Date | Time | Type | Contacted | Contacted Individual | Contacted by | Contacted by individual | Subject | Message | Follow up needed? | Person actioned | Comment |
|---|---------|--------|------------------------|----------------------|--------------|-------------------------|--------------------------------|--|-------------------|-----------------|---------------------------------|
| Stage 1 Agency notice | | | | | | | | | | | |
| 16/11/2021 | 11:06am | Email | NNTT | n/a | Urbis | AO | Stage 1.1 Request | | | AO | |
| 17/11/2021 | 2:47pm | Email | Urbis | AO | NNTT | n/a | Stage 1.1 Response | No Native Title Determination Applications Determinations of Native Title or Indigenous Land Use Agreements over the identified area | | AO | |
| 18/11/2021 | 12:46pm | Email | Heritage NSW | n/a | Urbis | Aaron Olsen (AO) | Stage 1.2 Request | | | AO | |
| 18/11/2021 | 12:46pm | Email | ORALFA | n/a | Urbis | AO | Stage 1.2 Request | | | AO | |
| 18/11/2021 | 12:46pm | Email | NTS Corp | n/a | Urbis | AO | Stage 1.2 Request | | | AO | |
| 18/11/2021 | 12:46pm | Email | GSLLS | n/a | Urbis | AO | Stage 1.2 Request | | | AO | |
| 18/11/2021 | 12:46pm | Email | Metropolitan LALC | n/a | Urbis | AO | Stage 1.2 Request | | | AO | |
| 18/11/2021 | 12:46pm | Email | City of Sydney Council | n/a | Urbis | AO | Stage 1.2 Request | | | AO | |
| 18/11/2021 | 2:13pm | Email | Urbis | AO | GSLLS | n/a | Stage 1.2 Response | No information provided | | AO | |
| 26/11/2021 | 7:36pm | Email | Heritage NSW | Den Clegg | Urbis | AO | Stage 1.2 Response | List provided | | AO | |
| Stage 1 RAP mobilisation/advertisement | | | | | | | | | | | |
| 7/12/2021 | 10:23am | Email | Koori Mail | Chris Costello | Urbis | AO | Stage 1.3 Request | 3 ads in Dec 13 edition | N | | |
| 13/12/2021 | 12:31pm | Email | All RAP groups | n/a | Urbis | KD | Stage 1.3 Request | invitation to register | N | KD | |
| 13/12/2021 | 4:20pm | Letter | [Redacted] | [Redacted] | All Urbis | KD | Stage 1.3 Request | invitation to register | N | KD | |
| 13/12/2021 | 5:51pm | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | AO | |
| 13/12/2021 | 1:01pm | Email | Urbis | Kirsten Downey (KD) | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | KD | |
| 13/12/2021 | 1:23pm | Email | Urbis | KD | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | KD | |
| 13/12/2021 | 1:58pm | Email | Urbis | KD | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | KD | |
| 13/12/2021 | 1:19pm | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | AO | |
| 13/12/2021 | 3:11pm | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | AO | |
| 13/12/2021 | 7:43pm | Email | Urbis | KD | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | KD | |
| 14/12/2021 | 2:25pm | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | KD | |
| 17/12/2021 | 9:37am | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | KD | |
| 17/12/2021 | 2:21pm | Email | Urbis | KD AO | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | KD | |
| 1/01/2022 | 2:20pm | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | KD | Do not disclose details to LALC |
| 1/01/2022 | 2:23pm | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | KD | Do not disclose details to LALC |
| 8/01/2022 | 12:00am | Email | Urbis | KD | [Redacted] | [Redacted] | Stage 1.3 Response | Registered for project | N | KD | |
| 11/01/2022 | 4:53pm | Email | Urbis | [Redacted] | Urbis | KD | Stage 1.6 Notification | List provided | N | KD | |
| 11/01/2022 | 4:53pm | Email | Urbis | Heritage NSW | Urbis | KD | Stage 1.6 Notification | List provided | N | KD | |
| Stage 2 and 3 | | | | | | | | | | | |
| 13/01/2022 | 4:02pm | Email | All RAPs | n/a | Urbis | AO | Stage 2-3 Letter | | N | AO | |
| 14/01/2022 | 9:15am | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 2-3 Response | Questionnaire returned | N | AO | |
| 14/01/2022 | 9:46am | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 2-3 Response | Insurances provided | N | AO | |
| 14/01/2022 | 10:05am | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 2-3 Response | Questionnaire returned / insurances provided | N | AO | |
| 7/02/2022 | 9:10a | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 2-3 Response | We would like to agree to your ACHA and we support | N | AO | |
| 11/02/2022 | 11:21am | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 2-3 Invite to Site Visit | | N | AO | |
| 11/02/2022 | 6:51pm | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 2-3 Response | Questionnaire returned / insurances provided | N | AO | Late Response |
| 13/02/2022 | 7:48pm | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 2-3 Invite to Site Visit | Confirmation of attendance | N | AO | |
| 17/02/2022 | 11:14am | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 2-3 Invite to Site Visit | Confirmation of attendance | N | AO | |
| 16/02/2022 | 9:18am | Email | Urbis | AO | [Redacted] | [Redacted] | Stage 2-3 Invite to Site Visit | Confirmation of attendance | N | AO | |

Stage 4

APPENDIX D

REGISTERED ABORIGINAL PARTY CONSULTATION DOCUMENTATION

DRAFT

STAGE 1.1 – NATIVE TITLE SEARCH

From: [Aaron Olsen](#)
To: [Geospatial Search Requests](#)
Cc: [Sam Richards](#); [Balazs Hansel](#)
Subject: Search Request for 520 Gardeners Road, Alexandria (Our Ref: P0032153)
Date: Tuesday, 16 November 2021 11:06:00 AM
Attachments: [Search Form Request for Search of Tribunal Registers 2020.pdf](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Good morning

Please find attached a Native Title search request for Lot 302 in DP1231238.

If you have any questions or need any further information, please let me know.

Kind regards

AARON OLSEN

CONSULTANT

D +61 2 8233 9957

T +61 2 8233 9900

E aolsen@urbis.com.au

ANGEL PLACE, LEVEL 8, 123 PITT STREET
SYDNEY, NSW 2000, AUSTRALIA

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Request for Search of Tribunal Registers

Search for overlapping interests i.e.: Is there a native title claim, determination or land use agreement over this land?

Please note: the NNTT cannot search over freehold land.

For further information on freehold land: [Click Here](#) (NNTT website)

1. Your details

| | |
|-----------------------|---|
| NAME: | Aaron Olsen |
| POSITION: | Consultant Archaeologist |
| COMPANY/ORGANISATION: | Urbis |
| POSTAL ADDRESS: | Level 8, 123 Pitt Street, Sydney, NSW, 2000 |
| TELEPHONE: | |
| EMAIL: | aolsen@urbis.com.au |
| YOUR REFERENCE: | P0032153 |
| DATE OF REQUEST: | 16/11/2021 |

2. Reason for your request

Are you a party to a native title proceeding?

Yes No

Please provide Federal Court/Tribunal file number/or application name:

OR

Do you need to identify existing- native title interests to comply with the *Native Title Act 1993* (Cth) or other State/Territory legislation?

Yes No

Please provide brief details of these obligations here:

Archaeological assessment

3. Identify the area to be searched

If there is insufficient room below, please send more information on a Word or Excel document.

Mining tenure

State/Territory: _____
Tenement ref/s: _____

OR

Crown land / non-freehold tenure

Tenure type: Lease Reserve or other Crown land
State/Territory: New South Wales
Lot and plan details: Lot 302 in DP1231238
Pastoral Lease number or name: -
Other details: (Town/County/Parish/Section/Hundred/Portion): Alexandria/Cumberland/Alexandria

Email completed form to: GeospatialSearch@nntt.gov.au

From: [Geospatial Search Requests](#)
To: [Aaron Olsen](#)
Cc: [Sam Richards](#); [Balazs Hansel](#)
Subject: RE: SR21/1792 - Search Request for 520 Gardeners Road, Alexandria (Our Ref: P0032153) - SR21/1792 [SEC=OFFICIAL]
Date: Wednesday, 17 November 2021 2:37:07 PM
Attachments: [image007.png](#)
[image009.png](#)
[image011.png](#)
[image013.png](#)
[image015.png](#)

OFFICIAL

Native title search – NSW Parcel – Lot 302 on DP1231238

Your ref: P0032153 - **Our ref:** SR21/1792

Please note: All future searches will need to be submitted on our current form. We have attached a copy for your convenience.

The form is also available from the Tribunal’s website at this address: http://www.nntt.gov.au/assistance/Geospatial/Pages/Geospatial_Searches.aspx

Dear Aaron Olsen,

Thank you for your search request received on 17 November 2021 in relation to the above area. Based on the records held by the National Native Title Tribunal as at 17 November 2021 it would appear that there are no Native Title Determination Applications, Determinations of Native Title, or Indigenous Land Use Agreements over the identified area.

Search Results

The results provided are based on the information you supplied and are derived from a search of the following Tribunal databases:

- Schedule of Native Title Determination Applications
- Register of Native Title Claims
- Native Title Determinations
- Indigenous Land Use Agreements (Registered and notified)

At the time this search was carried out, there were **no relevant entries** in the above databases.

| Feature ID | Tenure | As At | Feature Area SqKm | Overlapping Native Title Feature | | | |
|---------------|----------|------------|-------------------|----------------------------------|------|----------|--------------------|
| | | | | NNTT File Number | Name | Category | % Selected Feature |
| 302/DP1231238 | FREEHOLD | 11/10/2021 | 0.0190 | | | | |
| | | | | No overlap | | | 0.00% |

For more information about the Tribunal’s registers or to search the registers yourself and obtain copies of relevant register extracts, please visit our [website](#).

Information on native title claims and freehold land can also be found on the Tribunal’s website here: [Native title claims and freehold land](#).

Please note: There may be a delay between a native title determination application being lodged in the Federal Court and its transfer to the Tribunal. As a result, some native title determination applications recently filed with the Federal Court may not appear on the Tribunal’s databases.

The search results are based on analysis against external boundaries of applications only. Native title applications commonly contain exclusions clauses which remove areas from within the external boundary. To determine whether the areas described are in fact subject to claim, you need to refer to the “Area covered by claim” section of the relevant Register Extract or Schedule Extract and any maps attached.

From: Aaron Olsen <aolsen@urbis.com.au>
Sent: Tuesday, 16 November 2021 8:06 AM
To: Geospatial Search Requests <GeospatialSearch@NNTT.gov.au>
Cc: Sam Richards <sam.richards@urbis.com.au>; Balazs Hansel <bhansel@urbis.com.au>
Subject: SR21/1792 - Search Request for 520 Gardeners Road, Alexandria (Our Ref: P0032153)

Caution: This is an external email. DO NOT click links or open attachments unless you recognise the sender and know the content is safe

Good morning

Please find attached a Native Title search request for Lot 302 in DP1231238.

If you have any questions or need any further information, please let me know.

Kind regards

AARON OLSEN
CONSULTANT
D +61 2 8233 9957
T +61 2 8233 9900
E aolsen@urbis.com.au

**SHAPING
CITIES AND
COMMUNITIES**



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SYDNEY, NSW 2000, AUSTRALIA

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STAGE 1.2 – ASCERTAINING LIST OF POTENTIAL RAPS

From: [Aaron Olsen](#)
Cc: [Sam Richards](#); [Balazs Hansel](#)
Bcc: gs.service@lls.nsw.gov.au; information@ntscorp.com.au; [QEH HD Heritage Mailbox](#);
adminofficer@oralra.nsw.gov.au; metrolalc@metrolalc.org.au; council@cityofsydney.nsw.gov.au
Subject: 520 Gardeners Road, Alexandria - ACHA - Stage 1.2
Date: Thursday, 18 November 2021 12:46:00 PM
Attachments: [P0032153_520GardenersRd_ACHA_Stage1.2.pdf](#)
[image002.png](#)
[image004.png](#)
[image006.png](#)
[image008.png](#)
[image010.png](#)

Good afternoon

Urbis is currently undertaking an Aboriginal Cultural Heritage Assessment (ACHA) of 520 Gardeners Road, Alexandria, NSW. As part of the consultation process for that ACHA, we are seeking to compile a list of Aboriginal people and organisations who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places that may exist within the subject area.

If you are aware of any Aboriginal persons and/or organisations that may hold an interest in the project, we request that you please provide their details by return email at your earliest convenience and preferably by **25 November 2021**.

For further details, please refer to our formal letter attached.

We look forward to hearing from you.

Kind regards

AARON OLSEN
CONSULTANT

D +61 2 8233 9957

T +61 2 8233 9900

E aolsen@urbis.com.au

ANGEL PLACE, LEVEL 8, 123 PITT STREET
SYDNEY, NSW 2000, AUSTRALIA

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**ANGEL PLACE
LEVEL 8, 123 PITT STREET
SYDNEY NSW 2000**

URBIS.COM.AU
Urbis Pty Ltd
ABN 50 105 256 228

18 November 2021

To whom it may concern,

520 GARDENERS ROAD, ALEXANDRIA – ABORIGINAL CULTURAL HERITAGE ASSESSMENT – ABORIGINAL COMMUNITY CONSULTATION STAGE 1.2

Urbis has been commissioned by Project Strategy on behalf of Charter Hall ('the proponent') to conduct an Aboriginal Cultural Heritage Assessment (ACHA) of 520 Gardeners Road, Alexandria, NSW, legally referred to as Lot 302 in DP1231238 ('the subject area') (see attached figures). The subject area is within the City of Sydney Local Government Area.

The ACHA will form part of a State Significant Development Application under Division 4.7 of the NSW *Environmental Planning and Assessment Act 1979* for the subject area. The proposed development includes the construction of a multi-level warehouse and distribution centre development with ancillary office space, vehicle parking and landscaping.

The Proponent can be contacted via:

Theodore Berney
Development Manager – Industrial & Logistics
Charter Hall
E: theodore.berney@charterhall.com.au

The ACHA is to be carried out in accordance with relevant guidelines under the NSW *National Parks and Wildlife Act 1974* (NPW Act). The assessment will detail the nature, extent and significance of any Aboriginal cultural heritage resources that may exist within the subject area and provide recommendations regarding management of those resources.

As part of the ACHA, Urbis will conduct a community consultation process with registered Aboriginal parties. The community consultation will be conducted in accordance with Section 4 of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water).

In accordance with Section 4.1.2 of the Consultation Requirements, Urbis seeks to compile a list of Aboriginal people and organisations who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places that may exist within the subject area.

If you are aware of any Aboriginal persons and/or organisations that may hold an interest in the project, we request that you please provide their details at your earliest convenience and preferably by **25 November 2021** to:



Aaron Olsen
Consultant
Urbis Pty Ltd
Level 8 ,123 Pitt Street
Sydney NSW 2000
E: aolsen@urbis.com.au

Urbis, on behalf of the Proponent, will write to each Aboriginal person or group whose details are provided to notify them of the proposed project and invite them to register an interest in the community consultation process.

If you have any questions in relation to the foregoing, please do not hesitate to contact us.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Balazs Hansel". The signature is fluid and cursive.

Balazs Hansel
Associate Director
+61 2 8233 7668
bhansel@urbis.com.au



Figure 1 – Regional Location of the subject area



Figure 2 – Location of the subject area

From: [LLS GS Service Mailbox](#)
To: [Aaron Olsen](#)
Cc: [Sam Richards](#); [Balazs Hansel](#)
Subject: Re: 520 Gardeners Road, Alexandria - ACHA - Stage 1.2
Date: Thursday, 18 November 2021 2:13:33 PM
Attachments: [image002.png](#)
[image004.png](#)
[image006.png](#)
[image008.png](#)
[image010.png](#)

Dear Mr Olsen

Thank you for your recent letter seeking assistance to identify Aboriginal stakeholder organisations and persons who may hold an interest in Country at the project area designated in your correspondence.

Greater Sydney Local Land Services (GS LLS) acknowledges that Local Land Services (formerly as Catchment Management Authorities) has been listed in Section 4.1.3.(g) of the Aboriginal Cultural Heritage Consultation requirements for proponents 2010, to support Part 6, of the NSW National Parks and Wildlife Act 1974 as a source of information to obtain the 'names of Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places'.

GS LLS understands and respects the significant role and values that tangible and intangible Aboriginal Cultural Heritage holds for First Nations/Aboriginal people with Country. GS LLS also partners with many First Nations communities on Caring for Country projects that aim to protect and enhance those tangible and intangible values in Country including Aboriginal Cultural Heritage. GS LLS considers Aboriginal Cultural Heritage matters in relation to its role in land management and considers cultural heritage issues in the context of Natural Resource Management.

However, GS LLS feels that it is not a primary source of contact for First Nations (Aboriginal) communities or persons that may inform or provide comment on development or planning issues.

GS LLS strongly recommends you contact Heritage NSW to seek their advice on all-inclusive contact lists of persons and organisations who 'speak for Country' and that may assist with your investigation.

Regards

Customer Service Team

Greater Sydney Local Land Services

Level 4, 2 - 6 Station St Penrith | PO Box 4515, Westfield Penrith NSW 2750

T: 02 4724 2100

E: gs.service@lls.nsw.gov.au | **W:** www.greatersydney.lls.nsw.gov.au

You can also contact us through our [online enquiry form](#)

Rate our service

Local Land Services is committed to providing excellent customer service. Feedback is welcomed.

Should you wish to provide feedback please click here: <https://rateitnow.com/greatersydneyregion>

Greater Sydney Local Land Services acknowledges we operate in and deliver services throughout Country of First Nations people in the Greater Sydney Region.

We recognise and respect Elders and cultural knowledge holders, past and present, while acknowledging the unique and diverse enduring cultures and histories of all First Nations people. Always was and always will be Aboriginal land.



From: Aaron Olsen <aolsen@urbis.com.au>
Sent: Thursday, 18 November 2021 12:46 PM
Cc: Sam Richards <sam.richards@urbis.com.au>; Balazs Hansel <bhansel@urbis.com.au>
Subject: 520 Gardeners Road, Alexandria - ACHA - Stage 1.2

Good afternoon

Urbis is currently undertaking an Aboriginal Cultural Heritage Assessment (ACHA) of 520 Gardeners Road, Alexandria, NSW. As part of the consultation process for that ACHA, we are seeking to compile a list of Aboriginal people and organisations who may hold cultural knowledge relevant to determining the significance of Aboriginal objects and/or places that may exist within the subject area.

If you are aware of any Aboriginal persons and/or organisations that may hold an interest in the project, we request that you please provide their details by return email at your earliest convenience and preferably by **25 November 2021**.

For further details, please refer to our formal letter attached.

We look forward to hearing from you.

Kind regards

AARON OLSEN

CONSULTANT

D +61 2 8233 9957

T +61 2 8233 9900

E aolsen@urbis.com.au

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From: [Daniel Clegg](#)
To: [Aaron Olsen](#)
Subject: DPC Heritage NSW RAP List - 520 Gardners Rd (Alexandria)
Date: Friday, 26 November 2021 7:36:29 PM
Attachments: [image003.png](#)
[HNSW RAP List - 520 Gardners Road Alexandria - City of Sydney LGA - Nov2021.docx.pdf](#)

Hi Aaron

Please find attached the DPC Heritage NSW RAP list for the proposed development at 520 Gardners Road, Alexandria - City of Sydney LGA.

Regards

Dan

Dan Clegg | Aboriginal Heritage Planning Support Officer

Heritage NSW, Community Engagement, Department of Premier and Cabinet
Level 2 - 512 Dean St, Albury NSW 2640 | PO Box 1040
T: (02) 6022 0639 | daniel.clegg@environment.nsw.gov.au



"Look after the land and rivers, and the land and rivers will look after you" Wongamaa – Snr Wiradhuri Elder

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Aaron Olsen
Consultant
Urbis Pty Ltd
Level 8, 123 Pitt Street
SYDNEY NSW 2000
via email: aolsen@urbis.com.au

Our reference: DOC21/1023142
Your reference:

Dear Aaron

WRITTEN NOTIFICATION OF PROPOSAL AS REQUIRED UNDER DECCW ABORIGINAL CULTURAL HERITAGE CONSULTATION REQUIREMENTS FOR PROPONENTS 2010

Subject: Registration of Aboriginal Interests – 520 Gardners Road, Alexandria – City of Sydney LGA

Thank you for your correspondence dated 18 November 2021 received by Heritage NSW (Department of Premier and Cabinet) regarding the above project.

Attached is a list of known Aboriginal parties for the City of Sydney local government area that Heritage NSW considers likely to have an interest in the activity. Please note this list is not necessarily an exhaustive list of all interested Aboriginal parties. Receipt of this list does not remove the requirement of a proponent/consultant to advertise in local print media and contact other bodies seeking interested Aboriginal parties, in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (April 2010).

Under Section 4.1.6. of the Consultation Requirements, you must also provide a copy of the names of each Aboriginal person who registered an interest to the relevant **Heritage NSW** office and Local Aboriginal Land Council (LALC) within 28 days from the closing date for registering an interest.

Please note that the contact details in the list provided by Heritage NSW may be out of date as it relies on Aboriginal parties advising Heritage NSW when their details need changing. If individuals/companies undertaking consultation are aware that any groups contact details are out of date, or letters are returned unopened, please contact either the relevant stakeholder group (if you know their more current details) and/or Heritage NSW. AHIP applicants should make a note of any group they are unable to contact as part of their consultation record.

If you have any questions about this advice, please email: heritagemailbox@environment.nsw.gov.au or contact (02) 9873 8500.

Yours sincerely

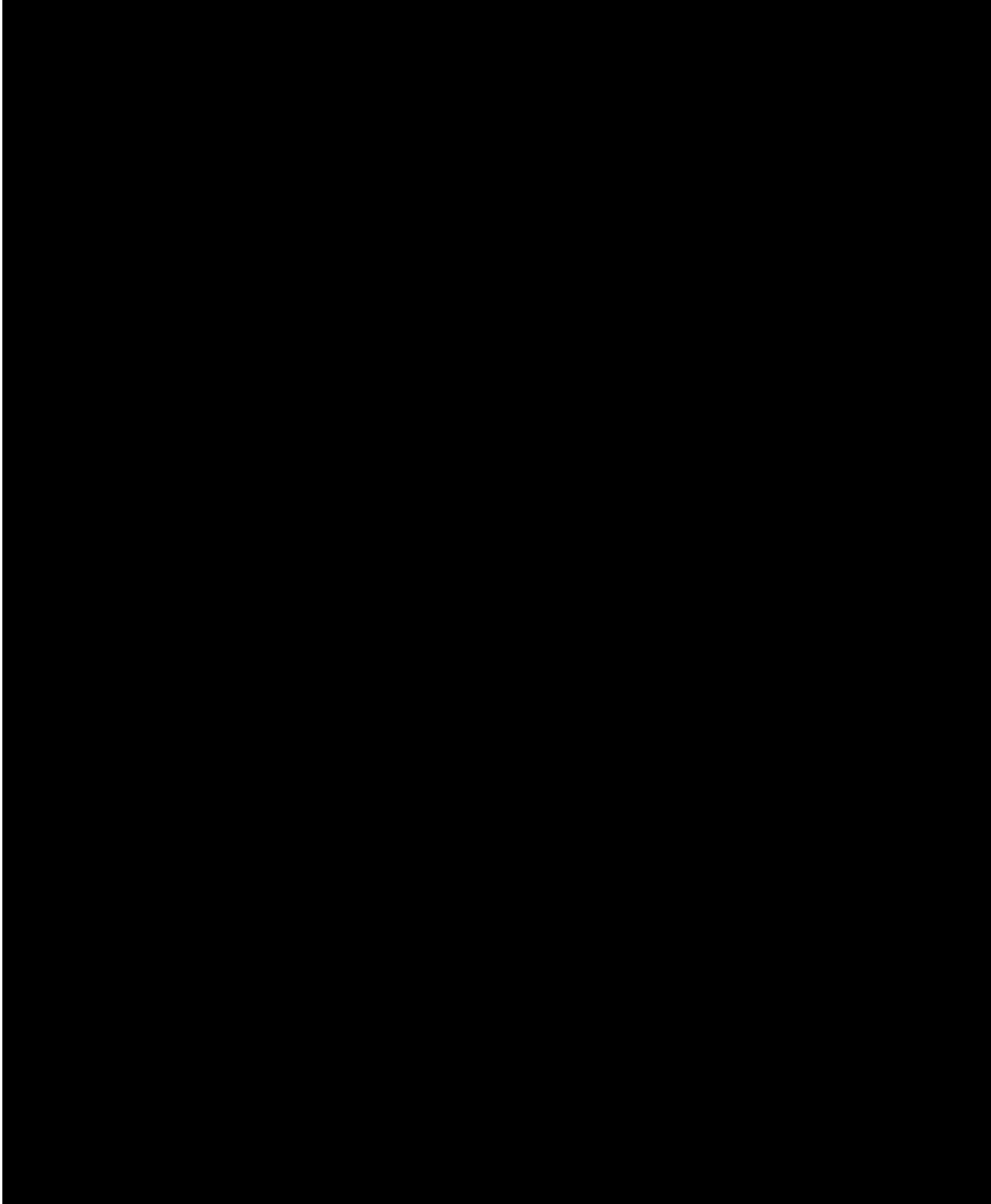
Dan Clegg
Aboriginal Heritage Planning Support Officer
Aboriginal Heritage Regulation Branch - South
Heritage NSW

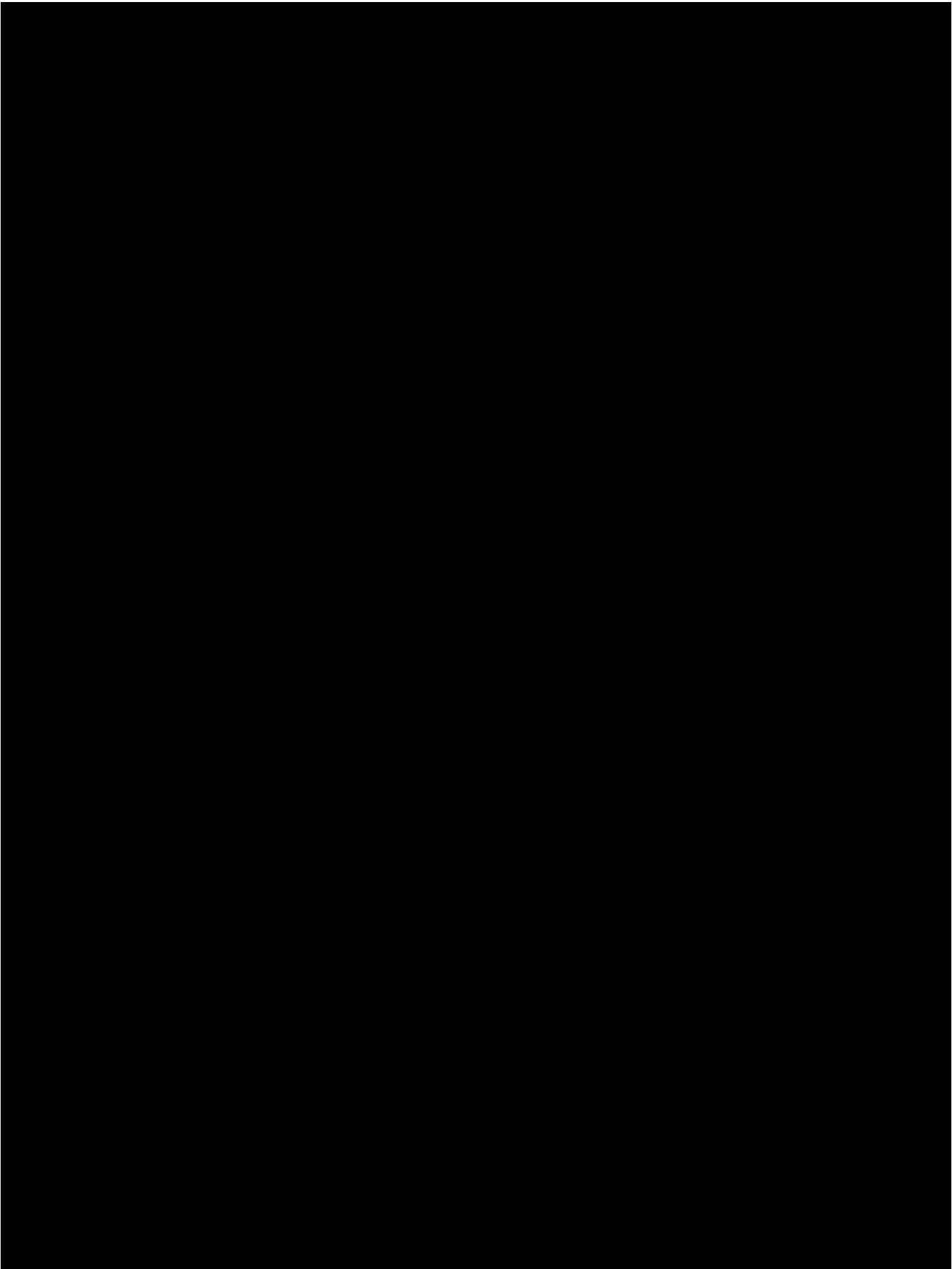
Encl: Attachment A: Registered Aboriginal Interests – City of Sydney Local Government Area

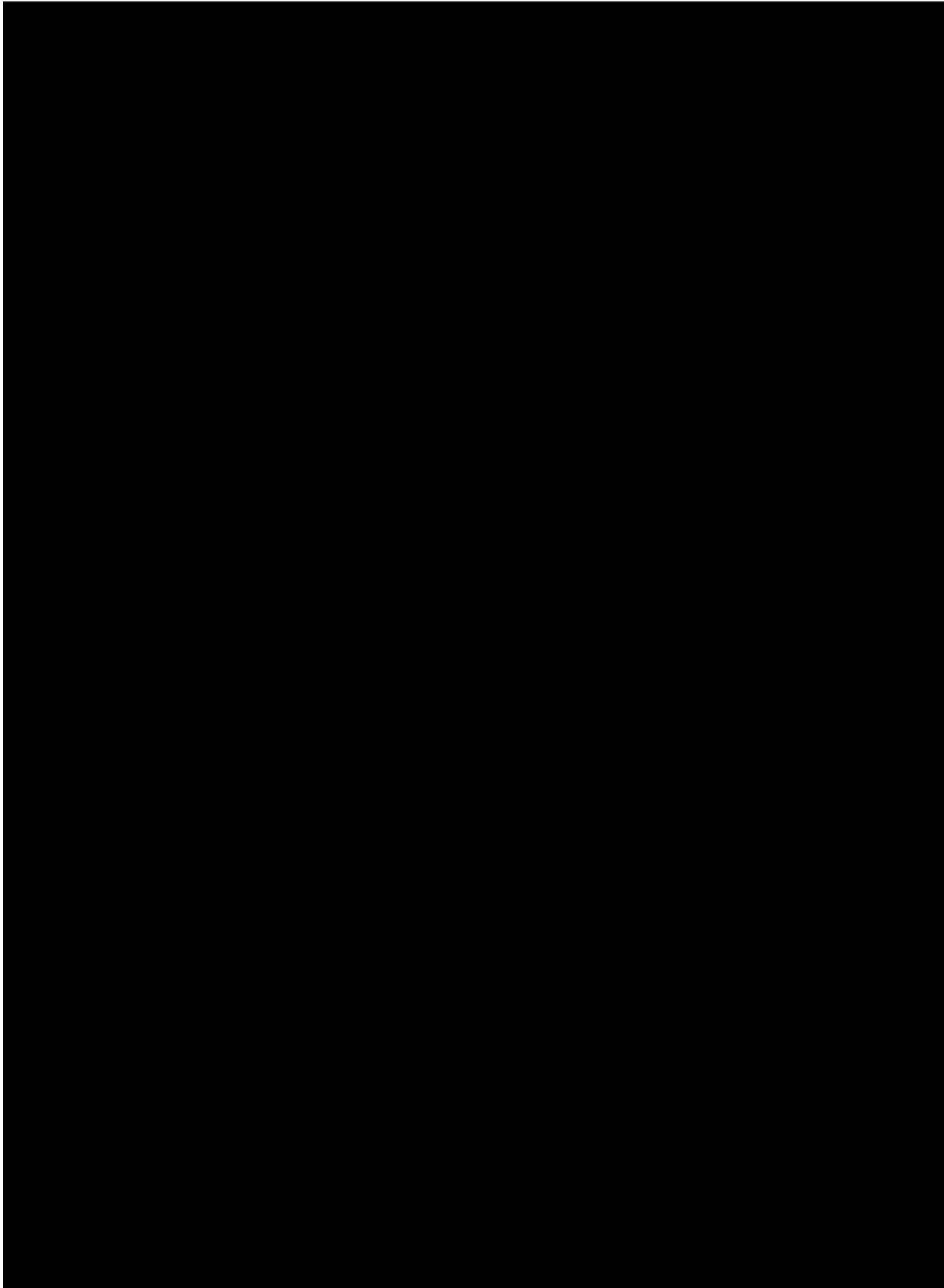
Attachment A: Registered Aboriginal Interests

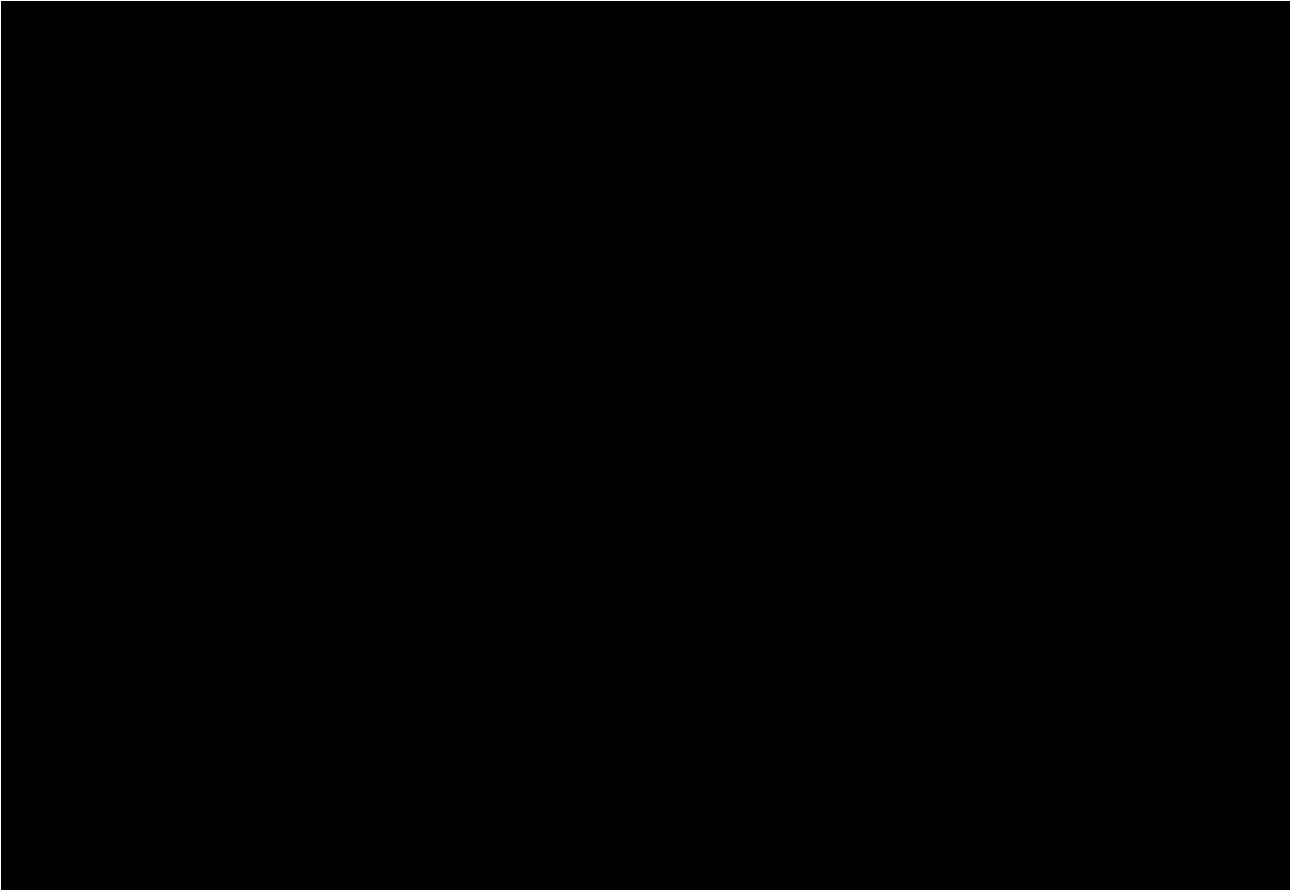
City of Sydney Local Government Area

| Organisation/ Individual | Contact Name | Email Address/ Fax / Phone | Postal Address |
|-------------------------------------|---------------------|---------------------------------------|-----------------------|
|-------------------------------------|---------------------|---------------------------------------|-----------------------|









STAGE 1.3 – INVITATION TO POTENTIAL RAPS

**NATURAL RESOURCES ACCESS REGULATOR
Tumbarumba Water Source**

Snowy Valleys Council has applied for a **Combined Approval** for a pump with a capacity of 1.4 L/s to extract water from Tumbarumba Creek on Lot 5 DP 234026 in the Parish of Tooma, County of Selwyn for fire-fighting and recreational purposes (ref. A028163).

If you object to this application, write to the Natural Resources Access Regulator, Licensing and Approvals—West, Locked Bag 5022, PARRAMATTA NSW 2124 or nrar.enquiries@nrar.nsw.gov.au within 28 days of this notice being published. You must include your name, address, the reason for your objection and the approval reference number stated above.

If you have questions, contact Water Regulation Officer Rachel Daly at rachel.daly@nrar.nsw.gov.au or on 0437 977 266.

SB2955

WaterNSW

Lower Gwydir Groundwater Source

WaterNSW has received an application from **Yara Nipro Pty. Limited** for an approval for a **Water Supply Work**, for a bore with a capacity of 20 ML/year at Lot 1 DP 34549, Parish Carare County Courallie. The application relates to Lower Gwydir Groundwater Source, subject to Gwydir Alluvial Groundwater Source 2020 Water Sharing Plan.

Objections must be submitted in writing to **Water NSW, PO Box 398, Parramatta NSW 2124** or customer.helpdesk@waterNSW.com.au. Objections must specify the grounds of the Objection and contain the name, address and signature (or authentication) of the Objector. You may use the Objection form waterNSW.com.au/advertising-and-objections. All Objections should reference Application Number **A028342**. Objections must be lodged with WaterNSW within 28 days of this Notice, please refer to the NSW Water Register ("closing date" column) for the final date to lodge an Objection. For enquiries contact **Bec Lowick, Water Regulation Officer**, on 1300 662 077 or by email customer.helpdesk@waterNSW.com.au.

KH1954

WaterNSW

Lower Murray-Darling Unregulated Water Source

WaterNSW has received an application from **Gavin James Hopkins And Gwendolyn Hopkins** to amend an approval for a **Water Supply Work** by adding a dam with a capacity of 19ML at Lot 1 DP 1010380, Parish of Avoca, County of Wentworth. The application relates to the Lower Murray Darling Unregulated Water Source, subject to the Water Sharing Plan for the Lower Murray Darling Unregulated River Water Source 2011.

Objections must be submitted in writing to **Water NSW PO Box 829 Albury NSW 2640** or customer.helpdesk@waterNSW.com.au. Objections must specify the grounds of the Objection and contain the name, address and signature (or authentication) of the Objector. You may use the Objection form waterNSW.com.au/advertising-and-objections. All Objections should reference Application Number **A026591**. Objections must be lodged with WaterNSW within 28 days of this Notice, please refer to the NSW Water Register ("closing date" column) for the final date to lodge an Objection. For enquiries contact **Stephanie Wight, Water Regulation Specialist**, on 1300 662 077 or by email customer.helpdesk@waterNSW.com.au.

KH1947

WaterNSW

Upper Bega/Bemboka Rivers Water Source

WaterNSW has received an application from **Aljo Pastoral Pty Ltd** to amend an approval for a **Water Supply Work** by replacing a work being a 150mm centrifugal pump with a capacity of 60 L/sec an increase of 41 L/sec at LOT 27 / DP1036268, Parish-Bemboka, County-Auckland. The application relates to Upper Bega/Bemboka Rivers Water Source, on the Bemboka River, subject to the Bega and Brogo Rivers Area Regulated, Unregulated and Alluvial Water Sources 2011.

Objections must be submitted in writing to **PO BOX 398, Parramatta NSW 2124** or customer.helpdesk@waterNSW.com.au. Objections must specify the grounds of the Objection and contain the name, address and signature (or authentication) of the Objector. You may use the Objection form waterNSW.com.au/advertising-and-objections. All Objections should reference Application Number **A27480**. Objections must be lodged with WaterNSW within 28 days of this Notice, please refer to the NSW Water Register ("closing date" column) for the final date to lodge an Objection. For enquiries contact **Martin Holland, Water Regulation Officer**, on 1300 662 077 or by email customer.helpdesk@waterNSW.com.au.

KH1946



Government of Western Australia
Department of Planning, Lands and Heritage

**NOTICE OF CANCELLATION OF NOTICE(S) OF INTENTION
TO TAKE**

LAND ADMINISTRATION ACT 1997

(Section 170(6))

I, the Honourable Dr Antonio de Paulo Buti MLA, Minister for Lands, hereby give notice in accordance with section 170(6) of the *Land Administration Act 1997* that the Notice(s) of Intention to Take specified below is/are cancelled.

| Location of Land | Registration Number of Notice of Intention to Take | Description of Land Required | Volume | Folio | Job Ref |
|--------------------|--|--|--------|-------|---------|
| Shire of Carnarvon | M168015 | Whole Lot 556 on Deposited Plan 415840 | 3172 | 223 | 103144 |

Dated this 29th day of November 2021.

Director General
Department of Planning, Lands and Heritage
For and on behalf of the Minister for Lands, under delegation

DOPLH_5688



**520 Gardeners Road / Alexandria
NSW**

**Aboriginal Cultural Heritage
Assessment – Community
Consultation Stage 1**

Urbis has been commissioned by Project Strategy on behalf of Charter Hall ('the Proponent') to conduct an Aboriginal Cultural Heritage Assessment (ACHA) of 520 Gardeners Road, Alexandria, NSW, legally referred to as Lot 302 DP1231238 ('the subject area') within the City of Sydney Local Government Area.

The ACHA will form part of a State Significant Development Application under Division 4.7 of the NSW Environmental Planning and Assessment Act 1979 for the subject area. The proposed development includes the construction of a multi-level warehouse and distribution centre development with ancillary office space, vehicle parking and landscaping.

The Proponent can be contacted via:

Theodore Berney
Development Manager – Industrial & Logistics Charter Hall
E: theodore.berney@charterhall.com.au

The ACHA will be conducted in accordance with the relevant guidelines under the NSW National Parks and Wildlife Act 1974, including community consultation with registered Aboriginal parties.

The Proponent is seeking the registration of Aboriginal persons or groups who may hold cultural knowledge relevant to determining the significance of Aboriginal object(s) and/or place(s) that may be present in the subject area.

Please register your interest in writing to the contact details provided below by 5.00pm 7 January 2022.

Aaron Olsen Consultant Urbis Pty Ltd
Level 8 123 Pitt Street,
Sydney, NSW, 2000
P: +61 2 8233 9957
E: aolsen@urbis.com.au

Please be advised that the Proponent is required to forward the names of registered Aboriginal parties to Heritage NSW and Metropolitan Local Aboriginal Land Council unless the party specifies that they do not want their details released.



Government of Western Australia
Department of Planning, Lands and Heritage

**NOTICE OF CANCELLATION OF NOTICE(S) OF INTENTION
TO TAKE**

LAND ADMINISTRATION ACT 1997

(Section 170(6))

I, the Honourable Dr Antonio de Paulo Buti MLA, Minister for Lands, hereby give notice in accordance with section 170(6) of the *Land Administration Act 1997* that the Notice(s) of Intention to Take specified below is/are cancelled.

| Location of Land | Registration Number of Notice of Intention to Take | Description of Land Required | Volume | Folio | Job Ref |
|--------------------|--|--|--------|-------|---------|
| Shire of Carnarvon | M168005 | Whole Lot 802 on Deposited Plan 415912 | 3172 | 225 | 120645 |
| Shire of Carnarvon | M168005 | Whole Lot 912 on Deposited Plan 415911 | 3172 | 219 | 120645 |
| Shire of Carnarvon | M168005 | Whole Lot 913 on Deposited Plan 415911 | 3172 | 220 | 120645 |
| Shire of Carnarvon | M168005 | Whole Lot 914 on Deposited Plan 415911 | 3172 | 221 | 120645 |

Dated this 29th day of November 2021.

Director General
Department of Planning, Lands and Heritage
For and on behalf of the Minister for Lands, under delegation

DOPLH_5686



**42 Raymond Avenue / Matraville
NSW**

**Aboriginal Cultural Heritage
Assessment – Community
Consultation Stage 1**

Urbis has been commissioned by Hale Capital Partners Pty Ltd ('the Proponent') to conduct an Aboriginal Cultural Heritage Assessment (ACHA) of 42 Raymond Avenue, Matraville, NSW, legally referred to as Lot 1 in DP 369888, Lot 32 Sec B DP 8313 and Lot 1 DP 511092. The subject area is within the Randwick City Council Local Government Area.

The ACHA will form part of a State Significant Development Application under Division 4.7 of the NSW Environmental Planning and Assessment Act 1979 for the subject area. The proposed development comprises the construction of a multi-level warehouse and distribution centre development, with ancillary office space, onsite parking for heavy vehicles, cars and bicycles and landscaping.

The Proponent can be contacted via: Alana Garrick

Development Manager
Hale Capital Partners Pty Ltd Level 13, 333 George Street
Sydney NSW 2000
E: alana.garrick@halecp.com

The ACHA will be conducted in accordance with the relevant guidelines under the National Parks and Wildlife Act 1974, including community consultation with registered Aboriginal parties.

The Proponent is seeking the registration of Aboriginal persons or groups who may hold cultural knowledge relevant to determining the significance of Aboriginal object(s) and/or place(s) that may be present in the subject area.

Please register your interest in writing to the contact details provided below by 5.00pm 7 January 2022.

Aaron Olsen Consultant Urbis Pty Ltd
Level 8, 123 Pitt Street
Sydney NSW 2000
E: aolsen@urbis.com.au

Please be advised that the Proponent is required to forward the names of registered Aboriginal parties to Heritage NSW and La Perouse Local Aboriginal Land Council unless the party specifies that they do not want their details released.



**Ryde Hospital Redevelopment / Denistone NSW
Aboriginal Cultural Heritage Assessment –
Community Consultation Stage 1**

Urbis has been commissioned by Health Infrastructure NSW ('the Proponent') to conduct an Aboriginal Cultural Heritage Assessment (ACHA) of the Ryde Hospital Campus at 37 Fourth Avenue and 1 Denistone Road, Denistone, NSW, legally referred to as Lots 10 and 11 in DP1183279, within City of Ryde Local Government Area. The ACHA will form part of a State Significant Development Application under Division 4.7 of the NSW Environmental Planning and Assessment Act 1979 for the subject area. The proposed development includes demolition of a number of existing buildings, construction of new buildings and landscaping.

The Proponent can be contacted via:

Leigh Gilshenan
Senior Project Manager TSA Management
Level 15, 207 Kent Street
Sydney NSW 2000
E: Leigh.Gilshenan@tsamgt.com

The ACHA will be conducted in accordance with the relevant guidelines under the National Parks and Wildlife Act 1974, including community consultation with registered Aboriginal parties.

The Proponent is seeking the registration of Aboriginal persons or groups who may hold cultural knowledge relevant to determining the significance of Aboriginal object(s) and/or place(s) that may be present in the subject area.

Please register your interest in writing to the contact details provided below by 5.00pm 7 January 2022.

Aaron Olsen Consultant Urbis Pty Ltd
Level 8 123 Pitt Street,
Sydney, NSW, 2000
P: +61 2 8233 9957
E: aolsen@urbis.com.au

Please be advised that the Proponent is required to forward the names of registered Aboriginal parties to Heritage NSW and Metropolitan Local Aboriginal Land Council unless the party specifies that they do not want their details released.



**ANGEL PLACE
LEVEL 8, 123 PITT STREET
SYDNEY NSW 2000**

URBIS.COM.AU
Urbis Pty Ltd
ABN 50 105 256 228

13 December 2021

To whom it may concern,

520 GARDENERS ROAD, ALEXANDRIA – ABORIGINAL CULTURAL HERITAGE ASSESSMENT – ABORIGINAL COMMUNITY CONSULTATION STAGE 1.3 – INVITATION TO REGISTER

Please be advised that your contact details have been provided to us by Heritage NSW as an Aboriginal person or party who may have an interest in registering for the above project.

Urbis has been commissioned by Project Strategy on behalf of Charter Hall ('the proponent') to conduct an Aboriginal Cultural Heritage Assessment (ACHA) of 520 Gardeners Road, Alexandria, NSW, legally referred to as Lot 302 in DP1231238 ('the subject area') (see attached figures). The subject area is within the City of Sydney Local Government Area.

The ACHA will form part of a State Significant Development Application under Division 4.7 of the NSW *Environmental Planning and Assessment Act 1979* for the subject area. The proposed development includes the construction of a multi-level warehouse and distribution centre development with ancillary office space, vehicle parking and landscaping.

The Proponent can be contacted via:

Theodore Berney
Development Manager – Industrial & Logistics
Charter Hall
E: theodore.berney@charterhall.com.au

The ACHA will be conducted in accordance with the relevant guidelines under the *NSW National Parks and Wildlife Act 1974*, including the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010) (the Consultation Requirements). The ACHA will include a community consultation process with registered Aboriginal parties.

The Proponent is seeking the registration of Aboriginal persons or groups who may hold cultural knowledge relevant to determining the significance of Aboriginal object(s) and/or place(s) that may be present in the subject area. Urbis, on behalf of the Proponent, hereby invites you to register an interest in the community consultation process for the above project.

If you wish to register your interest, please respond in writing (preferably by email) by clearly stating your interest and nominating a contact person **by 7 January 2022**.

Please send responses to:



Aaron Olsen,
Consultant
Urbis Pty Ltd
Level 8 ,123 Pitt Street
Sydney NSW 2000
E: aolsen@urbis.com.au

Following confirmation of your registration, Urbis will forward your name and contact details to Heritage NSW and Metropolitan Local Aboriginal Land Council, as required under the Consultation Requirements. If you do not want your details released, please advise us accordingly when registering your interest.

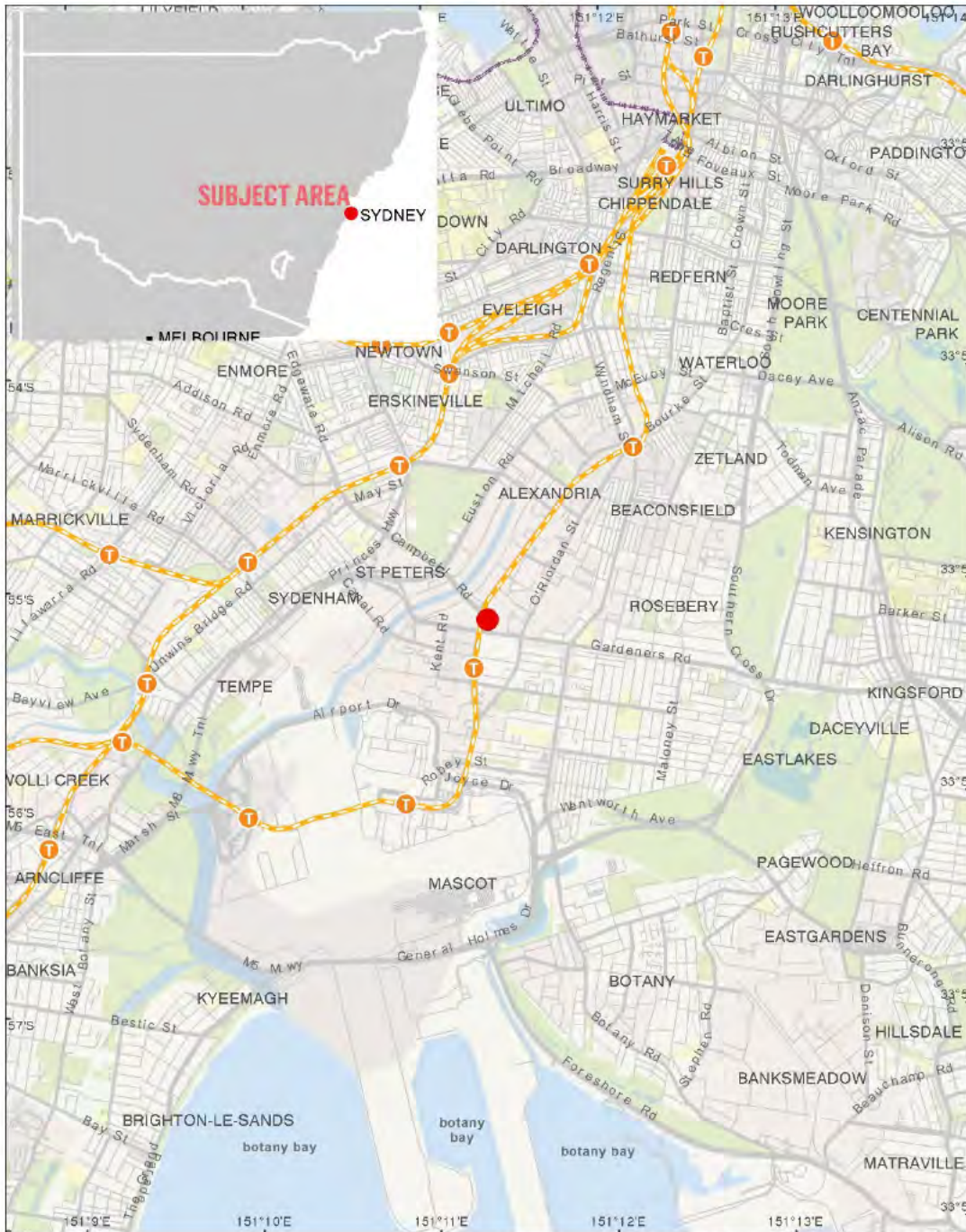
Please note that inclusion in the consultation process does not automatically result in paid site assessment, per Section 3.4 of the Consultation Requirements. Engagement for delivery of any services will be decided by the Proponent based on a range of considerations including skills, relevant experience and provision of certificates of currency.

If you have any questions in relation to the foregoing, please do not hesitate to contact us.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Balazs Hansel".

Balazs Hansel
Associate Director
+61 2 8233 7668
+61 499 986 833
bhansel@urbis.com.au



GDA 1994 MGA Zone 56 © 2021, PSMA Australia Ltd, HERE Pty Ltd, ABS, Produced by Urbis Pty Ltd ABN 60 105 286 228, Nov 2021

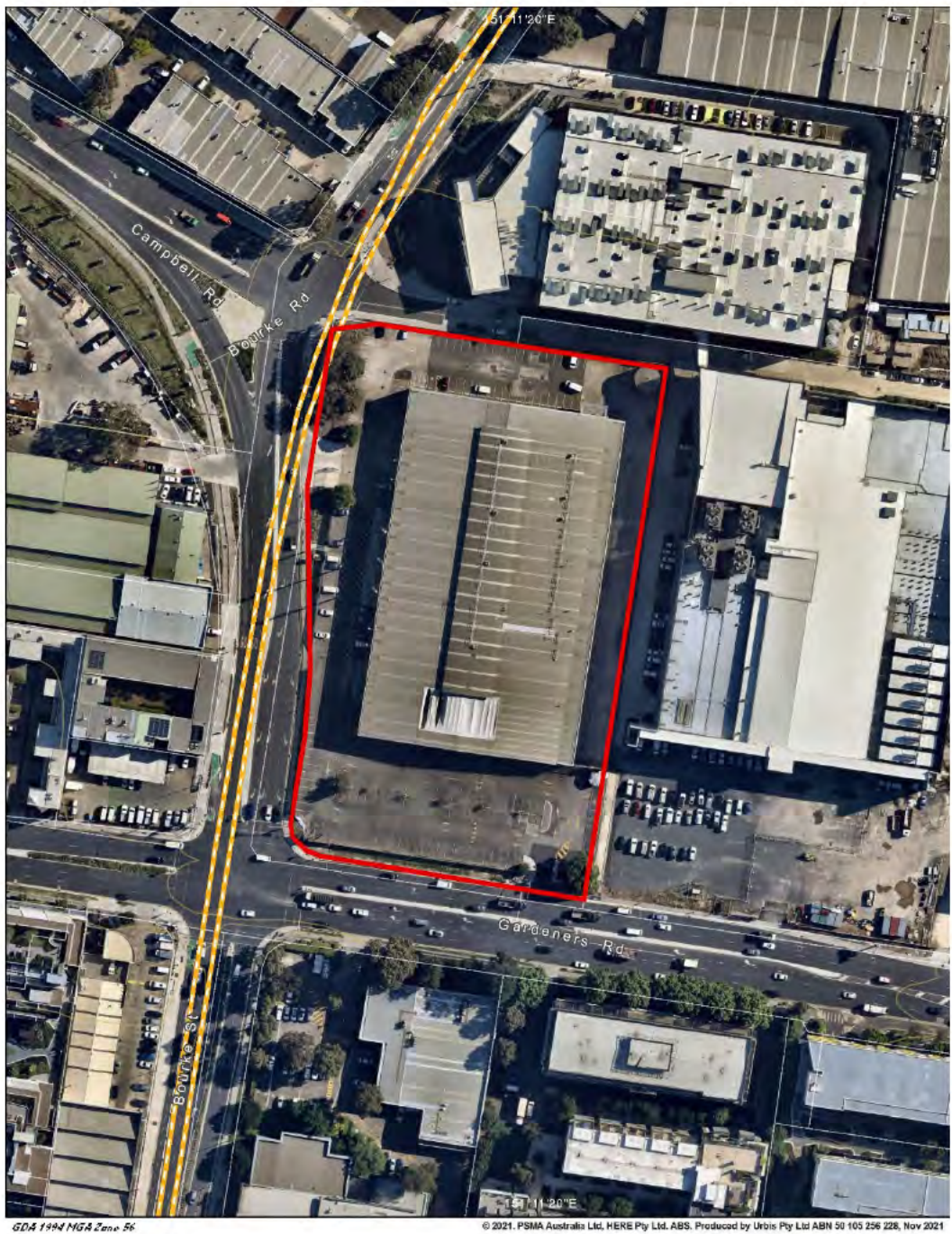
1 KM

Project No: P0032153
 Project Manager: Balazs Hansel

Subject Area

REGIONAL LOCATION
 520 Gardeners Road, Alexandria
 Charter Hall

Figure 1 – Regional Location of the subject area



GDA 1994 MGA Zone 56
 Project No: P0032153
 Project Manager: Balazs Hansel

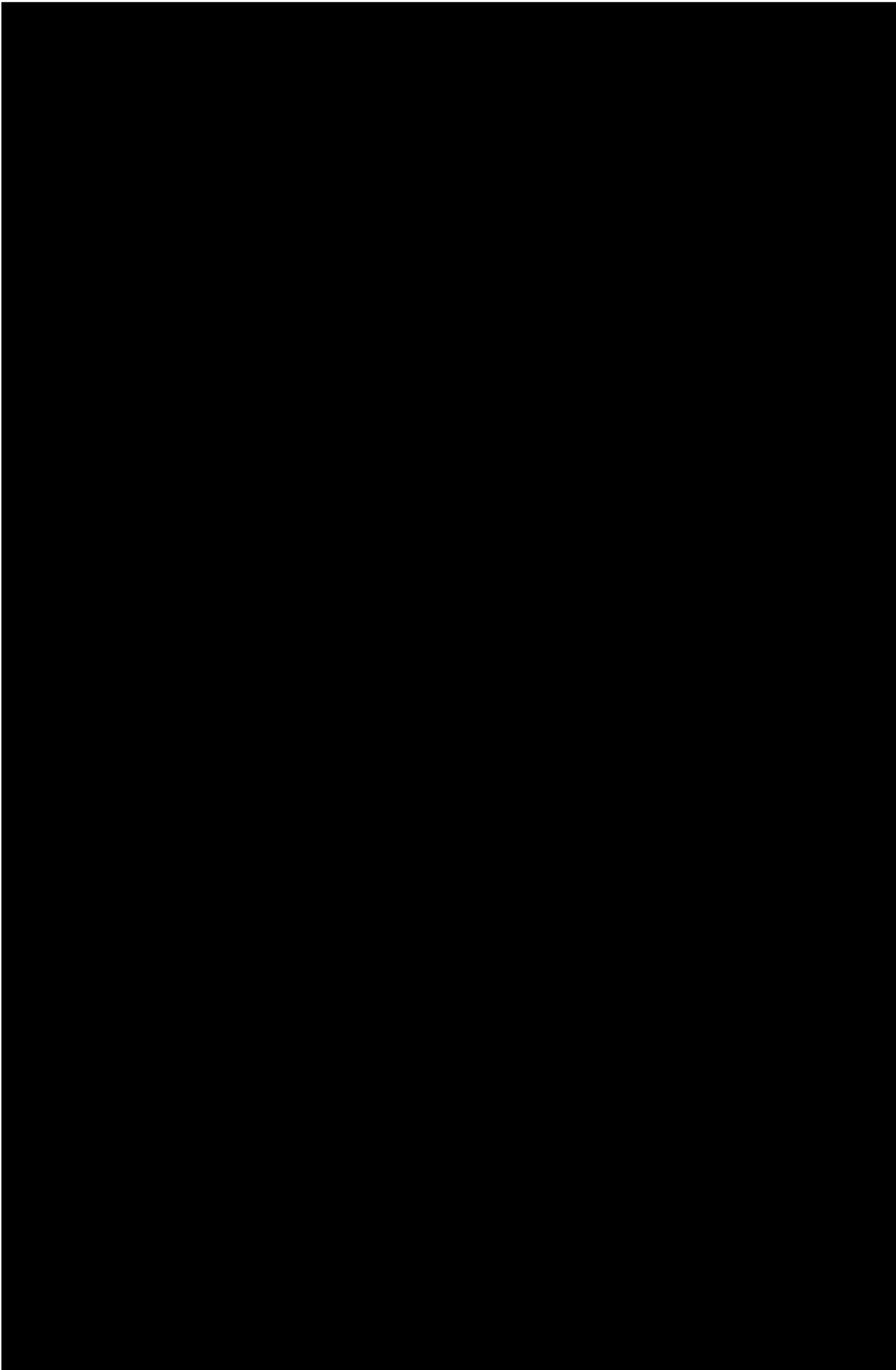
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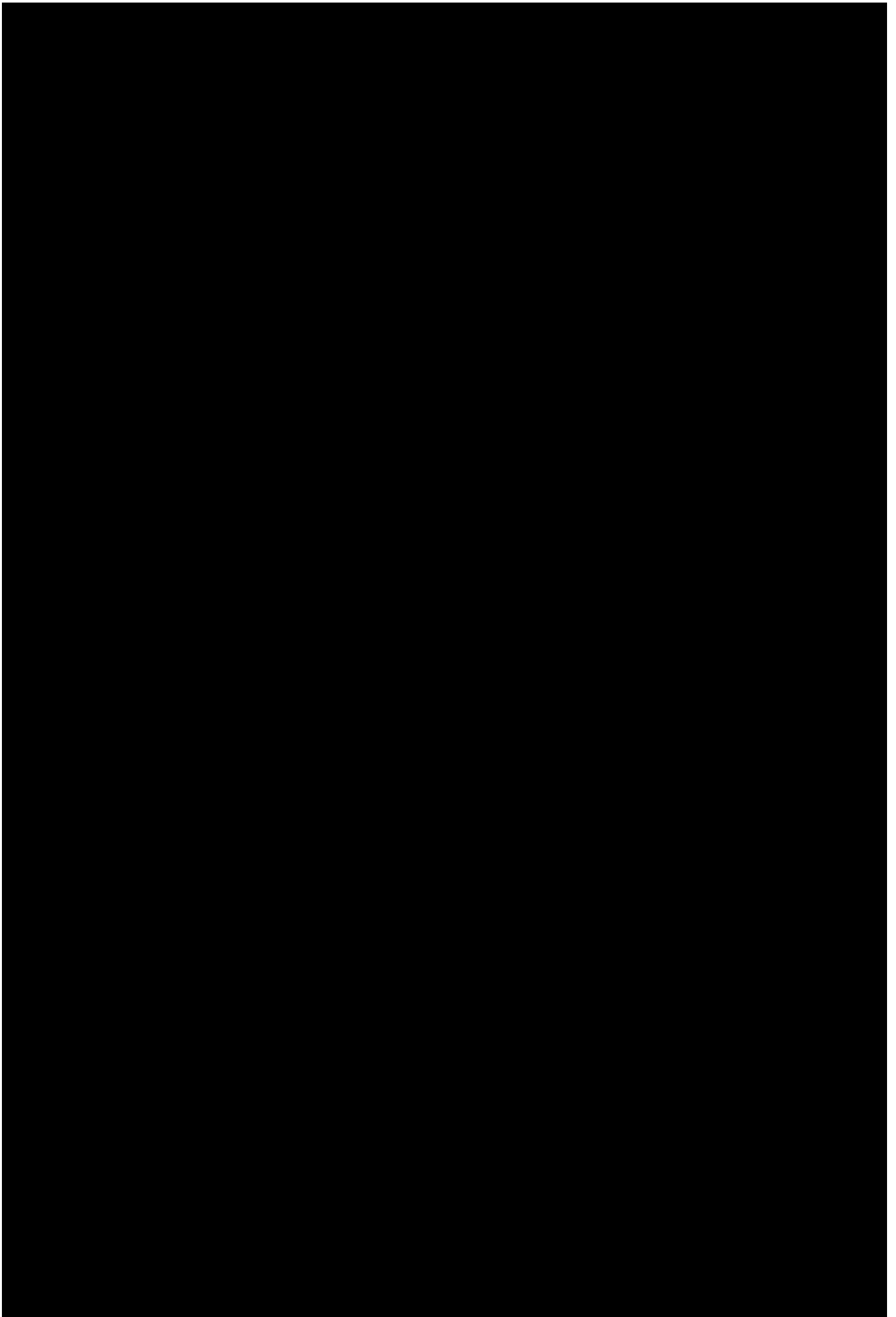
Legend: Subject Area — Contours

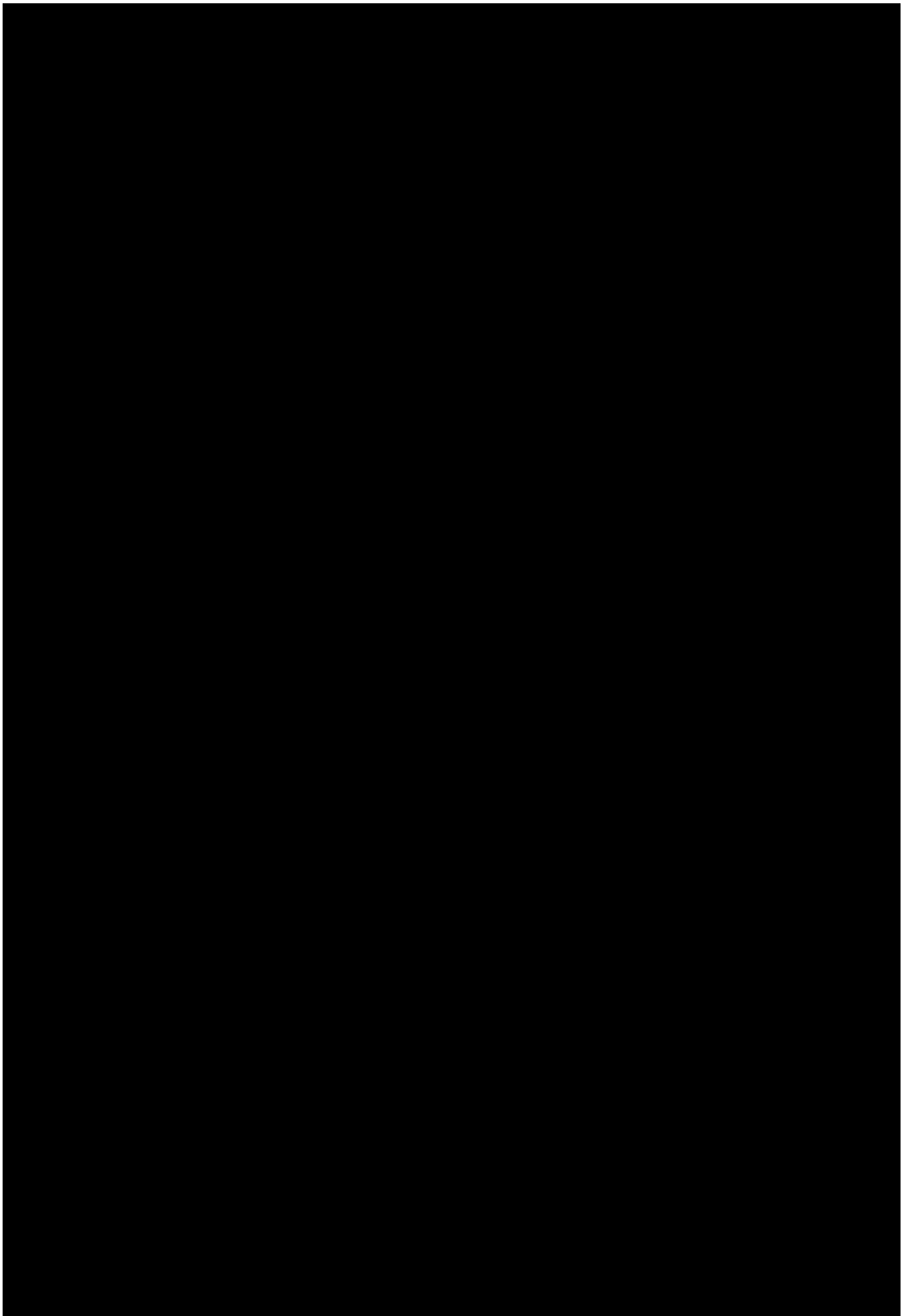
SUBJECT AREA
 520 Gardeners Road, Alexandria
 Charter Hall

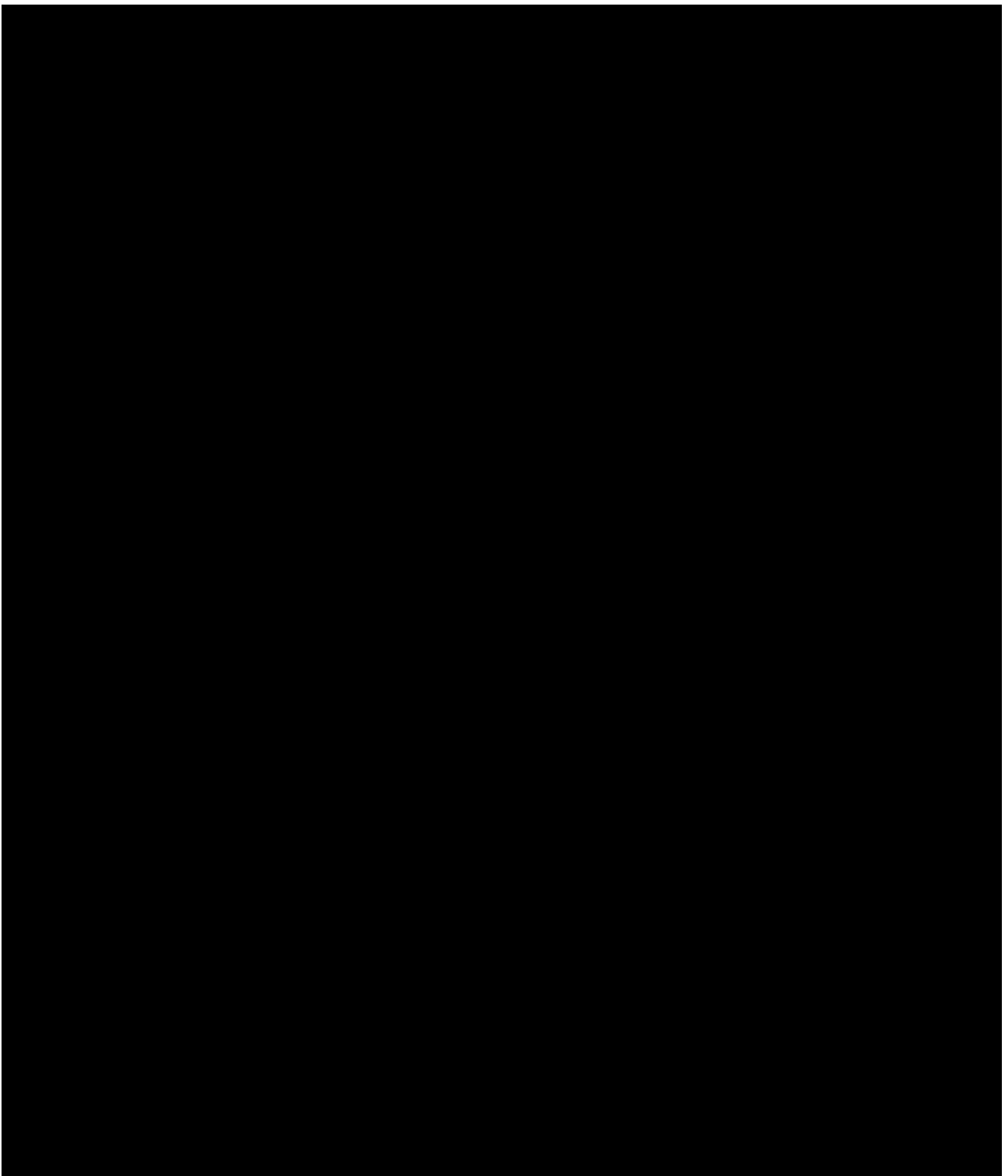
© 2021, PSMA Australia Ltd, HERE Pty Ltd, ABS, Produced by Urbis Pty Ltd ABN 50 105 256 228, Nov 2021

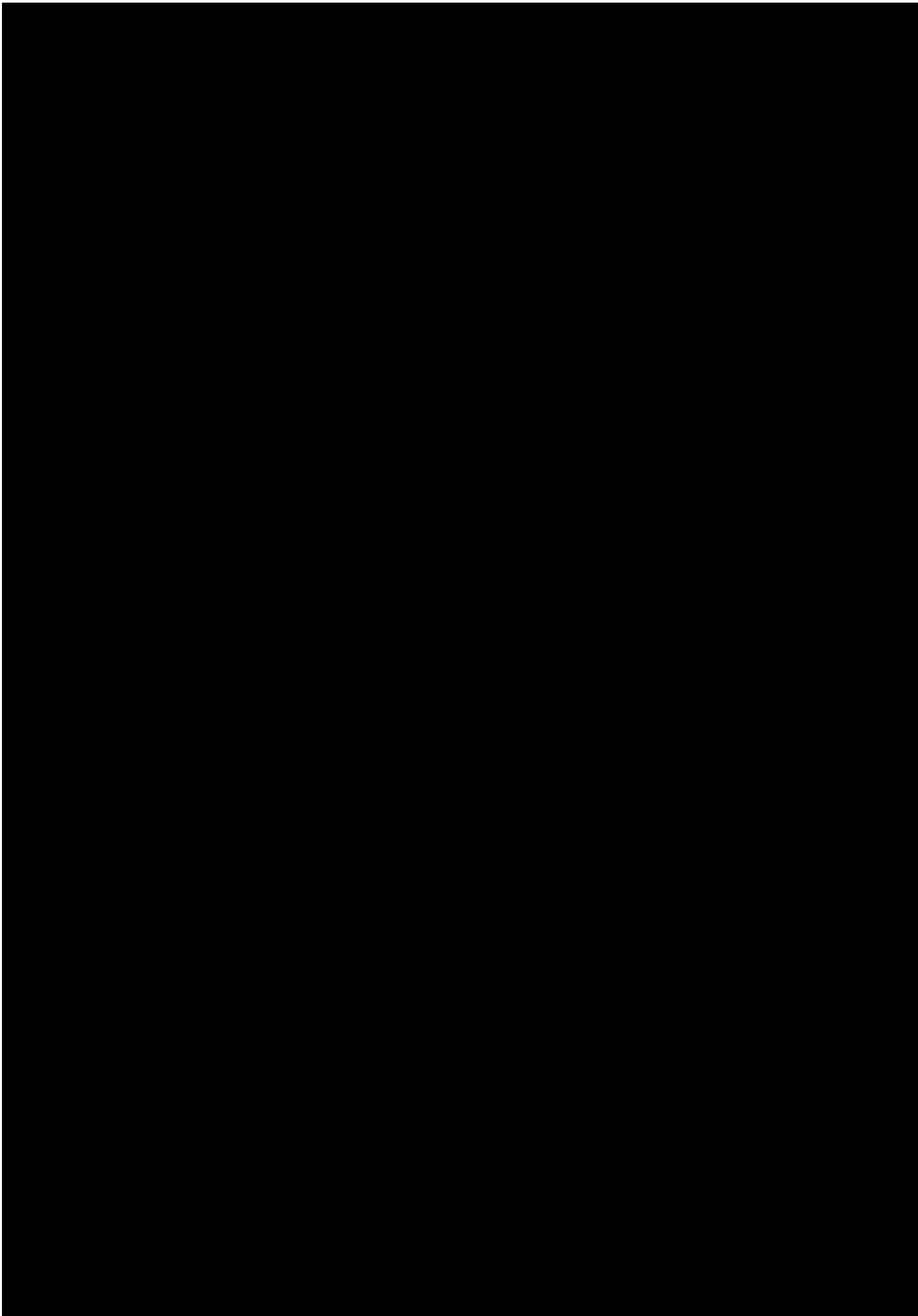
Figure 2 – Location of the subject area

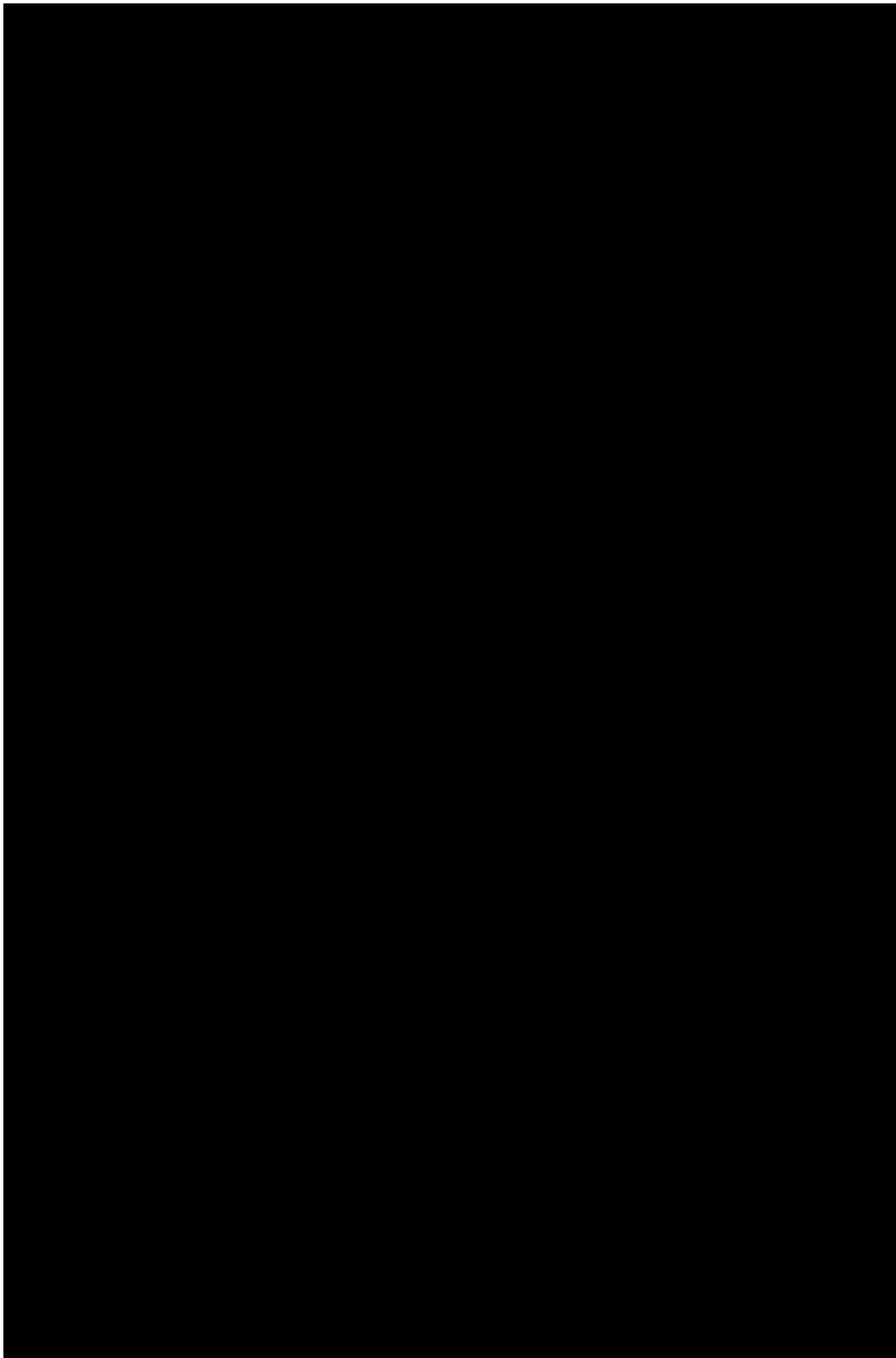


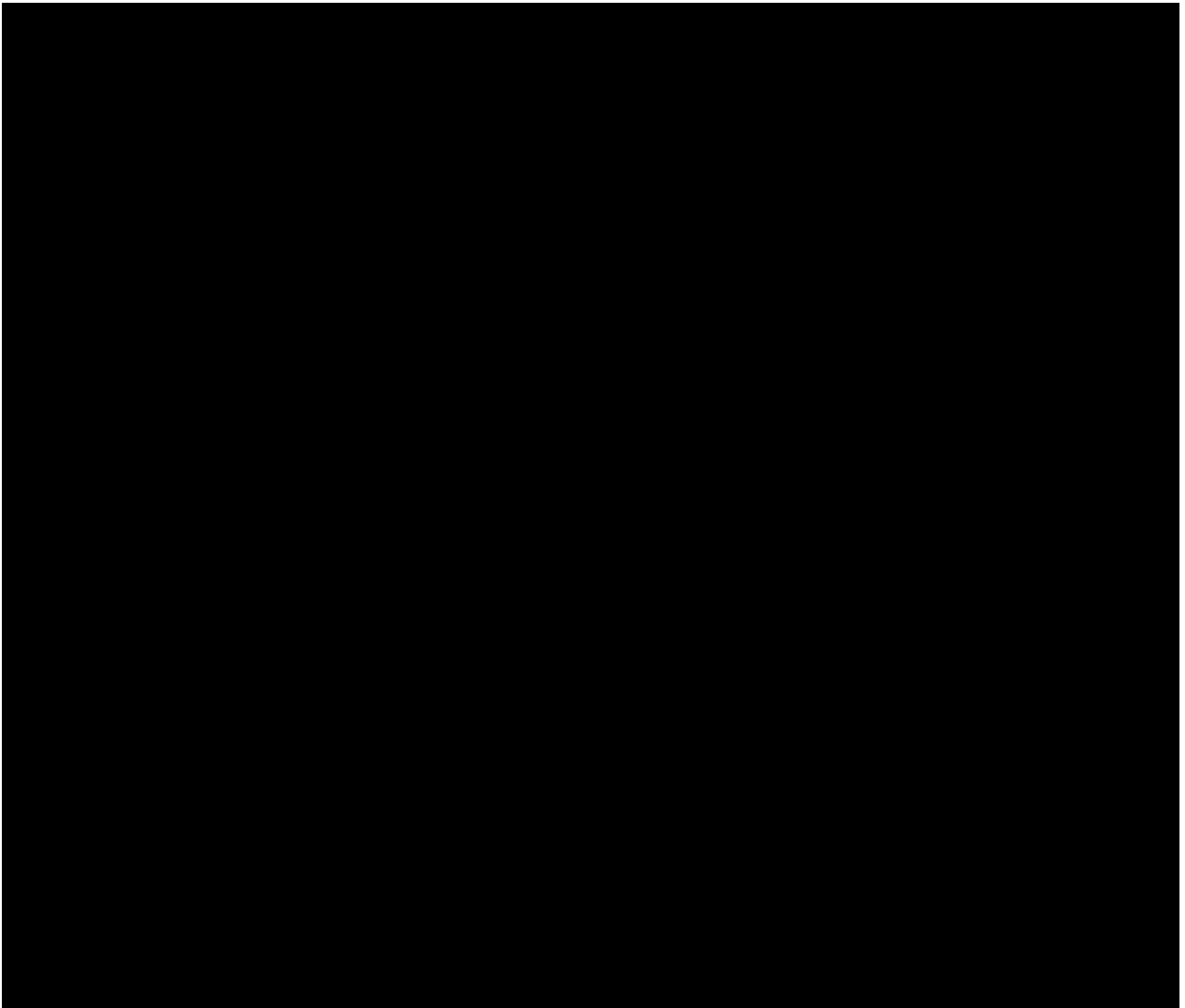


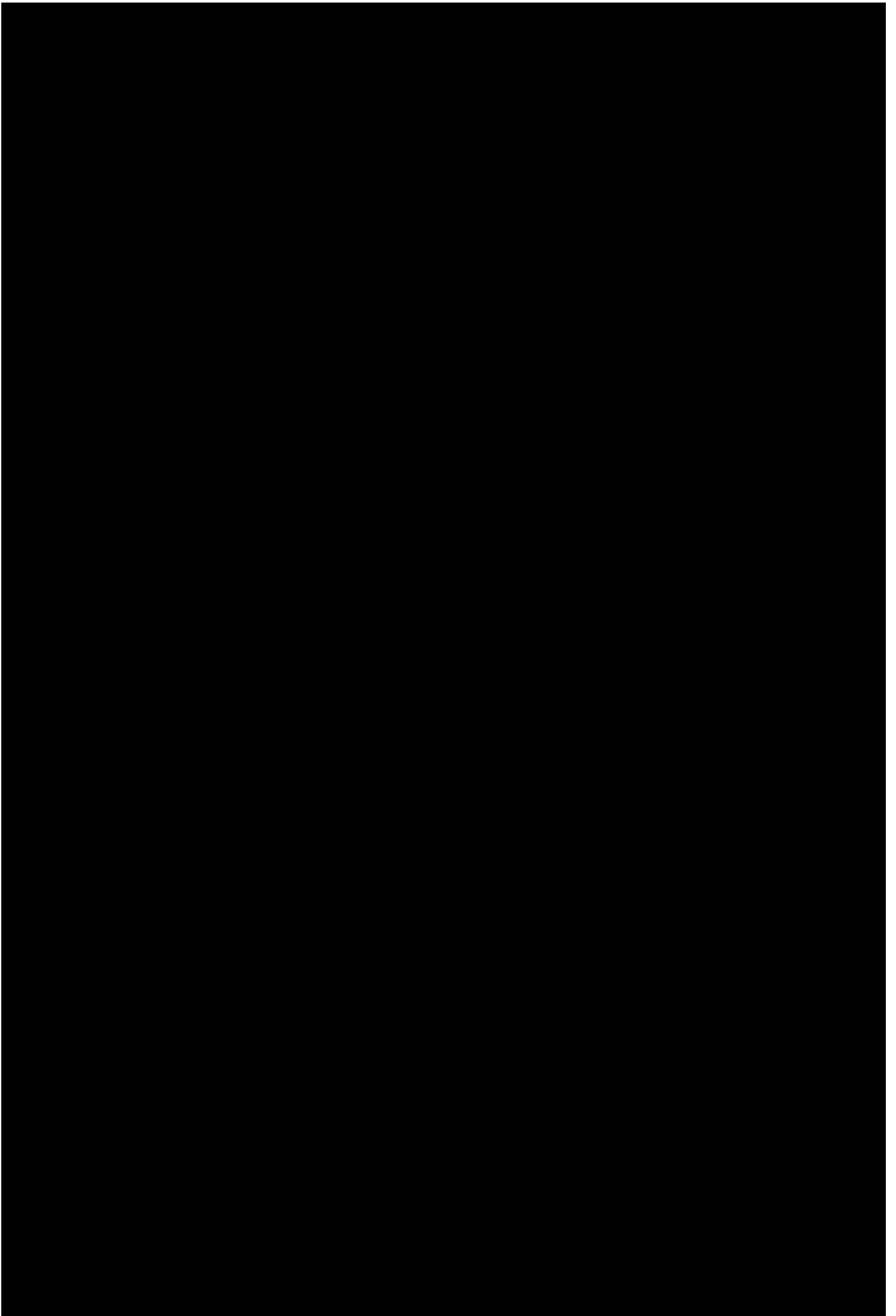


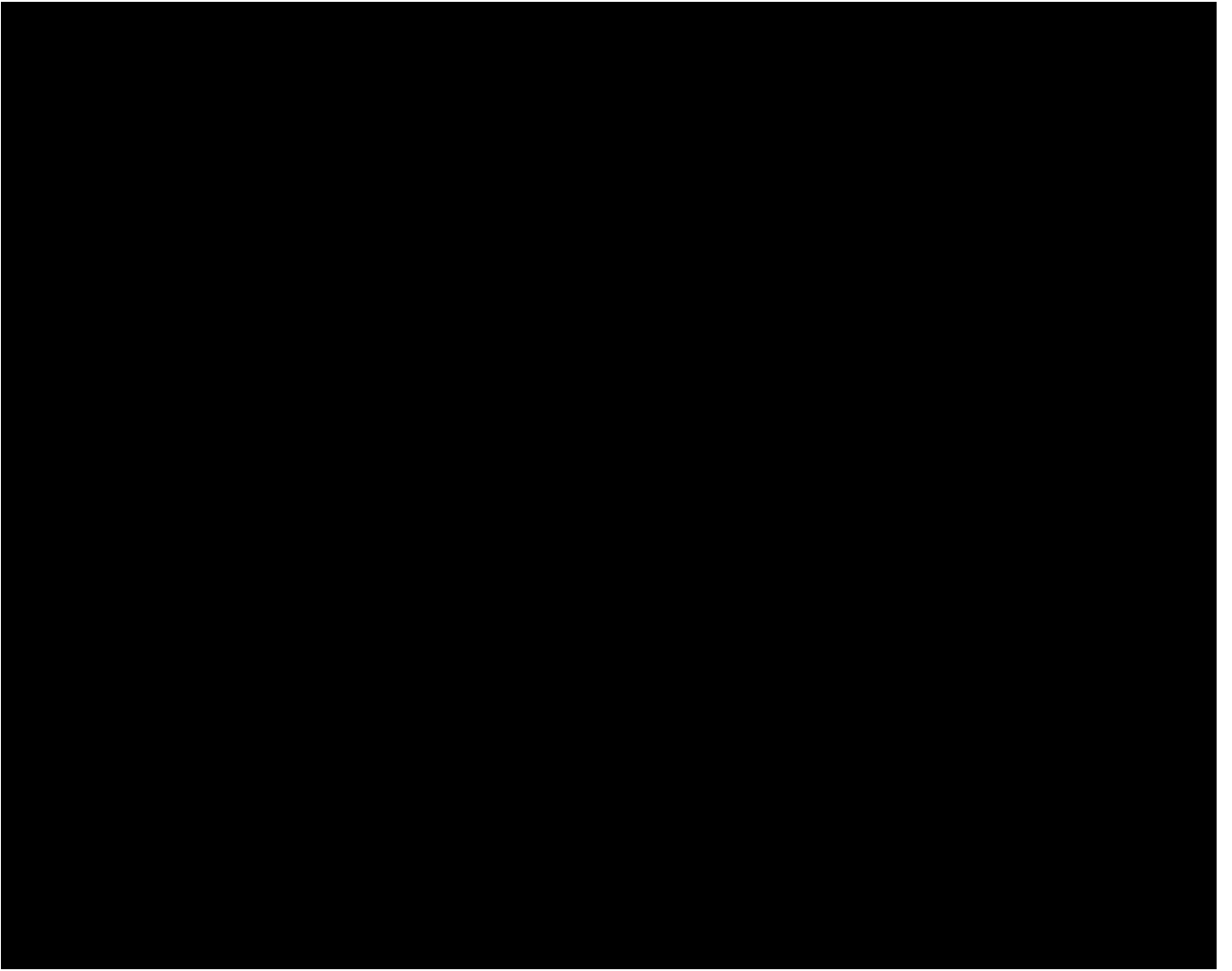


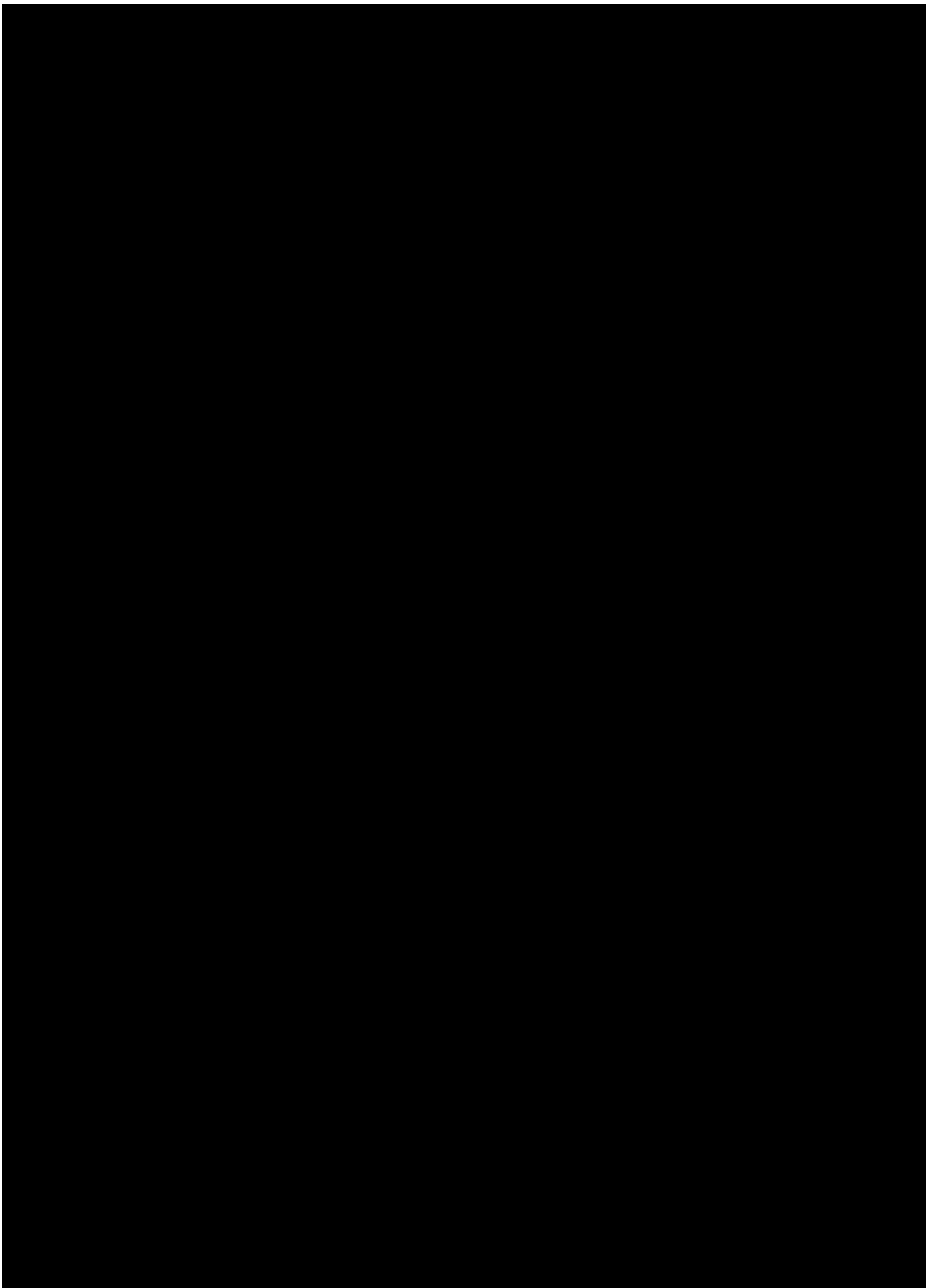


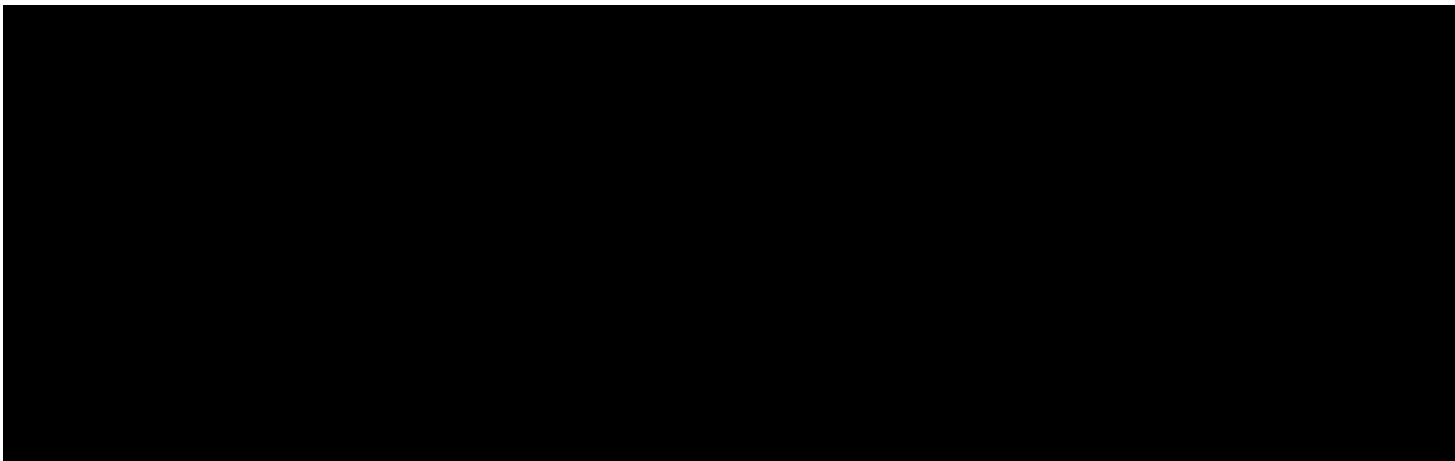


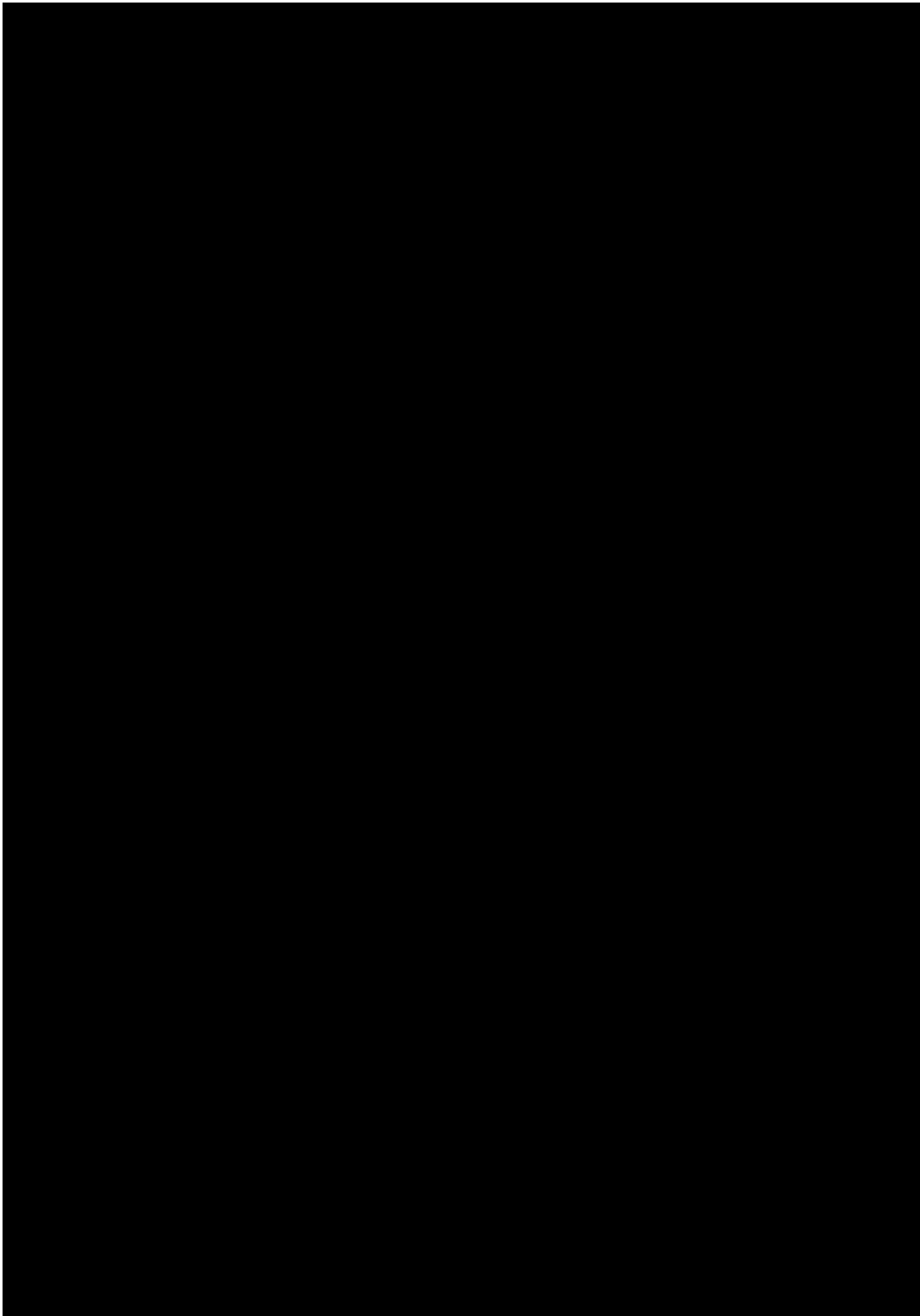


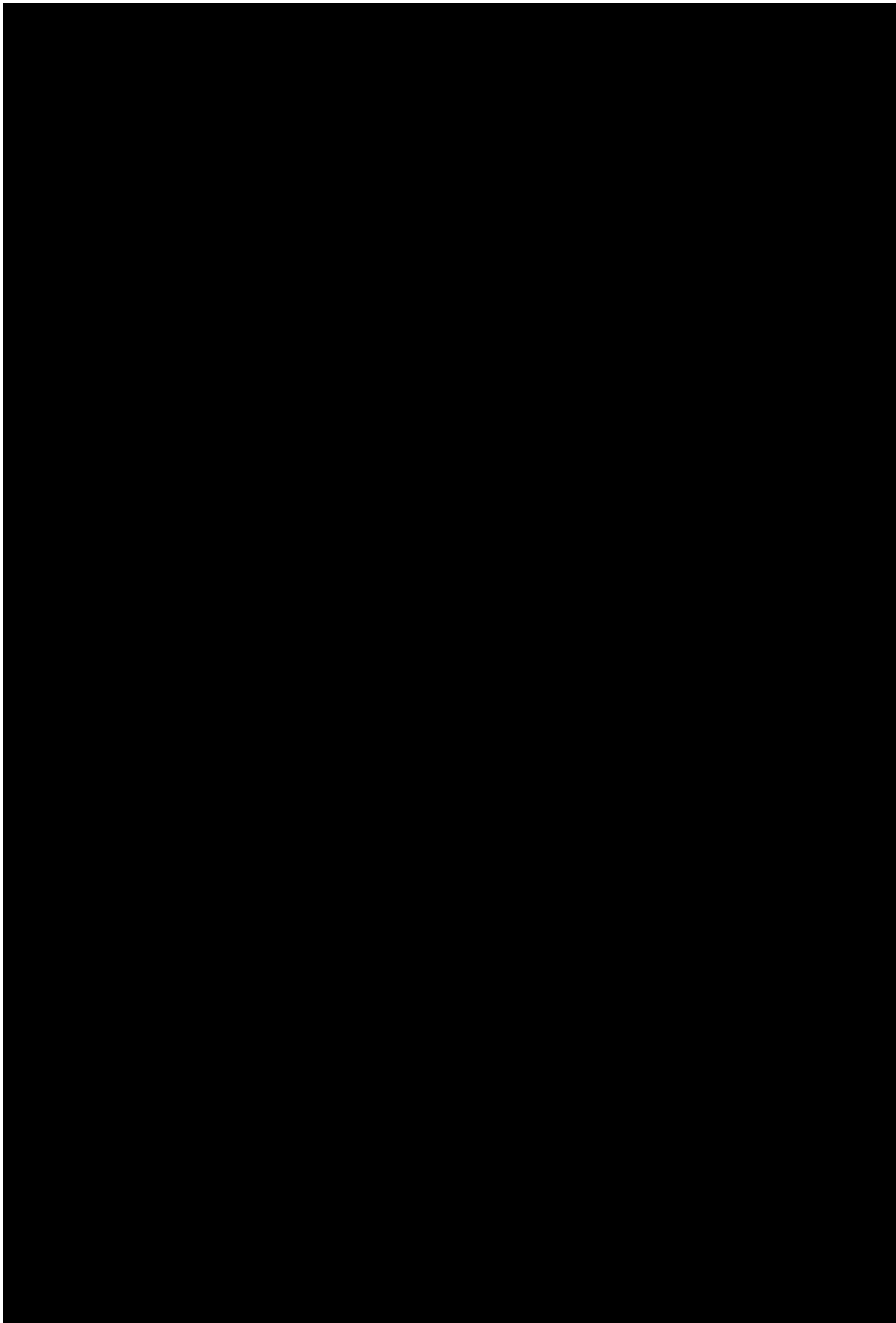


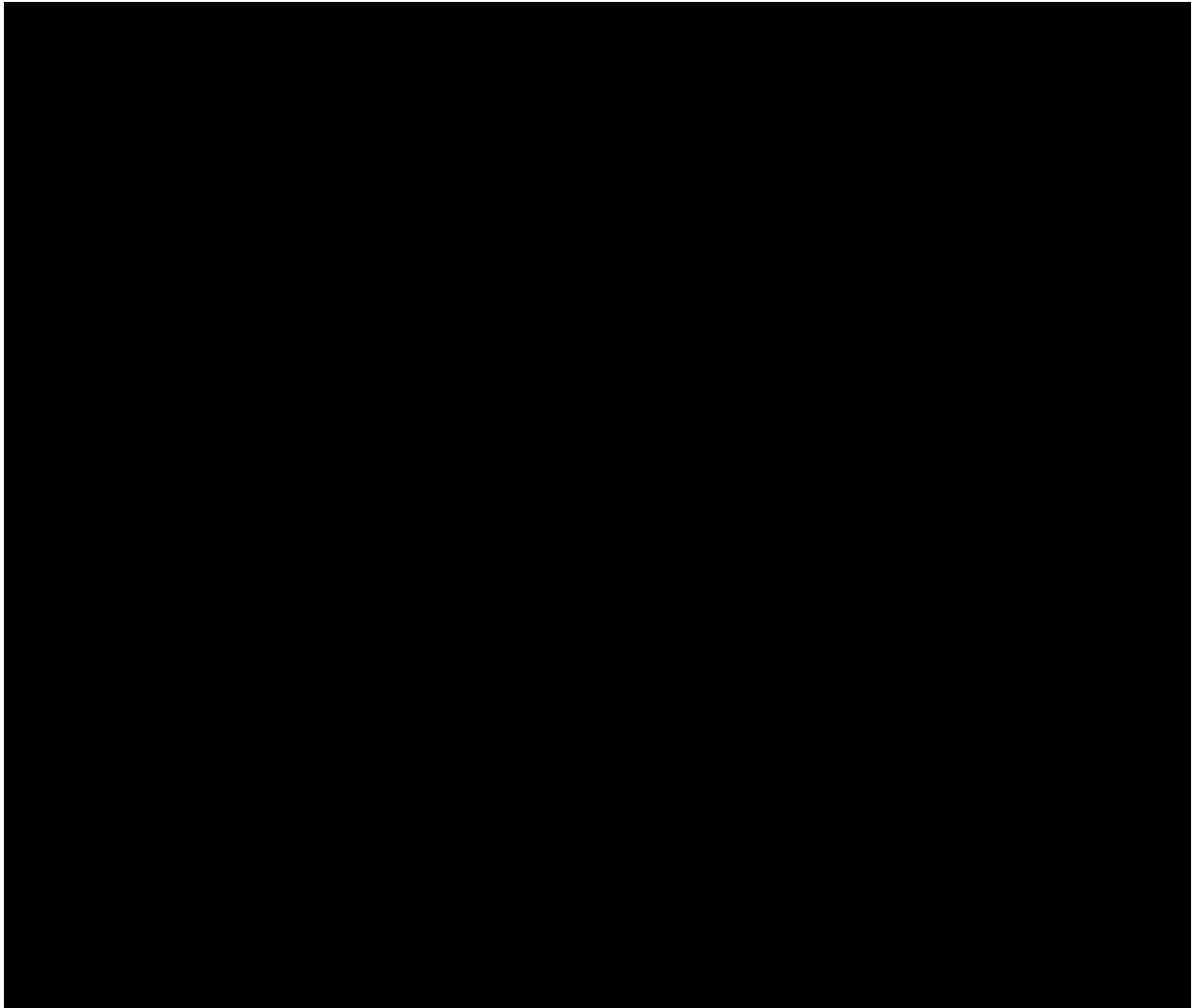


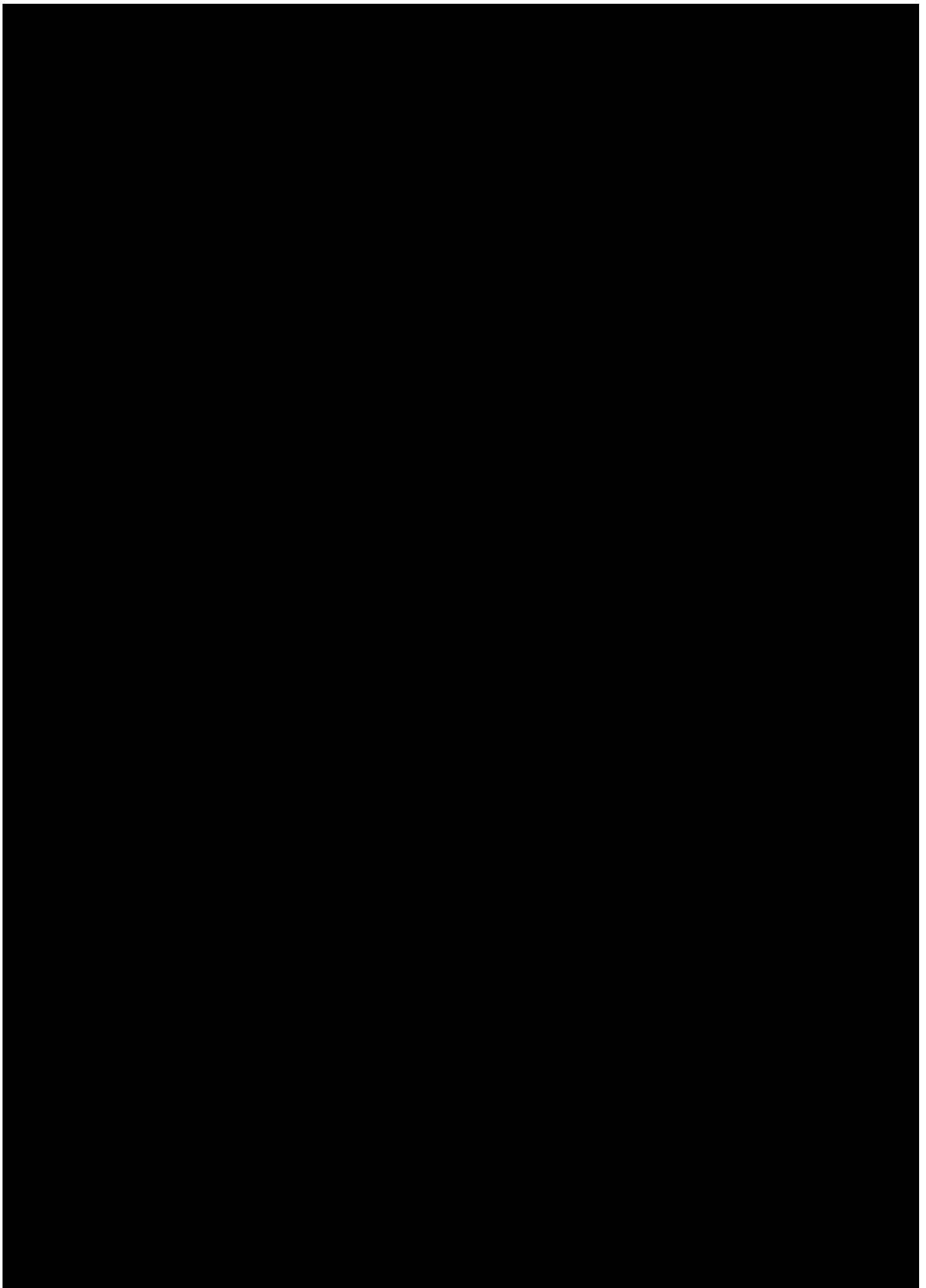


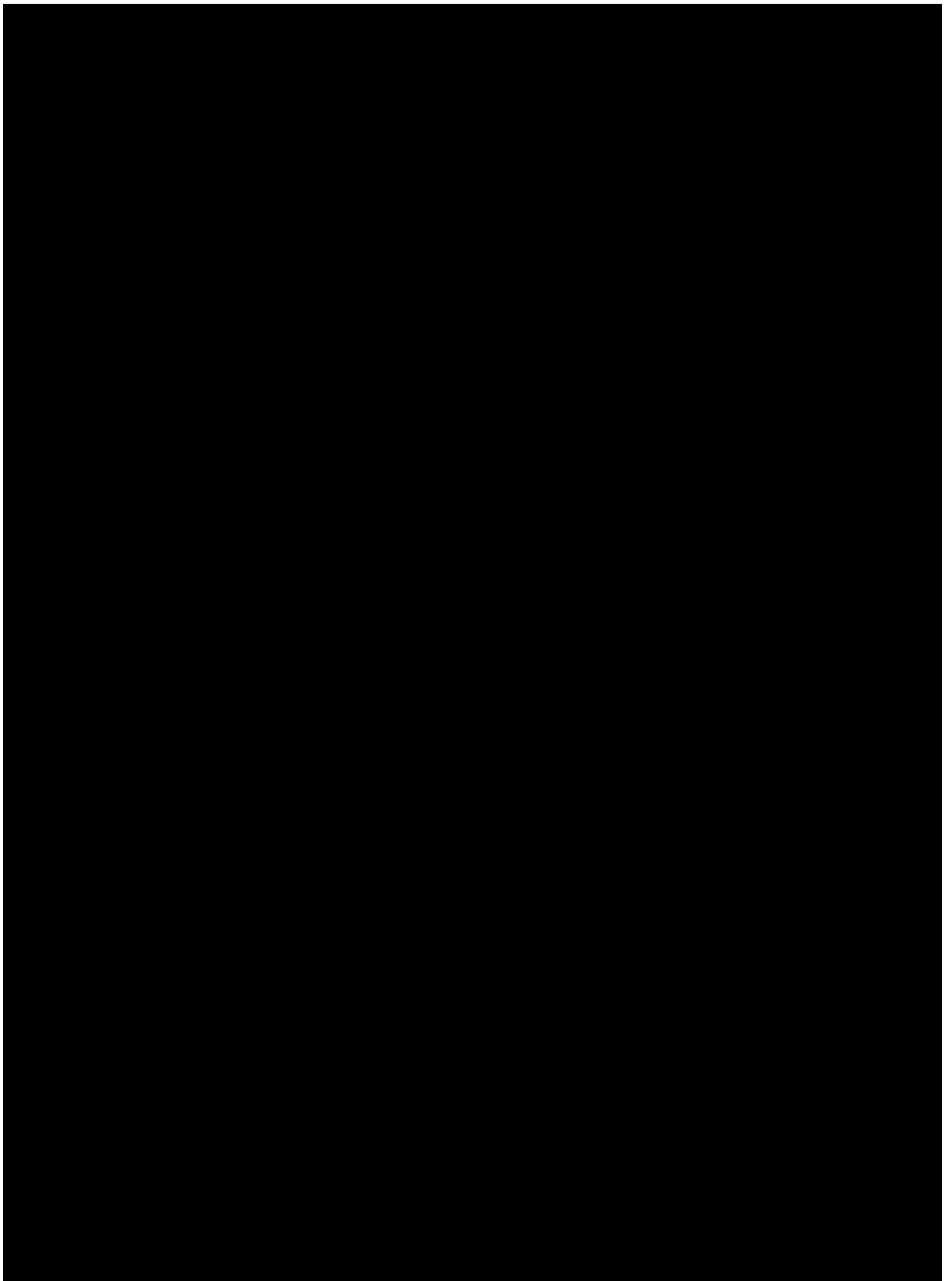


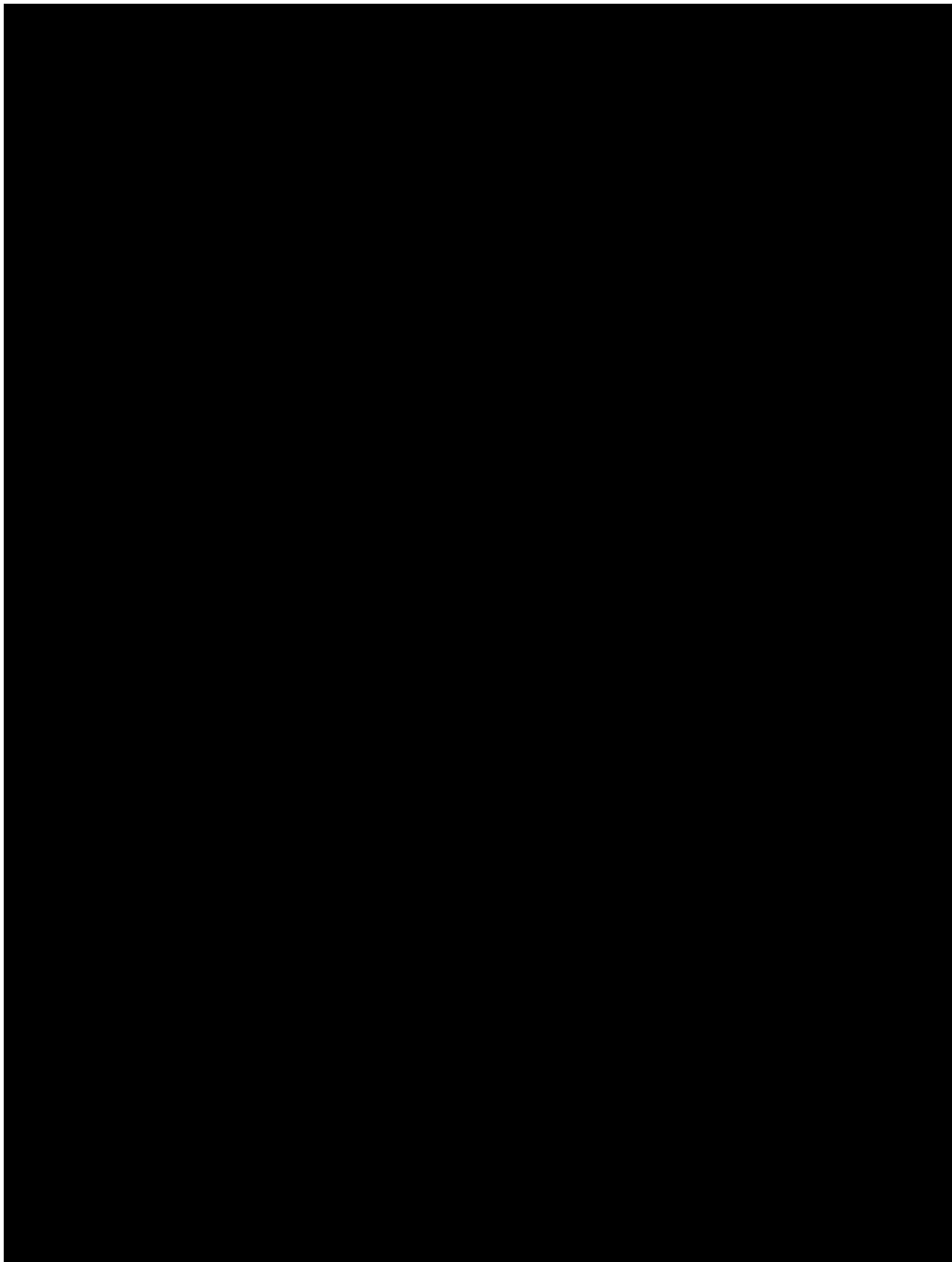


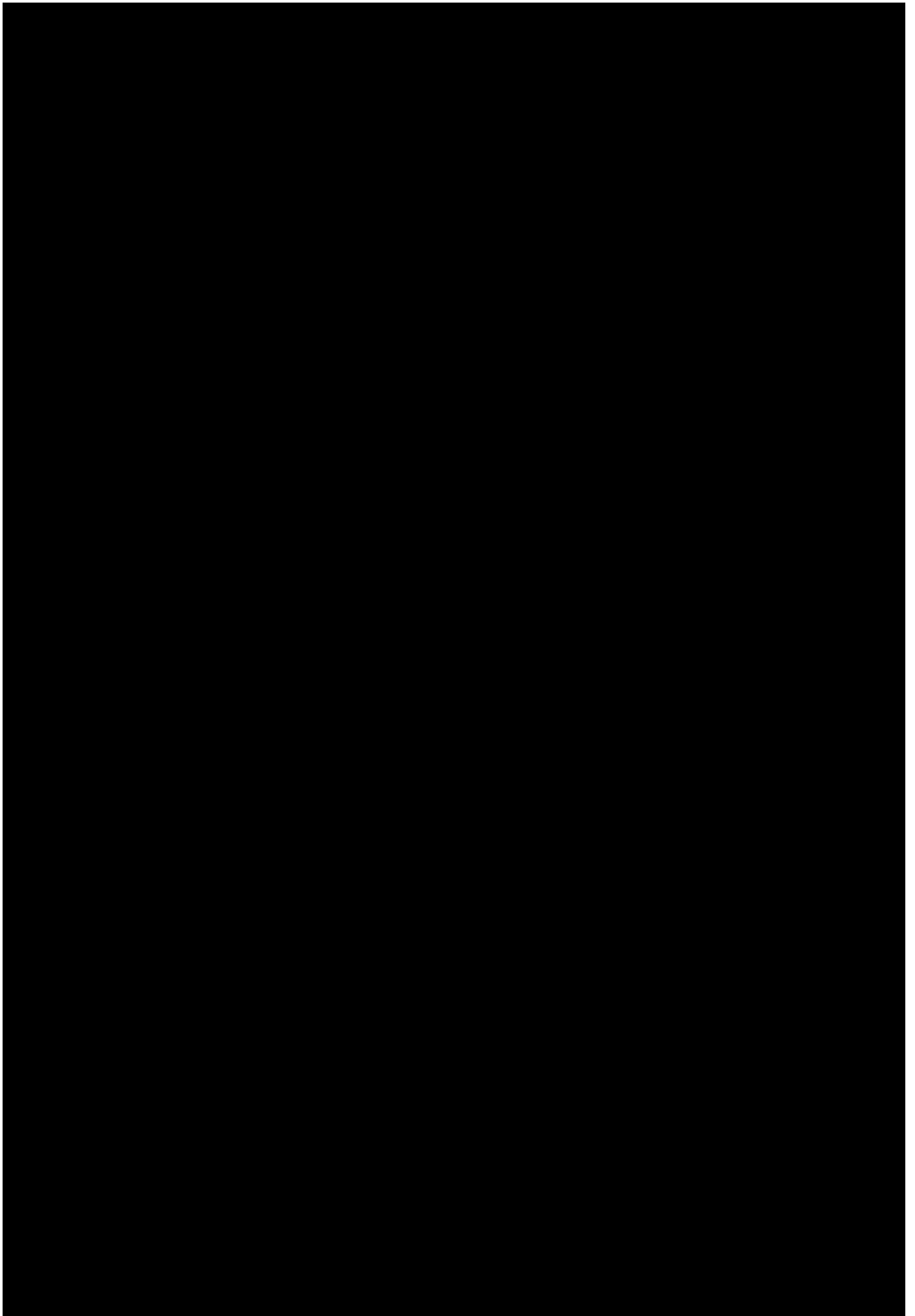


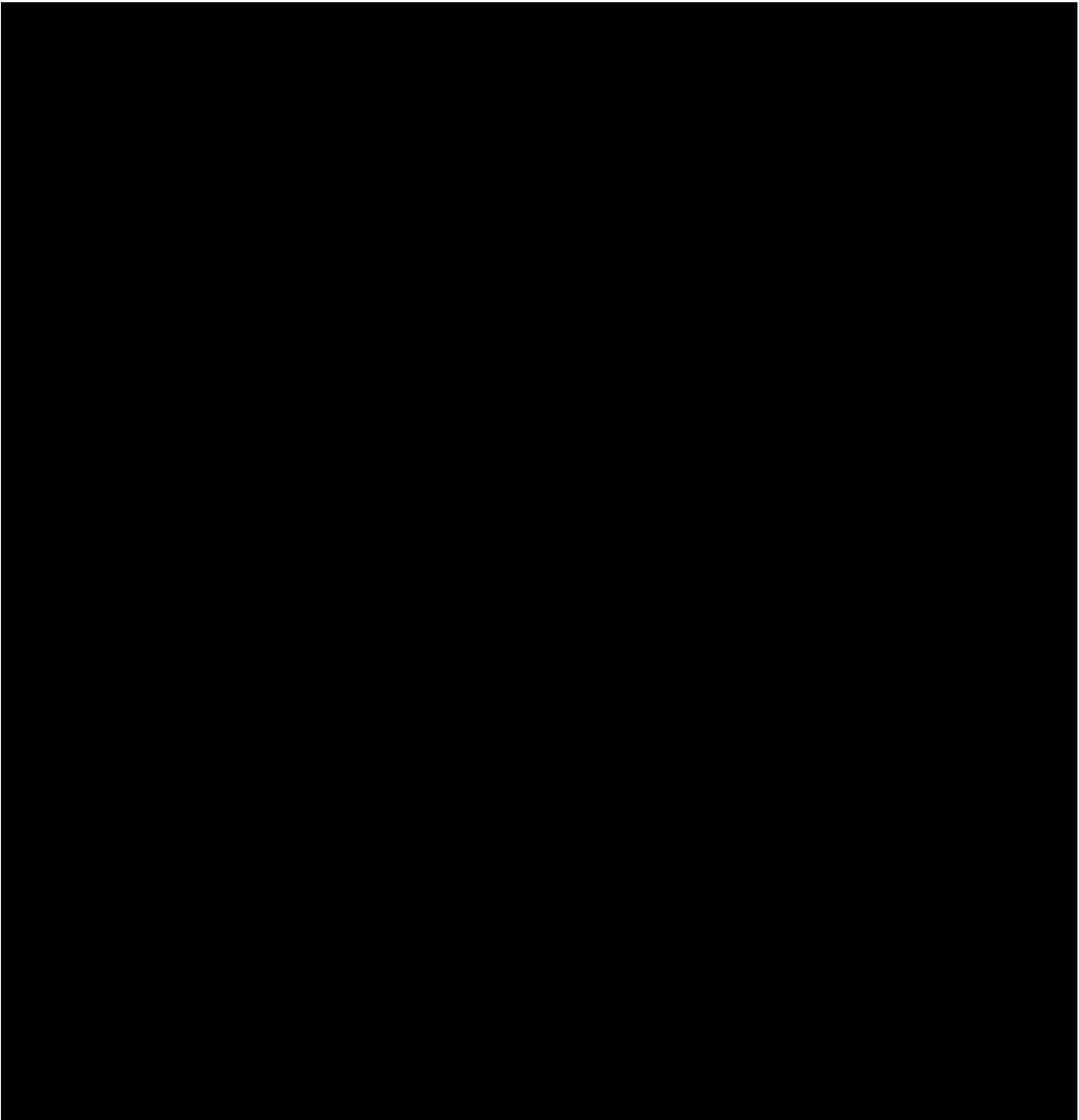


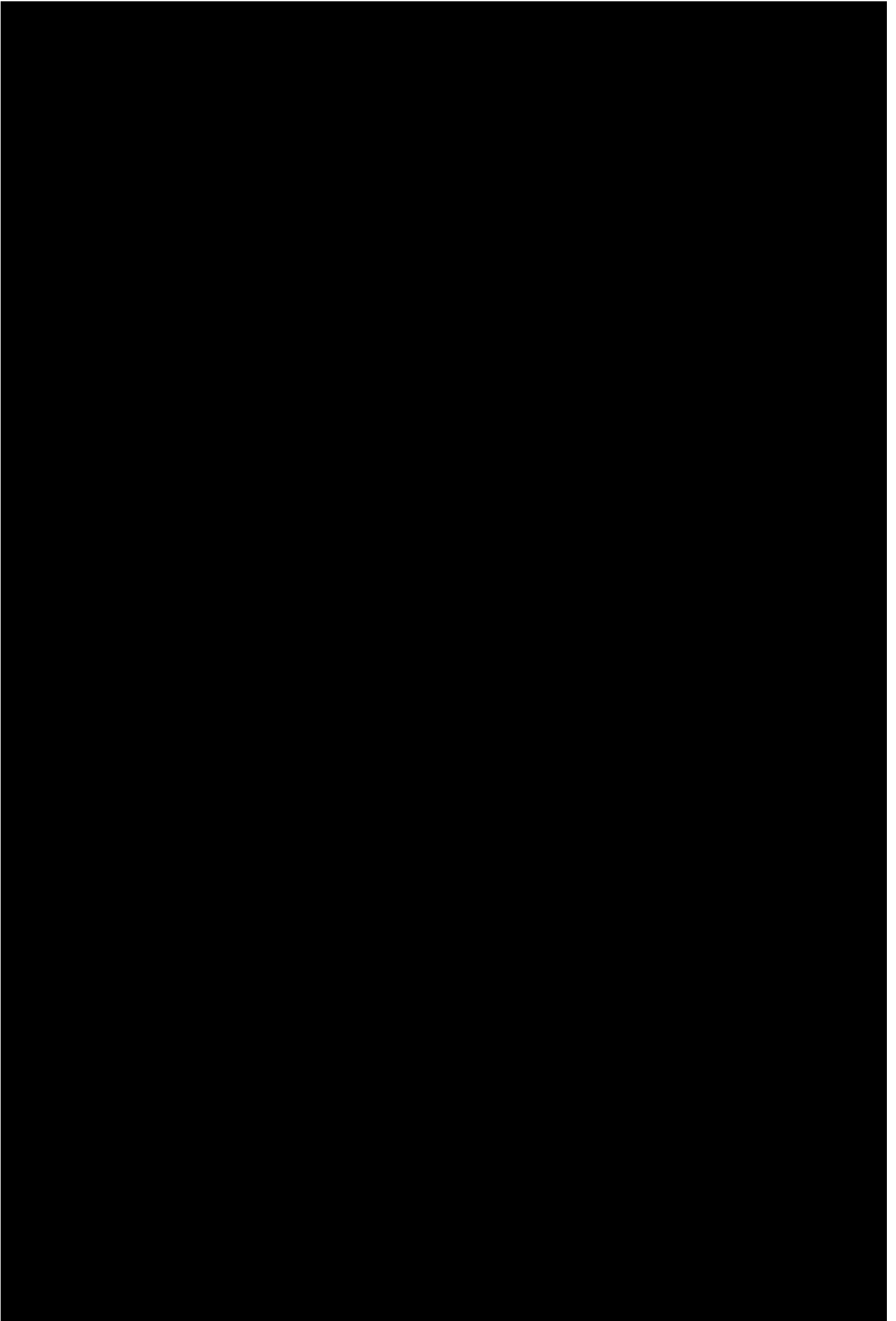


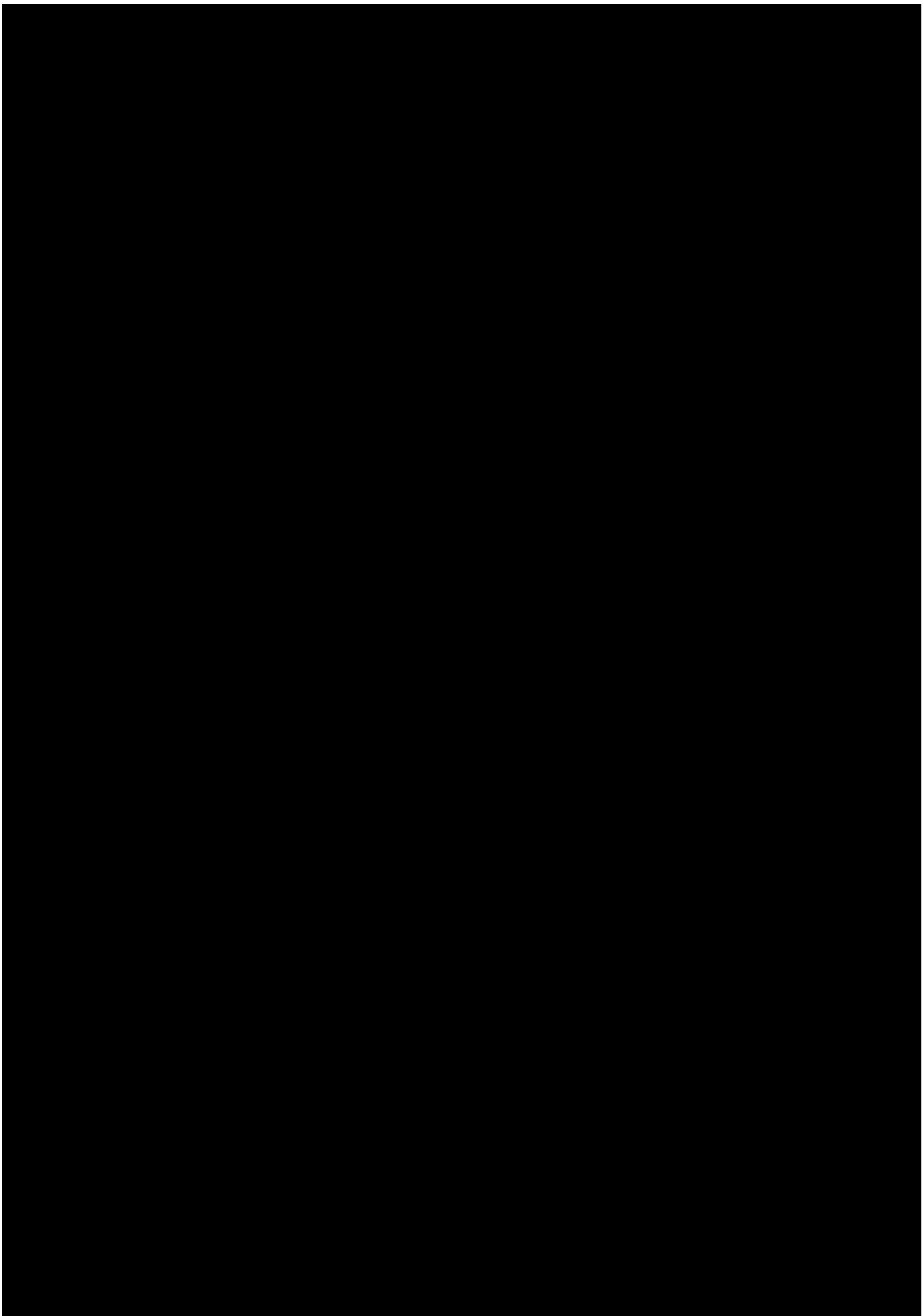


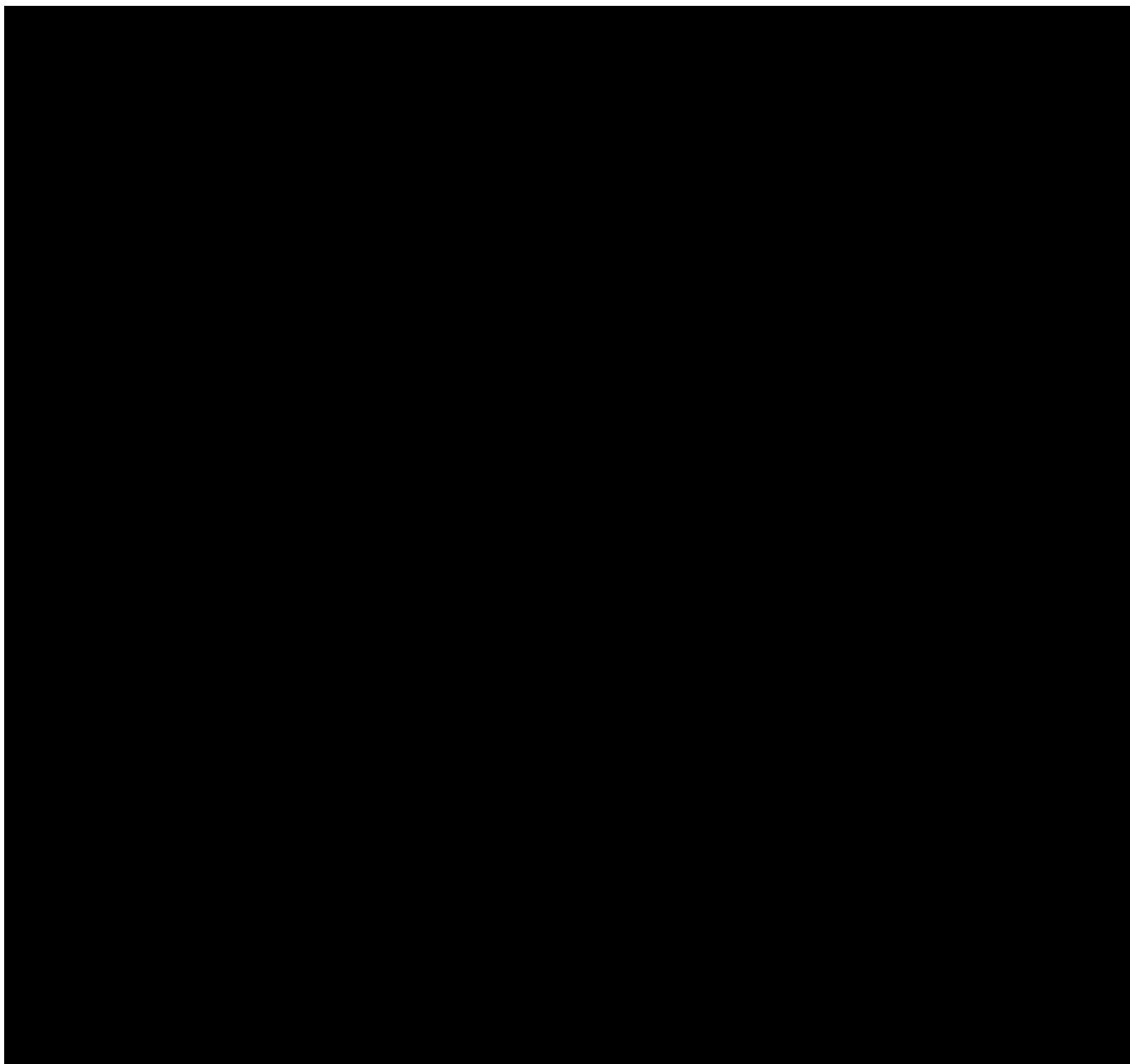


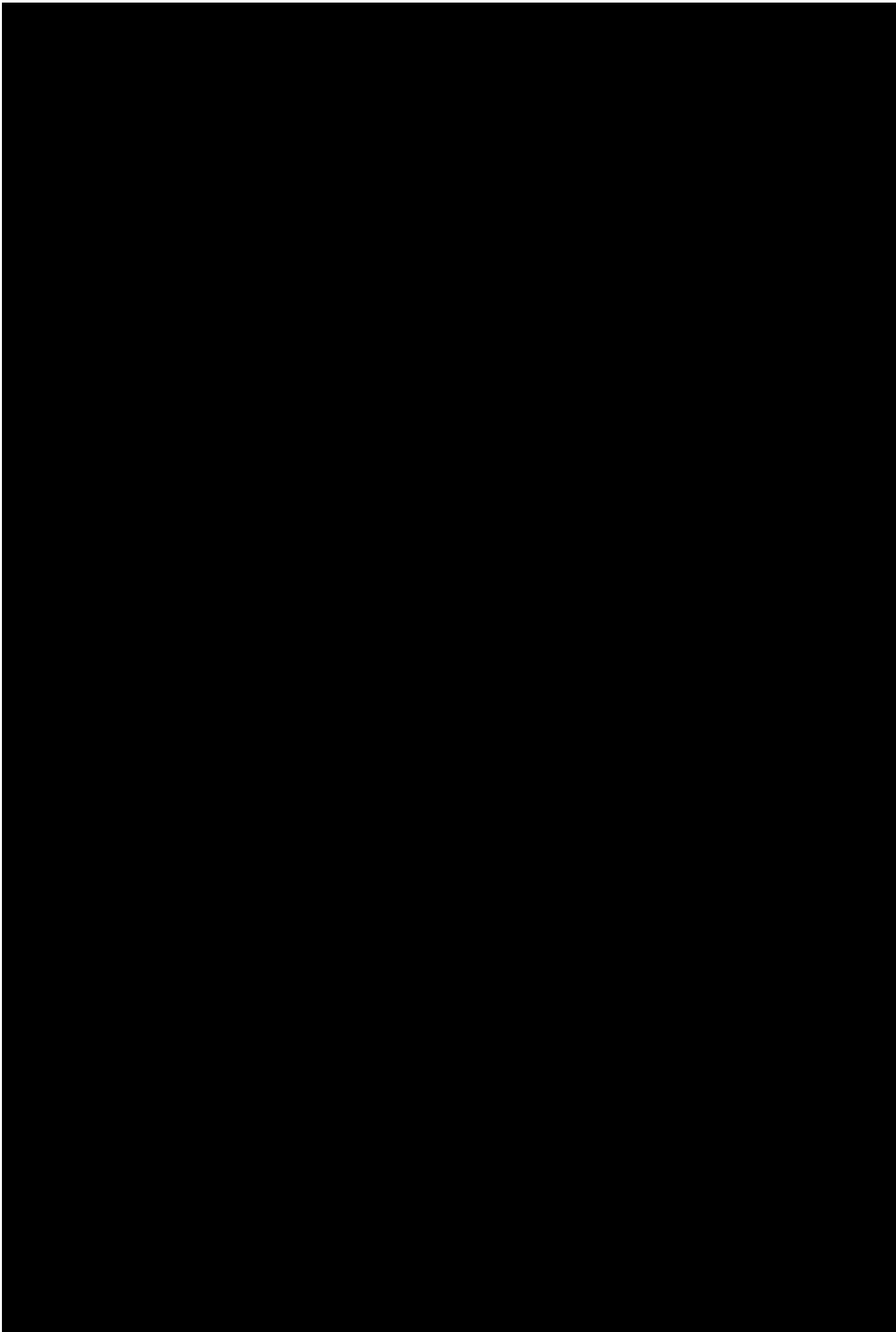


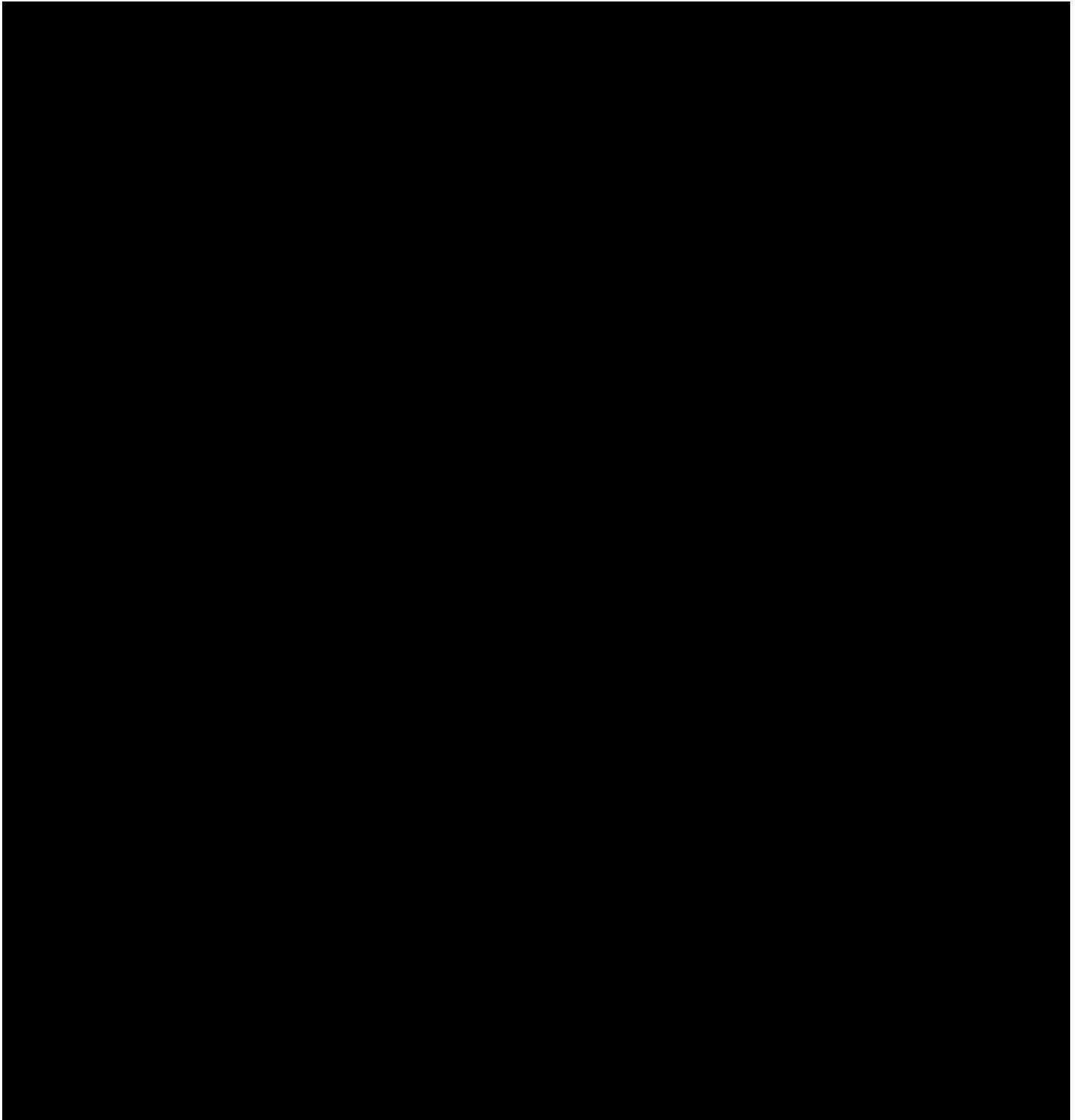


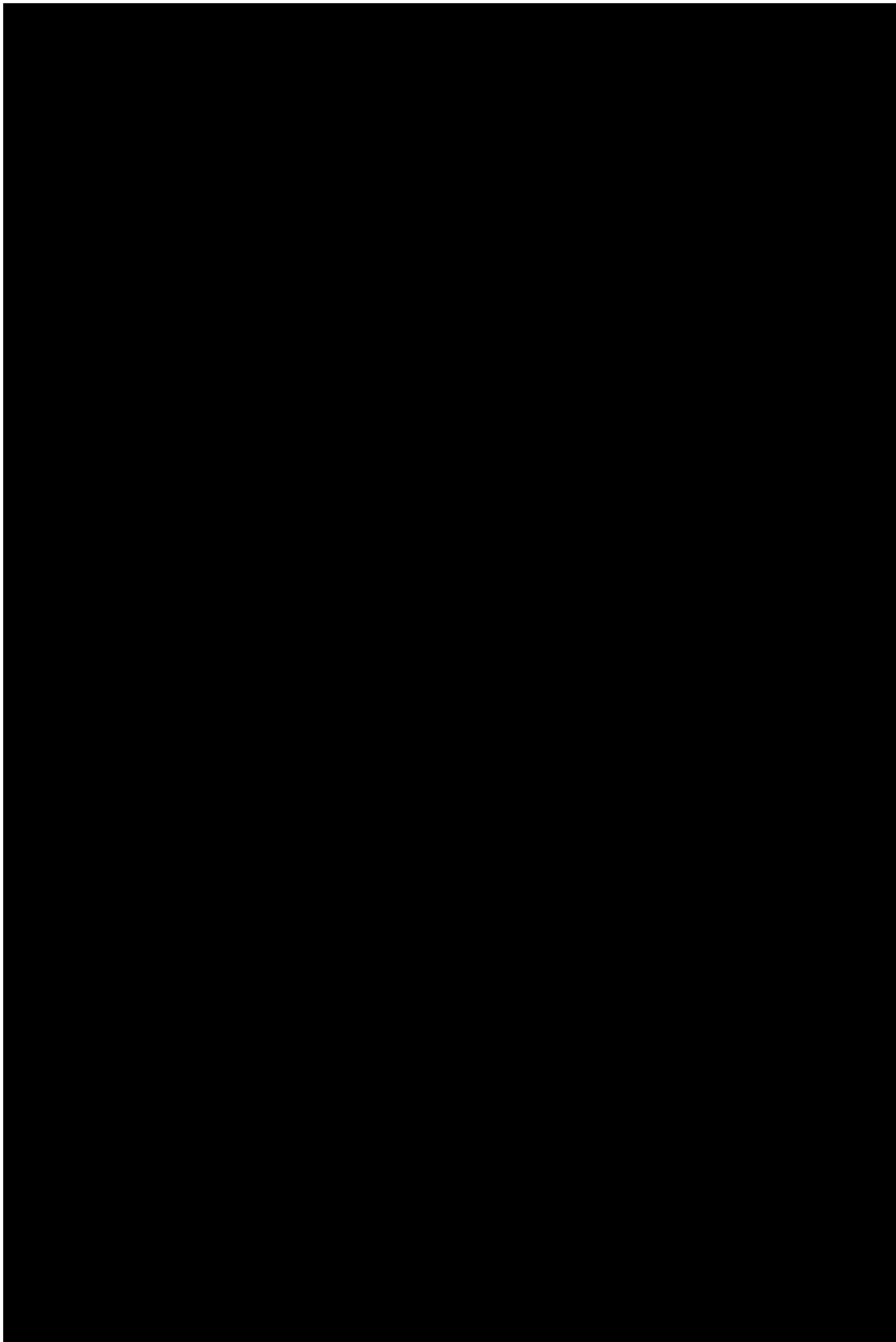


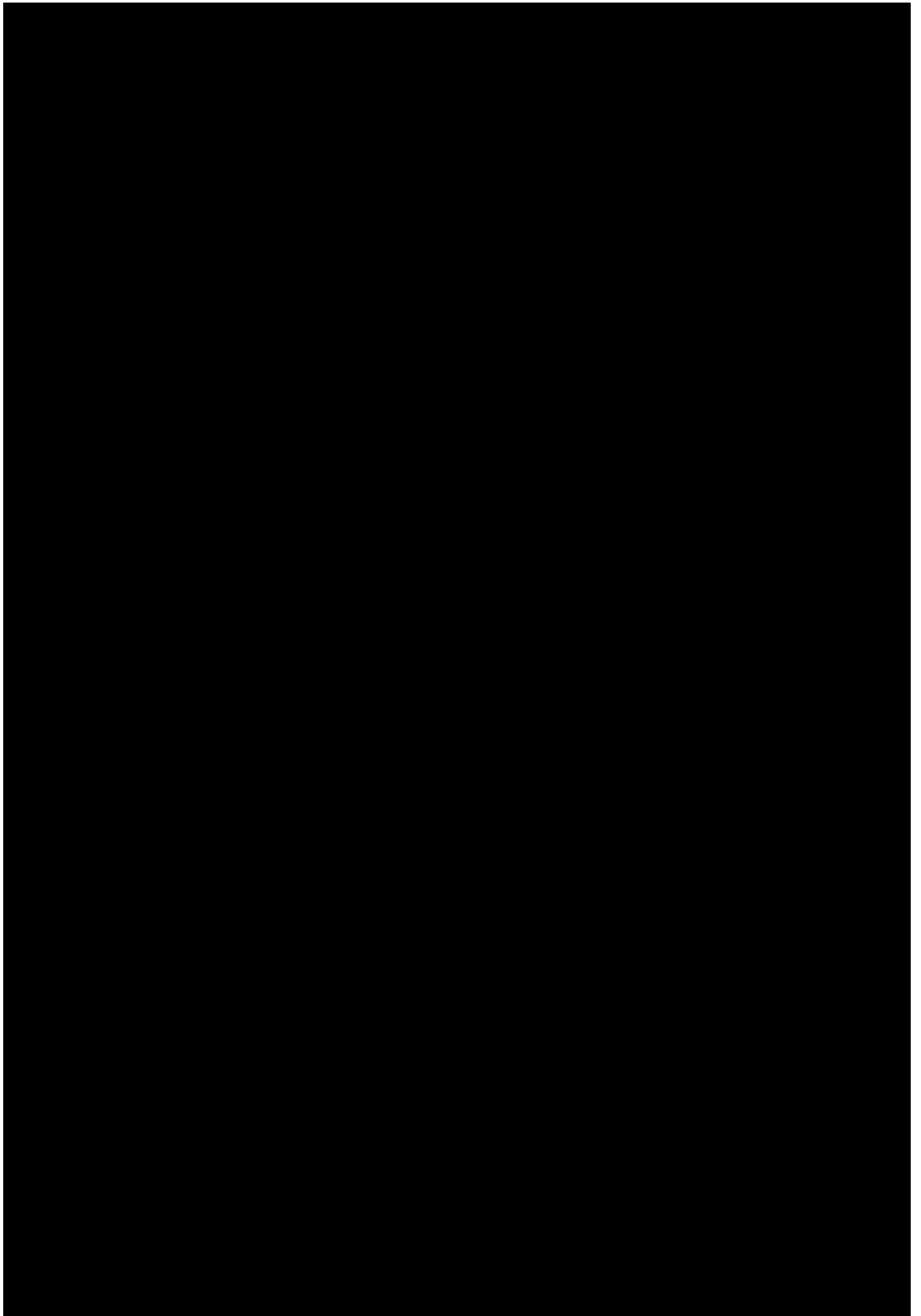


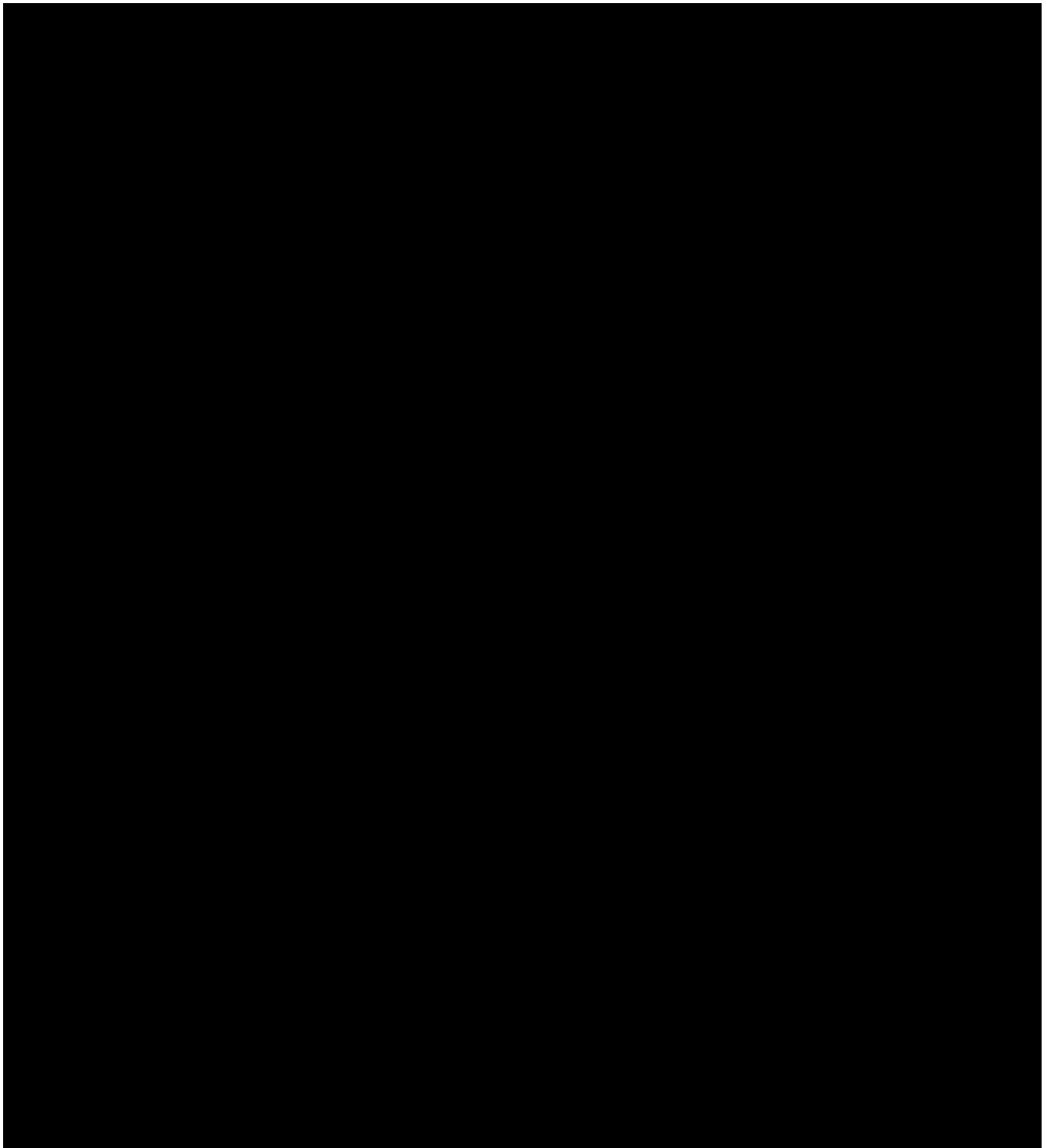


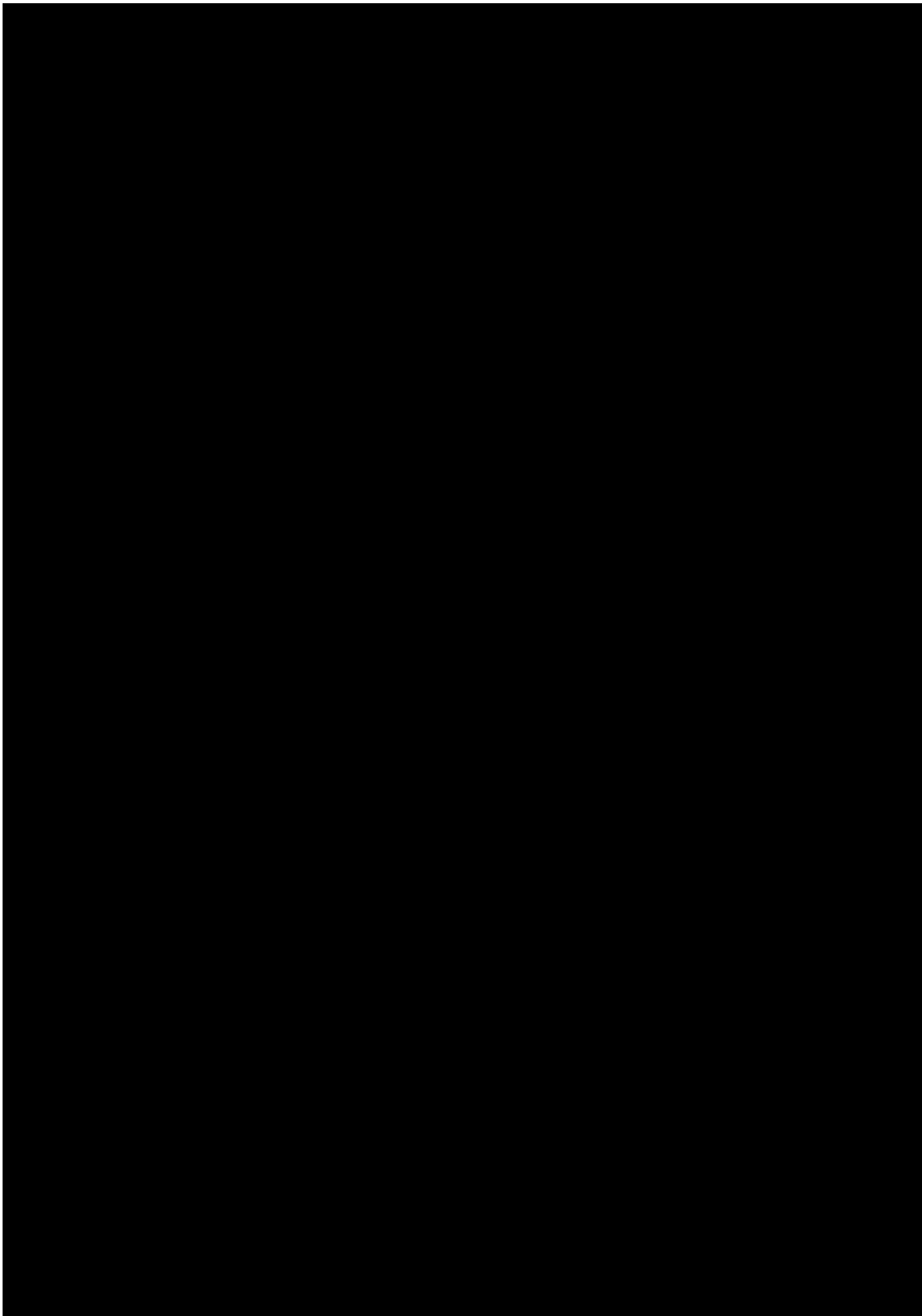


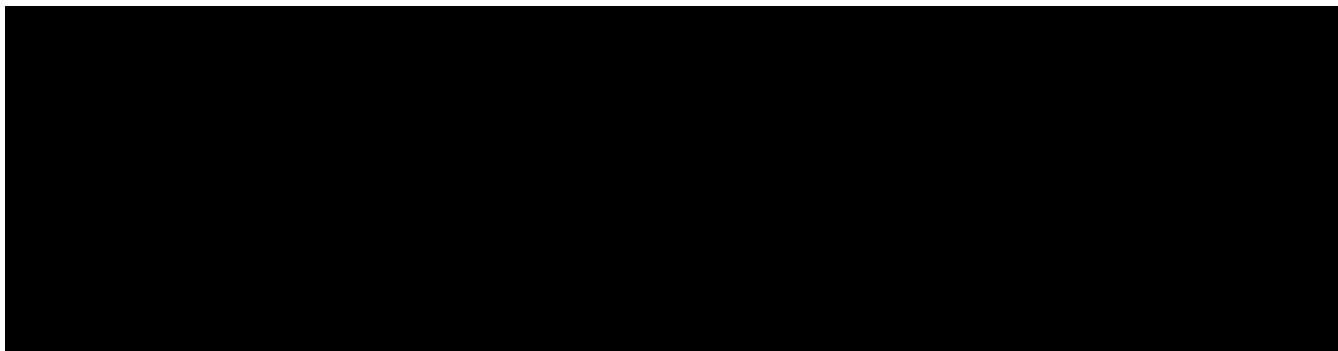


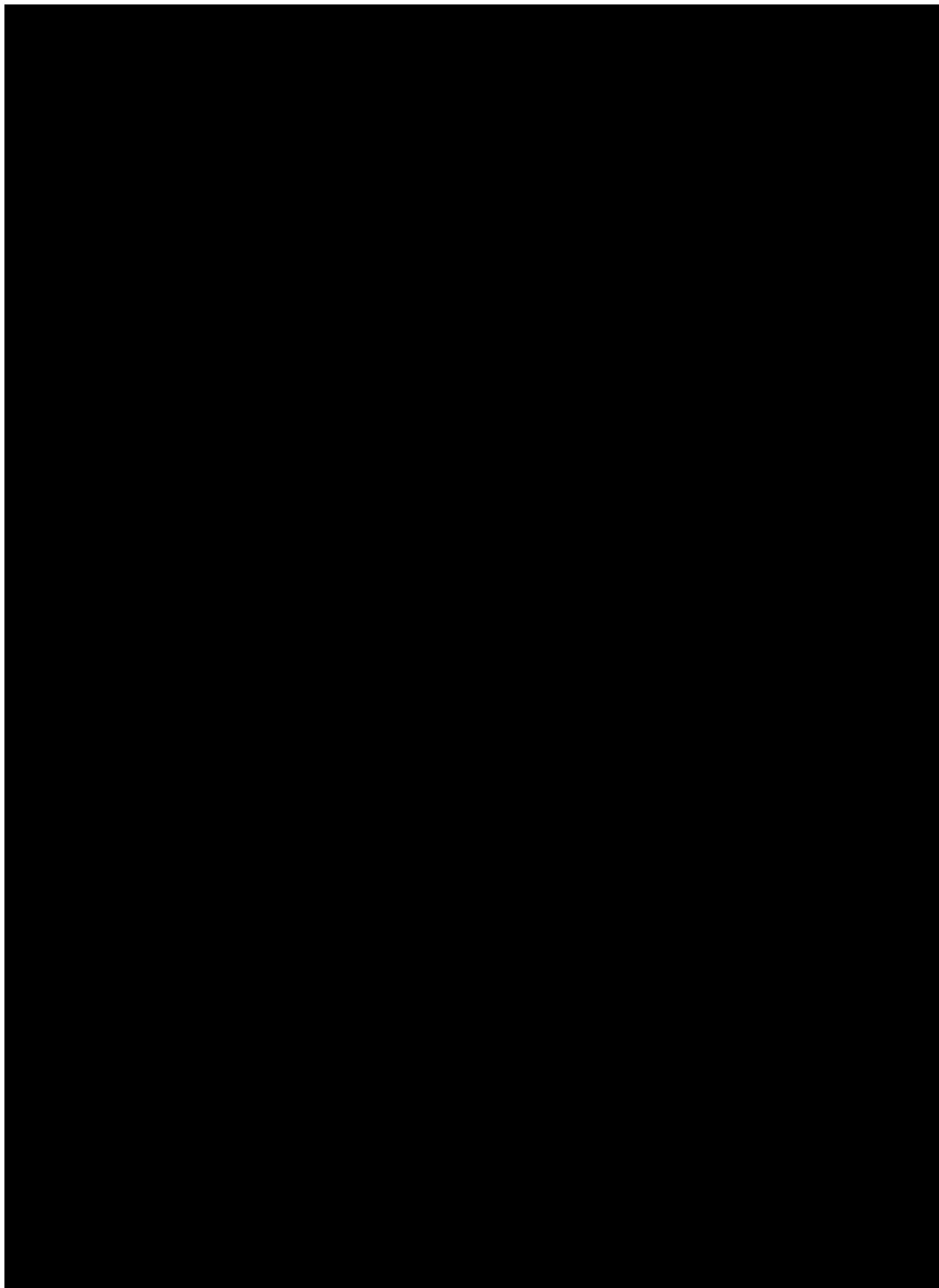


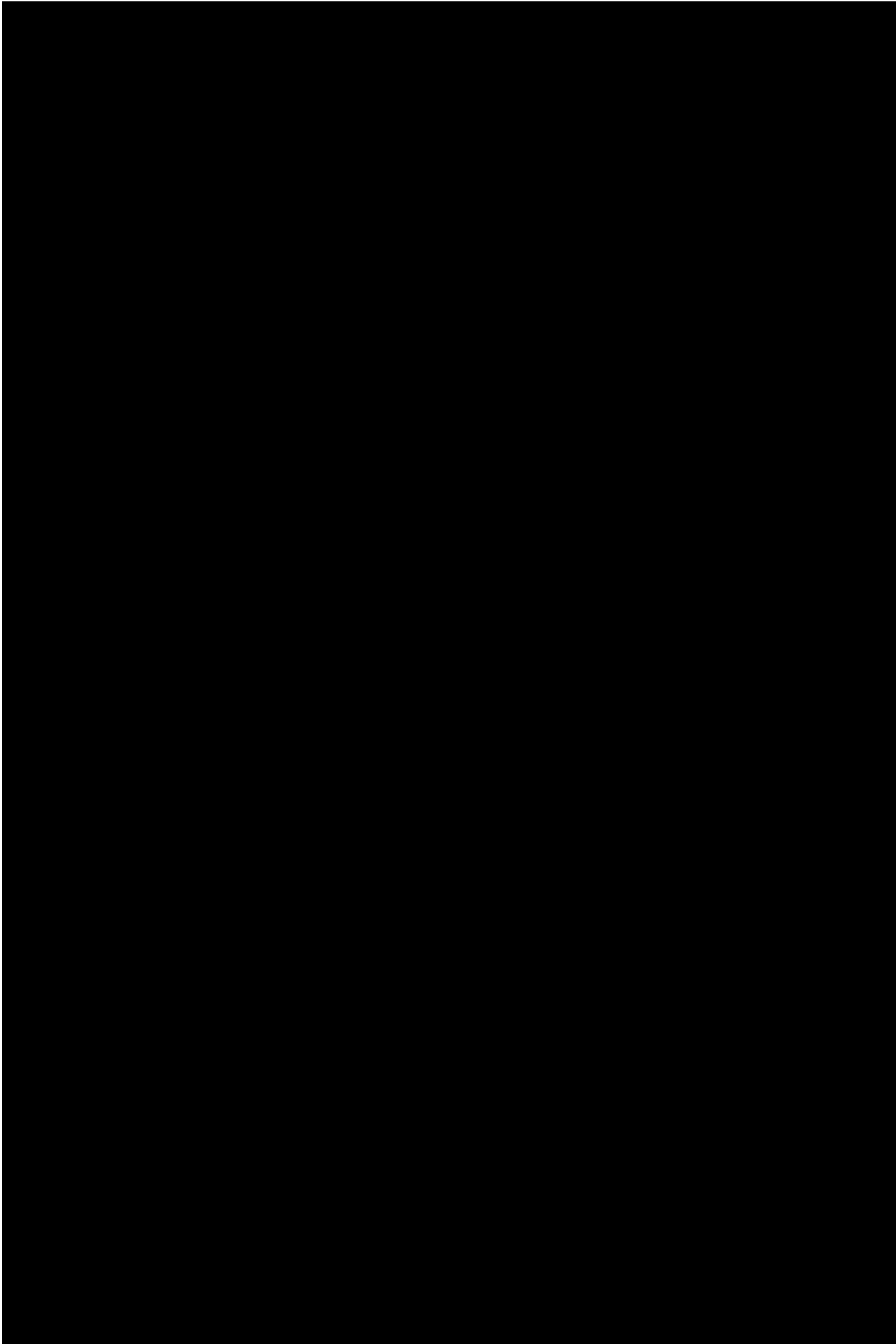


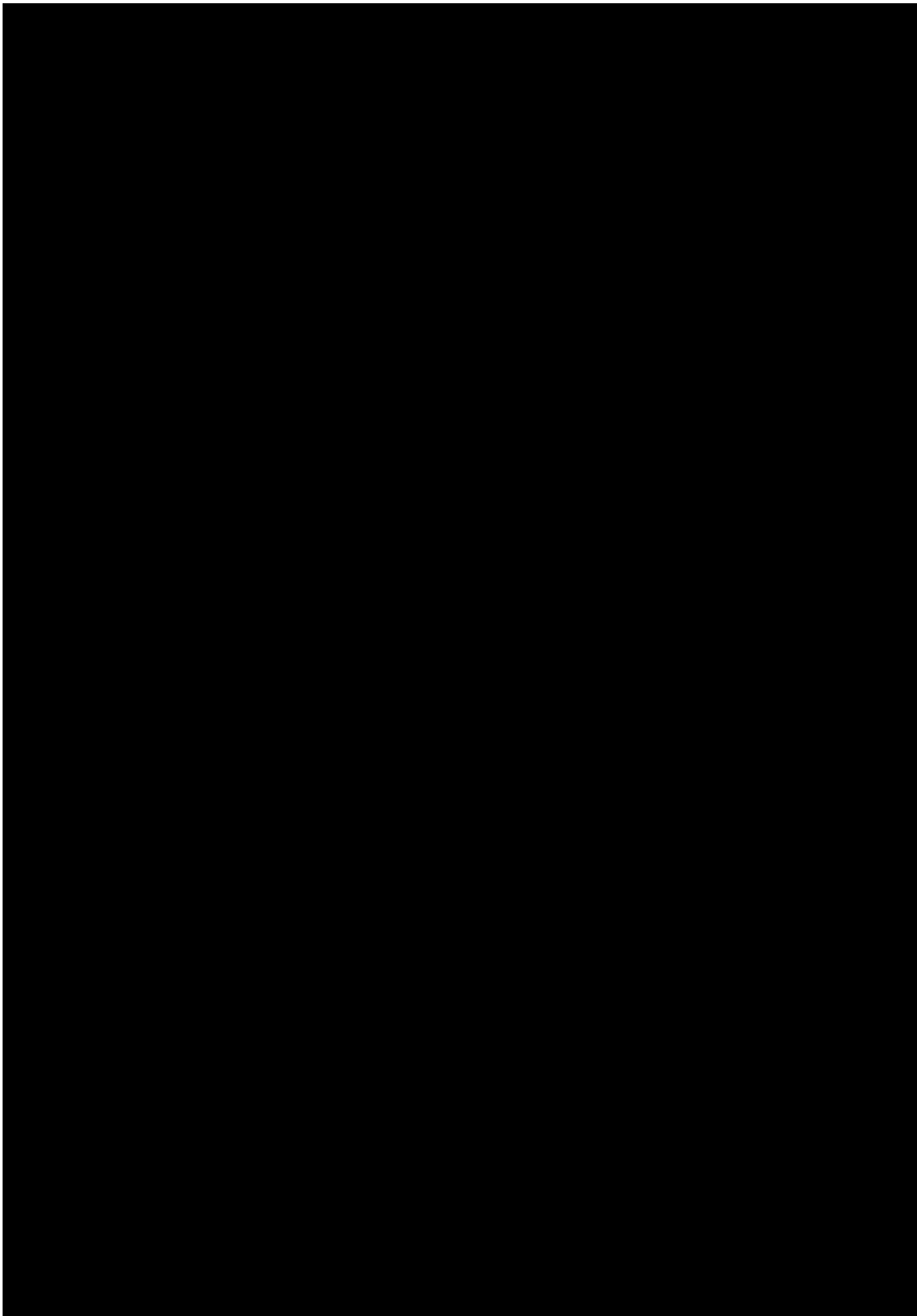


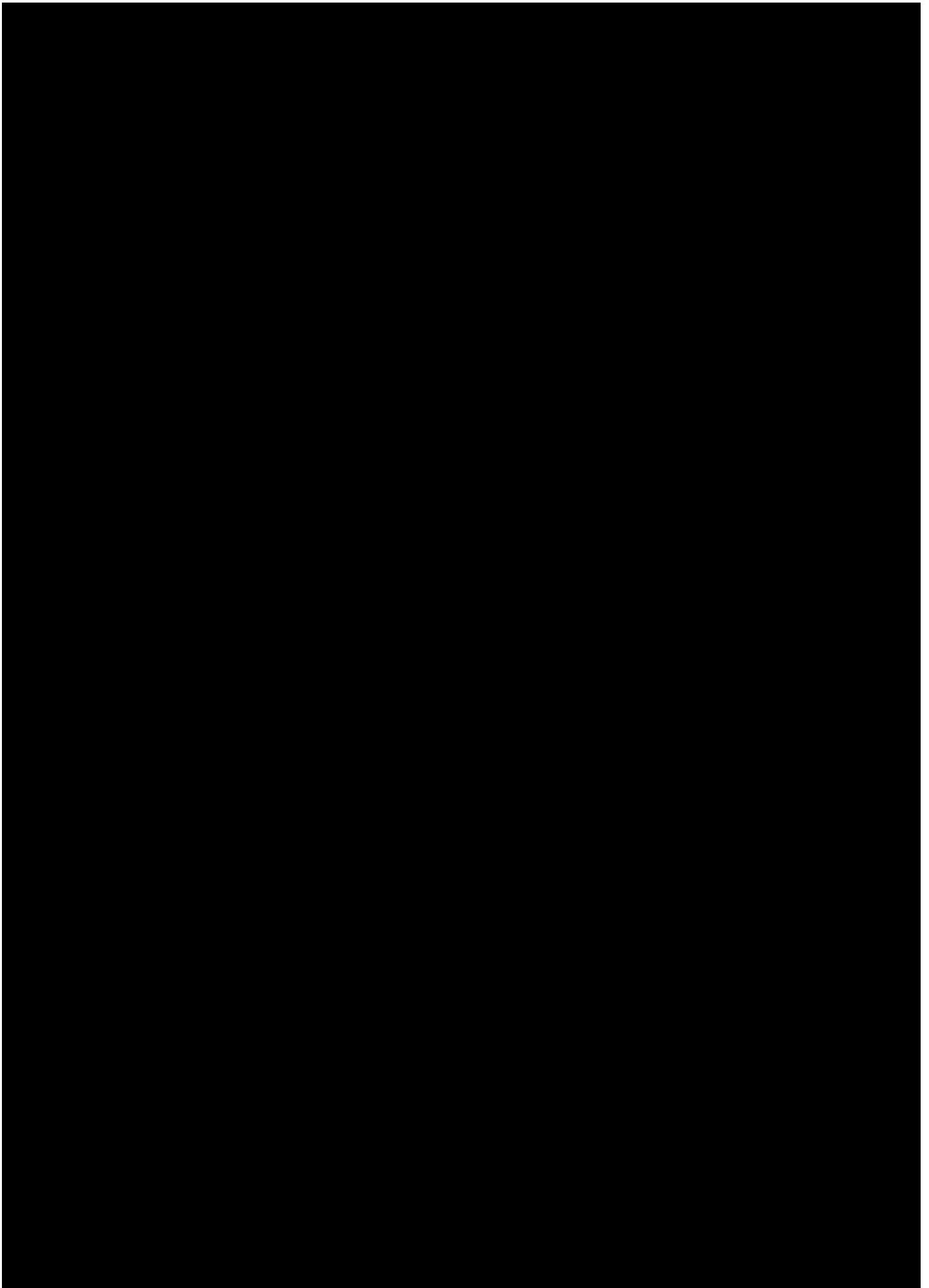














STAGE 1.6 – FORWARDING RAP LIST



11 January 2022

Aboriginal Cultural Heritage Regulation Branch
Heritage NSW
Department of Premier and Cabinet
Via email: heritagemailbox@environment.nsw.gov.au

To whom it may concern,

STAGE 1.6 - ABORIGINAL CULTURAL HERITAGE ASSESSMENT – 520 GARDENERS ROAD, ALEXANDRIA – LIST OF REGISTERED ABORIGINAL PARTIES AND NOTIFICATION LETTER

In accordance with Section 4.1.6 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010) please find below the compiled list of Registered Aboriginal Parties (RAPs) and the notification letter under Section 4.1.3 for the abovementioned project

Table 1 – List of Registered Aboriginal Parties

| Name | Contact |
|------------|------------|
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |



| Name | Contact |
|------------|------------|
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |

Please do not hesitate to contact us should you have any queries in relation to the provided information.

Yours sincerely,

A handwritten signature in black ink, appearing to read "KLD".

Kirsten Downey
Consultant
+61 2 8233 7603
kdowney@urbis.com.au



**ANGEL PLACE
LEVEL 8, 123 PITT STREET
SYDNEY NSW 2000**

URBIS.COM.AU
Urbis Pty Ltd
ABN 50 105 256 228

13 December 2021

To whom it may concern,

520 GARDENERS ROAD, ALEXANDRIA – ABORIGINAL CULTURAL HERITAGE ASSESSMENT – ABORIGINAL COMMUNITY CONSULTATION STAGE 1.3 – INVITATION TO REGISTER

Please be advised that your contact details have been provided to us by Heritage NSW as an Aboriginal person or party who may have an interest in registering for the above project.

Urbis has been commissioned by Project Strategy on behalf of Charter Hall ('the proponent') to conduct an Aboriginal Cultural Heritage Assessment (ACHA) of 520 Gardeners Road, Alexandria, NSW, legally referred to as Lot 302 in DP1231238 ('the subject area') (see attached figures). The subject area is within the City of Sydney Local Government Area.

The ACHA will form part of a State Significant Development Application under Division 4.7 of the NSW *Environmental Planning and Assessment Act 1979* for the subject area. The proposed development includes the construction of a multi-level warehouse and distribution centre development with ancillary office space, vehicle parking and landscaping.

The Proponent can be contacted via:

Theodore Berney
Development Manager – Industrial & Logistics
Charter Hall
E: theodore.berney@charterhall.com.au

The ACHA will be conducted in accordance with the relevant guidelines under the *NSW National Parks and Wildlife Act 1974*, including the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010) (the Consultation Requirements). The ACHA will include a community consultation process with registered Aboriginal parties.

The Proponent is seeking the registration of Aboriginal persons or groups who may hold cultural knowledge relevant to determining the significance of Aboriginal object(s) and/or place(s) that may be present in the subject area. Urbis, on behalf of the Proponent, hereby invites you to register an interest in the community consultation process for the above project.

If you wish to register your interest, please respond in writing (preferably by email) by clearly stating your interest and nominating a contact person **by 7 January 2022**.

Please send responses to:



Aaron Olsen,
Consultant
Urbis Pty Ltd
Level 8 ,123 Pitt Street
Sydney NSW 2000
E: aolsen@urbis.com.au

Following confirmation of your registration, Urbis will forward your name and contact details to Heritage NSW and Metropolitan Local Aboriginal Land Council, as required under the Consultation Requirements. If you do not want your details released, please advise us accordingly when registering your interest.

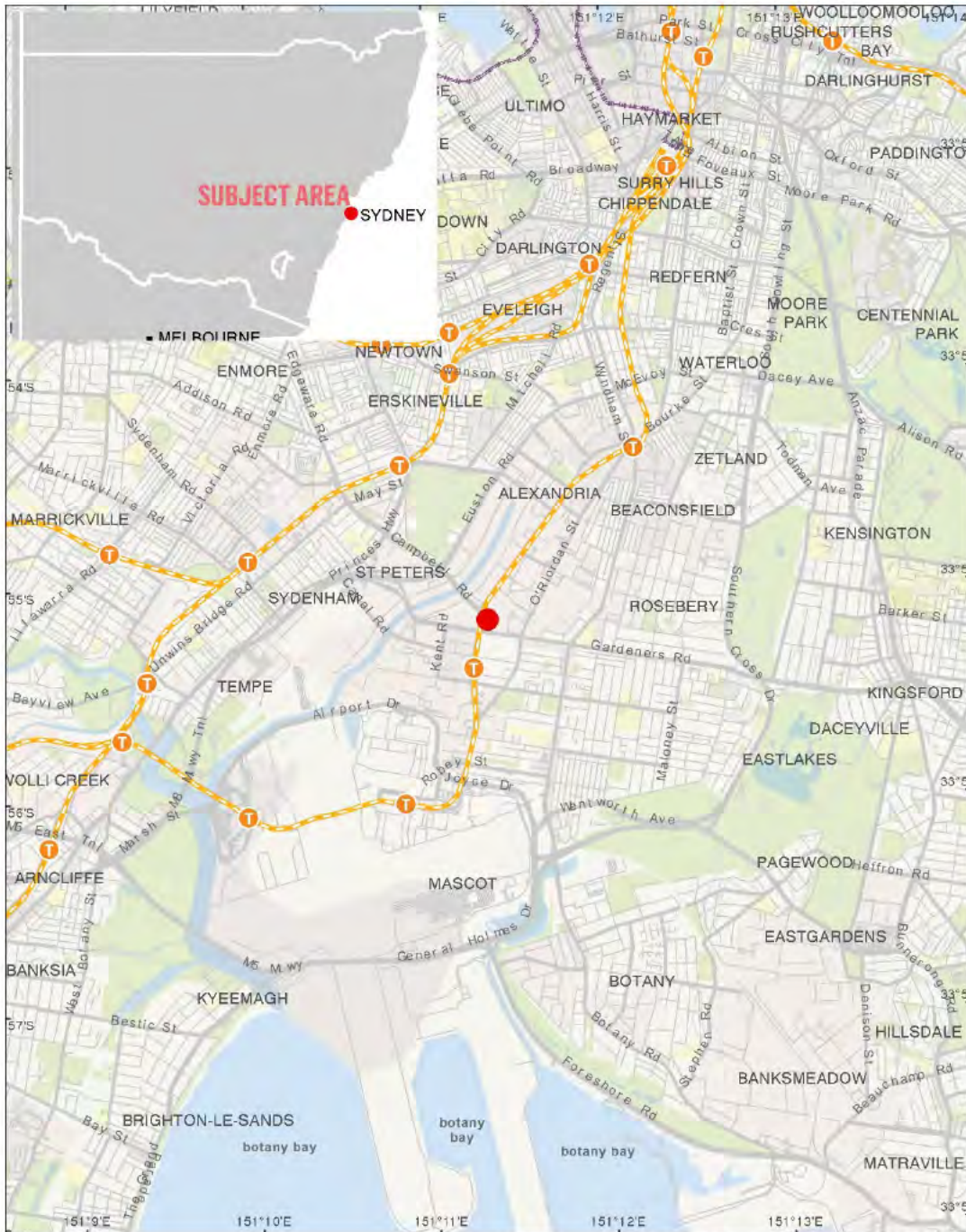
Please note that inclusion in the consultation process does not automatically result in paid site assessment, per Section 3.4 of the Consultation Requirements. Engagement for delivery of any services will be decided by the Proponent based on a range of considerations including skills, relevant experience and provision of certificates of currency.

If you have any questions in relation to the foregoing, please do not hesitate to contact us.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Balazs Hansel".

Balazs Hansel
Associate Director
+61 2 8233 7668
+61 499 986 833
bhansel@urbis.com.au



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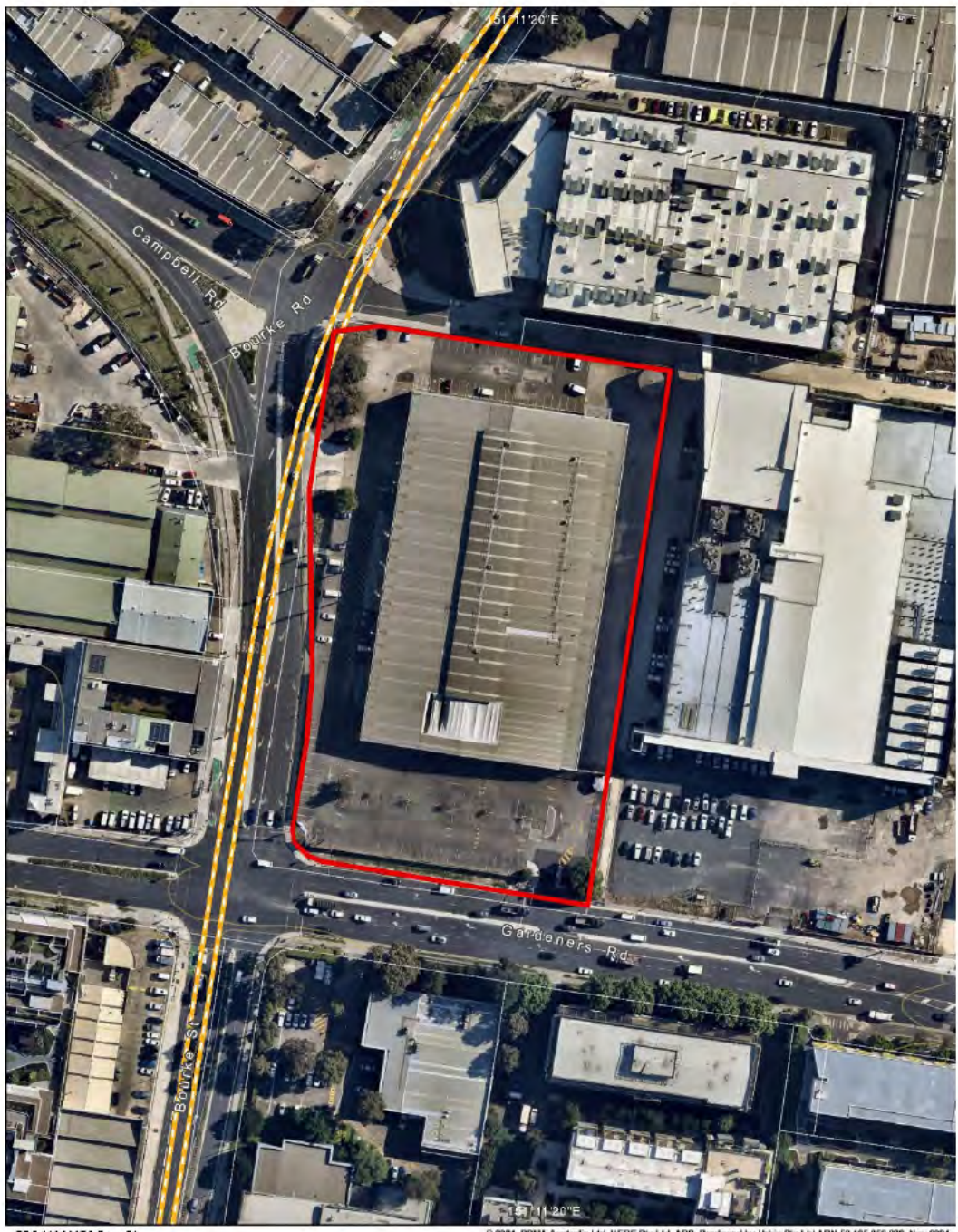
1 KM

Project No: P0032153
 Project Manager: Balazs Hansel

Subject Area

REGIONAL LOCATION
 520 Gardeners Road, Alexandria
 Charter Hall

Figure 1 – Regional Location of the subject area



GDA 1994 MGA Zone 56
 Project No: P0032153
 Project Manager: Balazs Hansel
 Legend: ■ Subject Area — Contours

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SUBJECT AREA
 520 Gardeners Road, Alexandria
 Charter Hall

Figure 2 – Location of the subject area



11 January 2022

Metropolitan Local Aboriginal Land Council
Via email: officeadmin@metrolalc.org.au

To whom it may concern,

STAGE 1.6 - ABORIGINAL CULTURAL HERITAGE ASSESSMENT – 520 GARDENERS ROAD, ALEXANDRIA – LIST OF REGISTERED ABORIGINAL PARTIES AND NOTIFICATION LETTER

In accordance with Section 4.1.6 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010) please find below the compiled list of Registered Aboriginal Parties (RAPs) and the notification letter under Section 4.1.3 for the abovementioned project.

Table 1 – List of Registered Aboriginal Parties

| Name | Contact |
|------------|------------|
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] |



Please do not hesitate to contact us should you have any queries in relation to the provided information

Yours sincerely,

A handwritten signature in black ink, appearing to read "KLD".

Kirsten Downey
Consultant
+61 2 8233 7603
kdowney@urbis.com.au



**ANGEL PLACE
LEVEL 8, 123 PITT STREET
SYDNEY NSW 2000**

URBIS.COM.AU
Urbis Pty Ltd
ABN 50 105 256 228

13 December 2021

To whom it may concern,

520 GARDENERS ROAD, ALEXANDRIA – ABORIGINAL CULTURAL HERITAGE ASSESSMENT – ABORIGINAL COMMUNITY CONSULTATION STAGE 1.3 – INVITATION TO REGISTER

Please be advised that your contact details have been provided to us by Heritage NSW as an Aboriginal person or party who may have an interest in registering for the above project.

Urbis has been commissioned by Project Strategy on behalf of Charter Hall ('the proponent') to conduct an Aboriginal Cultural Heritage Assessment (ACHA) of 520 Gardeners Road, Alexandria, NSW, legally referred to as Lot 302 in DP1231238 ('the subject area') (see attached figures). The subject area is within the City of Sydney Local Government Area.

The ACHA will form part of a State Significant Development Application under Division 4.7 of the NSW *Environmental Planning and Assessment Act 1979* for the subject area. The proposed development includes the construction of a multi-level warehouse and distribution centre development with ancillary office space, vehicle parking and landscaping.

The Proponent can be contacted via:

Theodore Berney
Development Manager – Industrial & Logistics
Charter Hall
E: theodore.berney@charterhall.com.au

The ACHA will be conducted in accordance with the relevant guidelines under the *NSW National Parks and Wildlife Act 1974*, including the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010) (the Consultation Requirements). The ACHA will include a community consultation process with registered Aboriginal parties.

The Proponent is seeking the registration of Aboriginal persons or groups who may hold cultural knowledge relevant to determining the significance of Aboriginal object(s) and/or place(s) that may be present in the subject area. Urbis, on behalf of the Proponent, hereby invites you to register an interest in the community consultation process for the above project.

If you wish to register your interest, please respond in writing (preferably by email) by clearly stating your interest and nominating a contact person **by 7 January 2022**.

Please send responses to:



Aaron Olsen,
Consultant
Urbis Pty Ltd
Level 8 ,123 Pitt Street
Sydney NSW 2000
E: aolsen@urbis.com.au

Following confirmation of your registration, Urbis will forward your name and contact details to Heritage NSW and Metropolitan Local Aboriginal Land Council, as required under the Consultation Requirements. If you do not want your details released, please advise us accordingly when registering your interest.

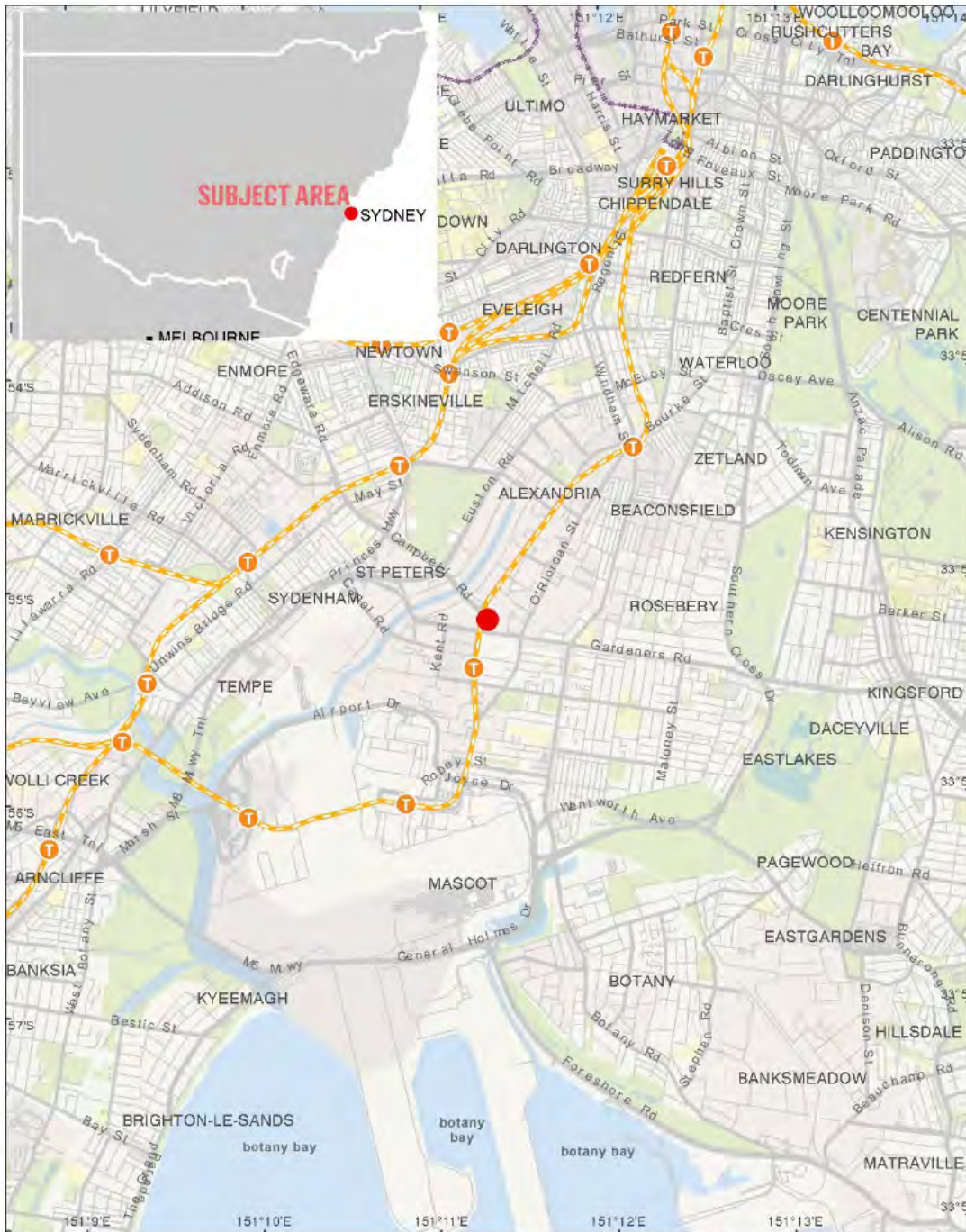
Please note that inclusion in the consultation process does not automatically result in paid site assessment, per Section 3.4 of the Consultation Requirements. Engagement for delivery of any services will be decided by the Proponent based on a range of considerations including skills, relevant experience and provision of certificates of currency.

If you have any questions in relation to the foregoing, please do not hesitate to contact us.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Balazs Hansel".

Balazs Hansel
Associate Director
+61 2 8233 7668
+61 499 986 833
bhansel@urbis.com.au

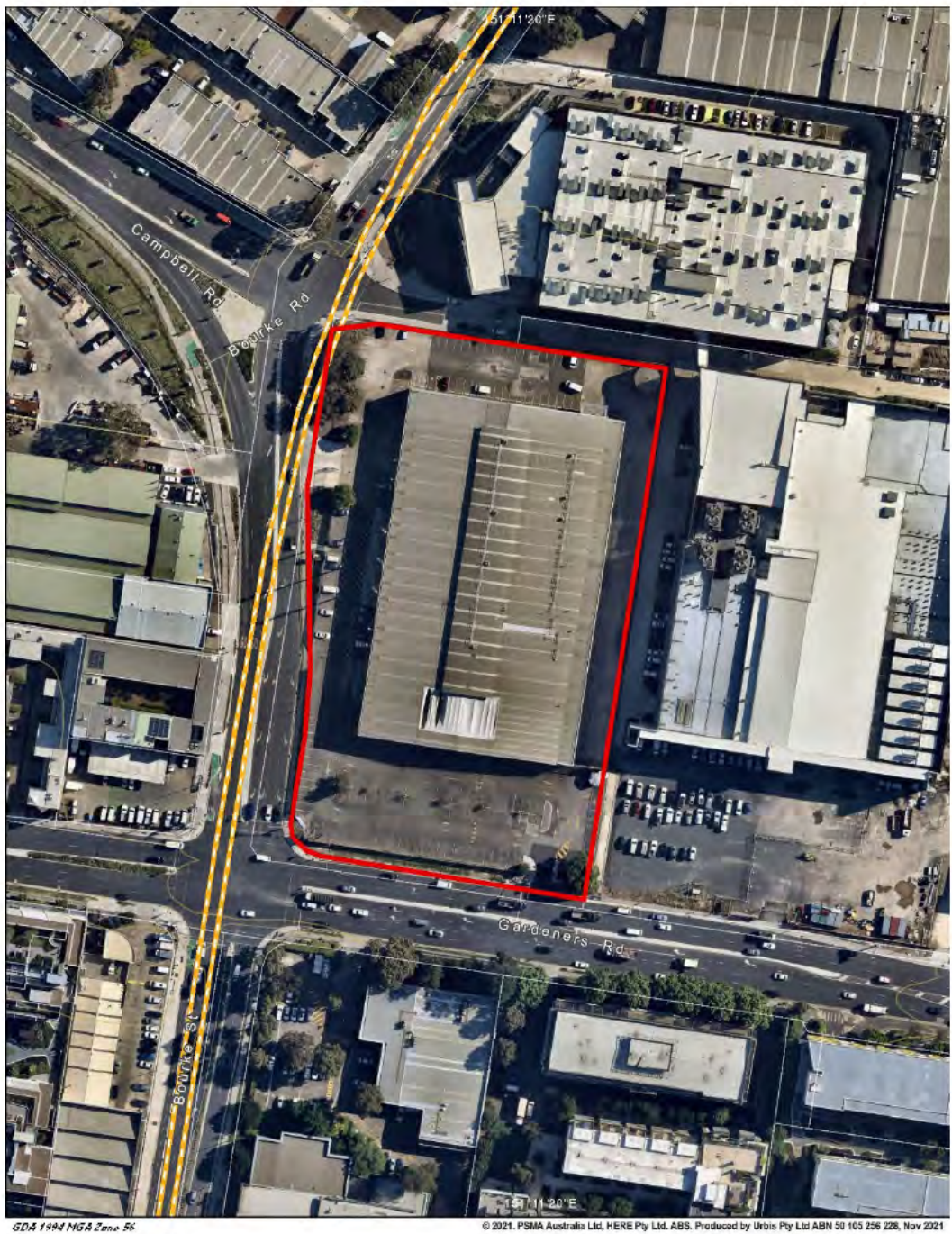


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1 KM
 Project No: P0032153
 Project Manager: Balazs Hansel
 Subject Area

REGIONAL LOCATION
520 Gardeners Road, Alexandria
Charter Hall

Figure 1 – Regional Location of the subject area



GDA 1994 MGA Zone 56
 Project No: P0032153
 Project Manager: Balazs Hansel
 Legend: Subject Area — Contours

SUBJECT AREA
 520 Gardeners Road, Alexandria
 Charter Hall

Figure 2 – Location of the subject area

STAGE 2 & 3 – PRESENTING AND GATHERING INFORMATION



**ANGEL PLACE
LEVEL 8, 123 PITT STREET
SYDNEY NSW 2000**

URBIS.COM.AU
Urbis Pty Ltd
ABN 50 105 256 228

13 January 2022

To whom it may concern,

520 GARDENERS ROAD ALEXANDRIA, NSW – ABORIGINAL CULTURAL HERITAGE ASSESSMENT – COMMUNITY CONSULTATION STAGES 2 & 3 – PRESENTING & GATHERING INFORMATION

Thank you for registering your interest in the Aboriginal Cultural Heritage Assessment (ACHA) of 520 Gardeners Road, Alexandria, Gadigal land, NSW, legally referred to as Lot 302 DP1231238 ('the subject area') (Figure 1 and Figure 2).

Urbis has been engaged by Project Strategy on behalf of Charter Hall ('the proponent') to conduct the ACHA in support of a State Significant Development Application (SSD-32489140), which seeks approval for a warehouse and distribution centre development within the subject area.

In accordance with Section 4.2 and 4.3 of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (Department of Environment, Climate Change and Water NSW) ('the Consultation Requirements') this present communication aims to provide all Registered Aboriginal Parties (RAPs) with the proposed project information and a process to facilitate the following:

- Contribute to culturally appropriate information gathering and the research methodology
- Provide information that will enable the cultural significance of Aboriginal objects and/or places on the proposed project area to be determined
- Have input into the development of any cultural heritage management options.

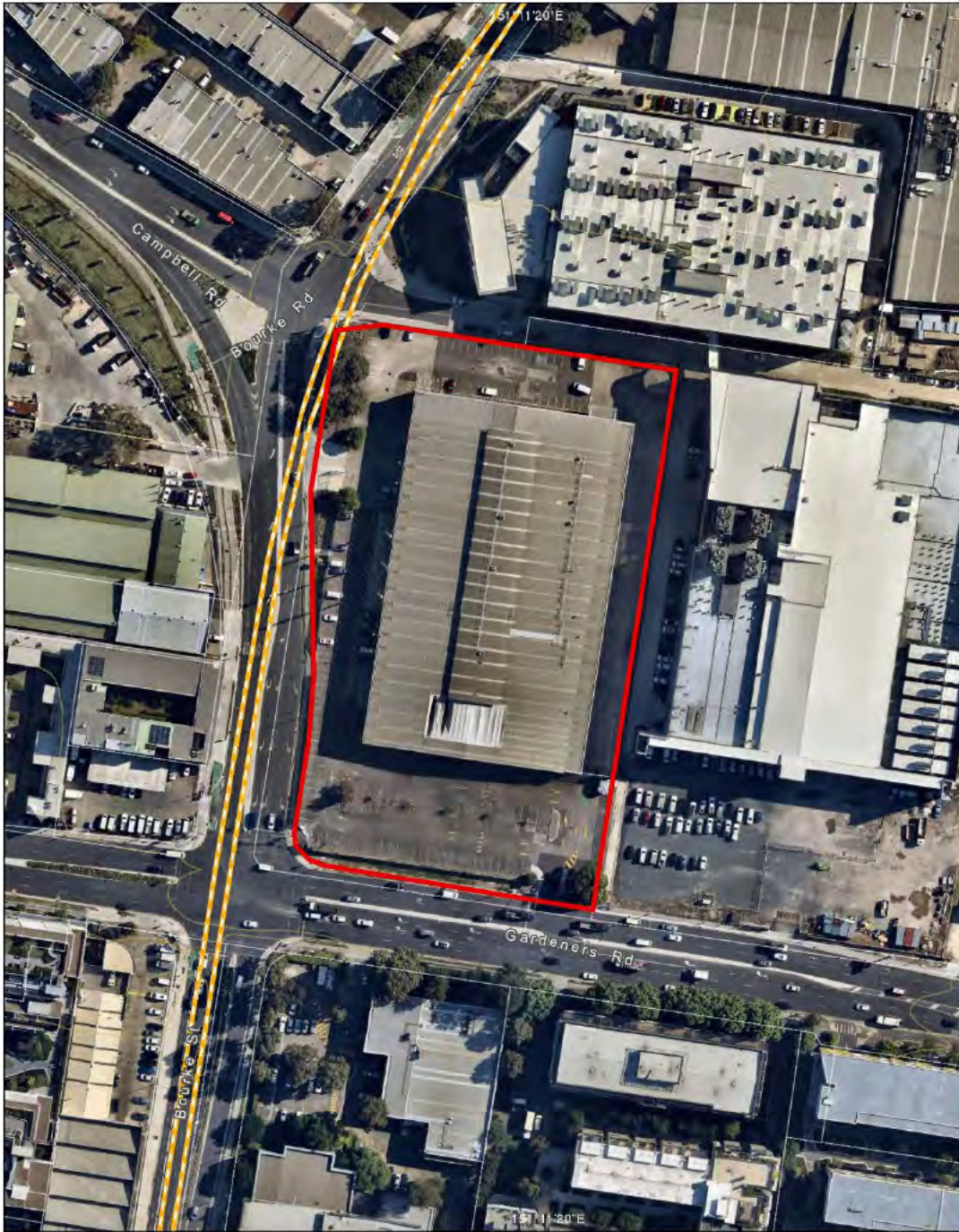
SUBJECT AREA

The subject area is located approximately 6km south of the Sydney CBD, within the City of Sydney Local Government Area (Sydney LGA) and on the traditional lands of the Gadigal people and within the catchment of the Metropolitan Local Aboriginal Land Council (MLALC). It is currently zoned IN1 - General Industrial and SP2 - Infrastructure.

The subject area encompasses approximately 18,988 m² and has frontages to Gardeners Road to the south and Bourke Road to the west. To the north and east it is bounded by the other IN1 - General Industrial zoned properties. Current improvements include a single warehouse building, surrounding hardstand and landscaping along the western and southern boundaries of the subject area.



Figure 1 - Regional location



GDA 1994 MGA Zone 56

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40 M

Project No: P0032153

Project Manager: Balazs Hansel

Subject Area Contours

SUBJECT AREA
520 Gardeners Road, Alexandria
Charter Hall

Figure 2 – Location of the subject area.

PROPOSED WORKS

The proposal comprises of the redevelopment of the subject area as summarised below:

- Construction, fit out and operation of a two-storey warehouse and distribution centre comprising approximately 27,509 m² Gross Floor Area (GFA) including:
 - 21,952 m² of warehouse and distribution GFA.
 - 5,557 m² GFA ancillary office space.
- Provision of 64 bicycle parking spaces at ground floor level and 144 car parking spaces at second floor level.
- Approximately 3,342 m² of landscaping at ground and second floor levels.
- Replacement of the existing vehicular access from Bourke Road with two new access driveways from Bourke Road.
- Earthworks and upgrades to existing on-site infrastructure.
- Provision of internal vehicle access route and loading docks.
- Building identification signage.
- Operation 24 hours per day seven days per week.

Site preparation and enabling works will including minor bulk earthworks limited to an import of fill to raise the ground level by 0.4m for flood planning purposes. It is understood that construction of the multi-level warehouse and distribution centre will include the sinking of piles to a depth of approximately 18m below the existing ground surface.

ARCHAEOLOGICAL CONTEXT

The AHIMS database comprises previously registered Aboriginal archaeological objects and cultural heritage places in NSW and it is managed by the Department of Premier & Cabinet (DPC) under Section 90Q of the *National Parks and Wildlife Act 1974* (NPW Act)

A search of the Aboriginal Heritage Information Management System (AHIMS) was carried out on 11 November 2021 (AHIMS Client Service ID: 638083) for an area of approximately 10km x 10km. The AHIMS basic and extensive search results are included in Appendix A.

The AHIMS search identified no Aboriginal objects and no Aboriginal places within the curtilage of the subject area. In the broader search area, a total of 45 Aboriginal objects and no Aboriginal places are registered. Four were identified as 'not a site' in the search results and one was identified as a duplicate, reducing the total number of identified Aboriginal objects to 40 (Table 2 and Figure 3).

The relevance of any Aboriginal objects in the extensive search area to the archaeological potential of the subject area will be considered during the ACHA process.

Table 1 – Results of AHIMS search (Client Service ID: 638083)

| Site Type | Context | Total | Percentage |
|------------------------------------|---------|-------|------------|
| PAD | Open | 16 | 40% |
| Artefact Scatter | Open | 9 | 23% |
| Isolated Find | Open | 3 | 8% |
| Midden | Open | 3 | 8% |
| Hearth | Open | 2 | 5% |
| Aboriginal Gathering | Open | 1 | 3% |
| Art | Open | 1 | 3% |
| Artefact Scatter with Contact Site | Open | 1 | 3% |
| Artefact Scatter with PAD | Open | 1 | 3% |
| Burial with Midden | Open | 1 | 3% |
| Shelter with Art | Closed | 1 | 3% |
| Shelter with Art and Midden | Closed | 1 | 3% |
| Total | | 40 | 100% |

ENVIRONMENTAL CONTEXT

A full analysis of the environmental context is included in the ACHAR, which will be provided at Stage 4 (Review of Draft Cultural Heritage Assessment Report) of the consultation process. This consideration of the environmental context is included to assess the likelihood for Aboriginal objects to be deposited and retained across the subject area.

The environmental context of the subject area is summarised below:

- The subject area has a generally flat topography.
- The subject area is located in the Tuggerah soil landscape.
- The subject area is located within 200m of a former low order, ephemeral waterway.
- Historical activities within the subject include construction and demolition of buildings and utilisation of the subject area for industrial purposes.
- The subject area has been entirely cleared of natural vegetation.

The relevance of the environmental context to the archaeological potential of the subject area will be considered during the ACHA process.

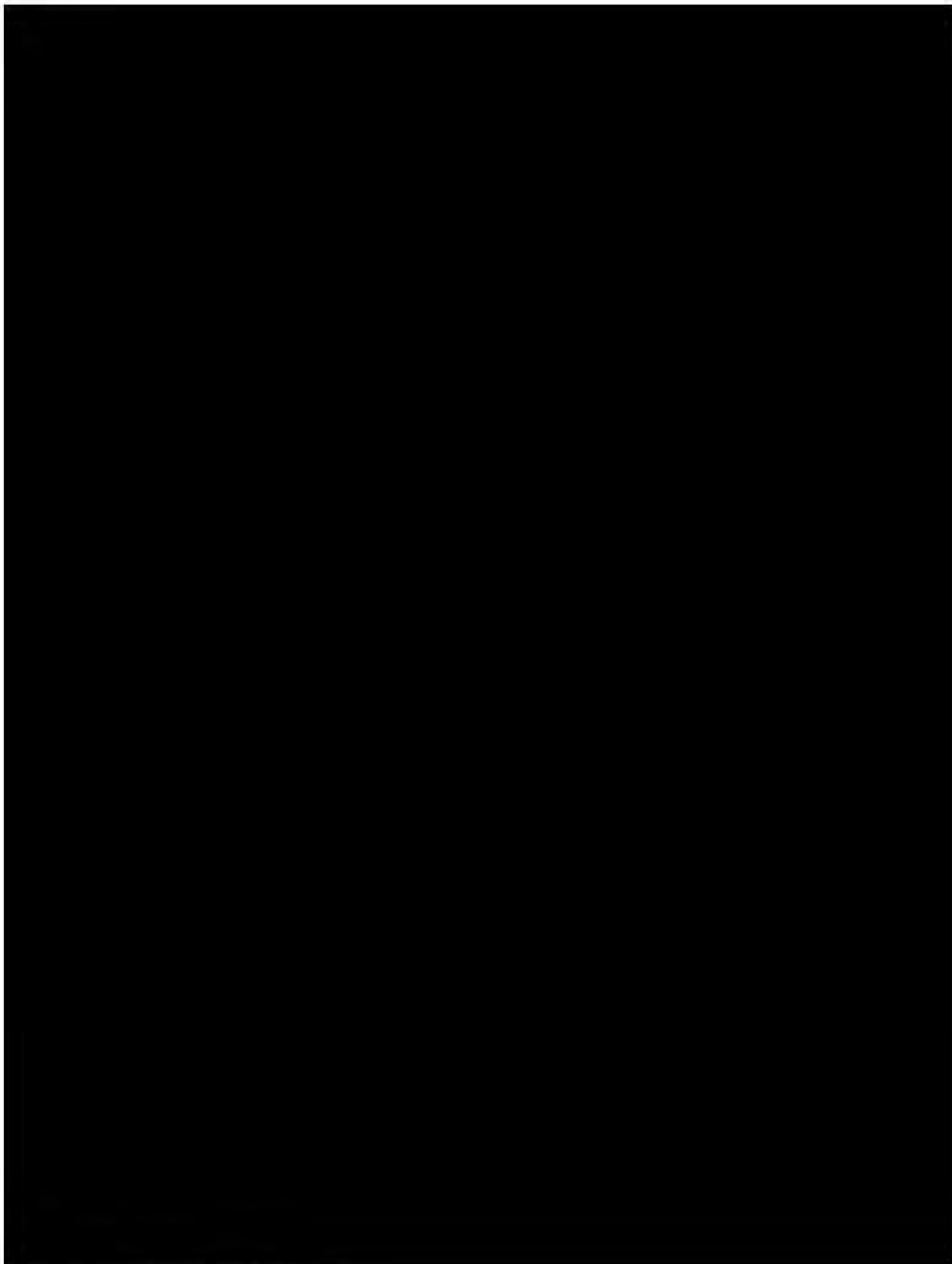


Figure 3 – Registered AHIMS Sites

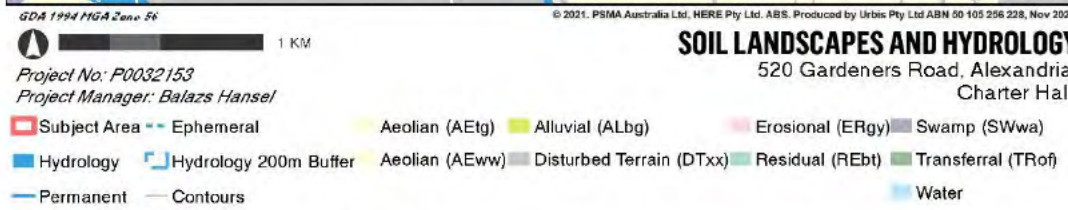
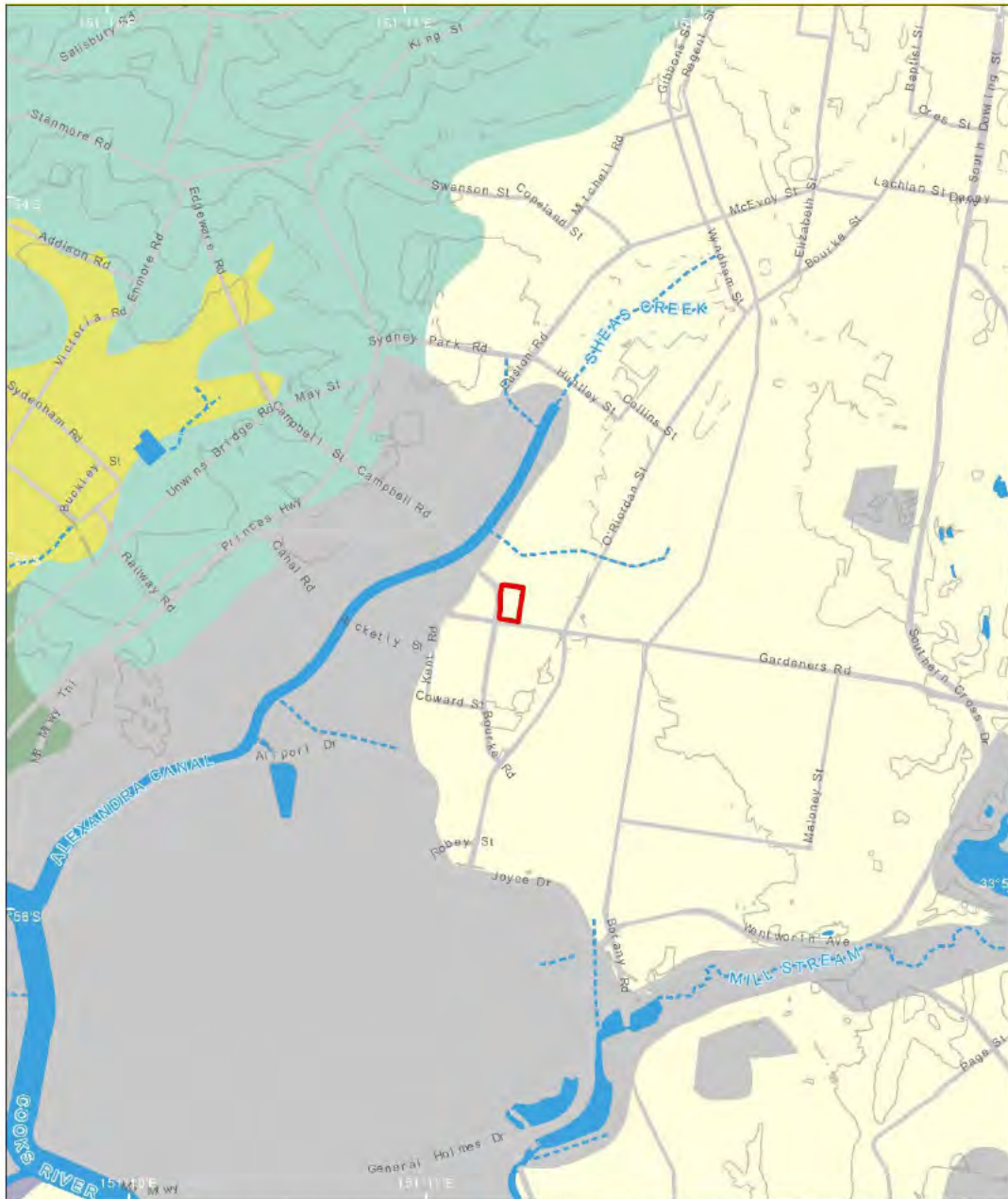


Figure 4 – Soil Landscapes and Hydrology

METHODOLOGY

The proposed impact assessment process for the ACHA, including the input points into the investigation and assessment activities for RAPs, is outlined below, in accordance with Section 4.2.2(b) of the Consultation Requirements.

The ACHA will be conducted in accordance with *Part 6 of the National Parks and Wildlife Act 1974* ('NPW Act'), *Part 5 of the National Parks and Wildlife Regulation 2019* ('NPW Reg') and will adhere to the following guidelines:

- *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010);
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010);
- *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales* (OEH, 2011); and
- *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013.*

The ACHA will follow the general methodology described in Table 2 – Aboriginal cultural heritage assessment methodology below.

Table 2 – Aboriginal cultural heritage assessment methodology

| Process Method | Description |
|----------------------------------|---|
| Desktop assessment | Collection and evaluation of background information, including archaeological and historical resources and environmental conditions, to develop a predictive model for archaeological potential. |
| Consultation with RAPs | Providing information on the project to RAPs and gathering information about the proposed methodology and the Aboriginal cultural heritage values and significance of the subject area. |
| Site inspection with RAPs | On-site meeting including site inspection of the subject area with the RAPs to allow further opportunity for cultural information to be provided and for the RAPs to familiarise themselves with the subject area and discuss the archaeological approach. |
| Preparation of draft ACHA report | Synthesis of all information collected during the ACHA process to prepare a draft assessment report and provision of the draft report to the Proponent and the RAPs for comments. The report will include an assessment of significance of any Aboriginal objects or Aboriginal cultural heritage values that may exist within the subject area, an |



| Process Method | Description |
|-----------------------------|--|
| | impact assessment and provide management and mitigation measures. |
| Finalisation of ACHA report | Incorporation of all comments from the Proponent and RAPs into ACHA report and finalisation. |

Urbis welcomes input and information from the RAPs at any stage throughout the entire process of the ACHA. Consistent with the Consultation Requirements, the formal input points for the consultation are the following:

- During Stage 2 and 3 – Following review of the current communication, which presents information about the proposed project and ACHA methodology.
- During Stage 2 and 3 – During or following the site visit and meeting.
- During Stage 4 – Following review of the draft ACHA.

CRITICAL TIMELINES

The critical timelines and milestones for the completion of the ACHA and delivery of reports are presented in Table 3 below, in accordance with Section 4.2.2(c) of the Consultation Requirements. Please note that the presented timeframes are estimates only and are intended as a guided to allow forward planning of personnel and resources.

Table 3 – Critical timelines.

| Project Stage | Due Date |
|--|---|
| Stage 2 and 3: Provision of comments on the provided project information and proposed methodology (this document). | Within 28 days from delivery of this document (i.e., by 10 February 2022). |
| Stage 3: Site survey. | After 10 February 2022. |
| Stage 4: Provision of the draft ACHA report (including the proposed management and mitigation measures) to the RAPs. | Within two weeks of the site inspection. |
| Stage 4: Provision of comments on draft ACHA report. | Within 28 days from delivery of the draft ACHA report to the RAPs. |
| Stage 4: Finalisation of the ACHA report including the consideration of all comments and feedback. | Within one week of the closing of the comment period for the draft ACHA report. |



ROLES, FUNCTIONS AND RESPONSIBILITIES

The roles, functions and responsibilities of the proponent and RAPs are defined below, in accordance with Section 4.2.2(d) of the Consultation Requirements.

The roles, functions and responsibilities of the Proponent, Urbis (acting on behalf of the Proponent), RAPs and any other parties involved in the consultation process are those defined in Section 5 of the Consultation Requirements.

Please note that, in accordance with Section 3.4 of the Consultation Requirements, consultation does not include the employment of Aboriginal people to assist in field assessment and/or site monitoring. Furthermore, there is no obligation on the Proponent to employ Aboriginal people registered for consultation. Aboriginal people may provide services to the Proponent through a contractual arrangement separate to the consultation process. Consultation will continue irrespective of potential or actual employment opportunities for Aboriginal people.

GATHERING CULTURAL INFORMATION

Urbis is providing the opportunity for RAPs to identify, raise and discuss their cultural concerns, perspectives and assessment requirements (if any), in accordance with Section 4.2.2(e) of the Consultation Requirements.

Urbis is actively seeking information on the cultural heritage and cultural significance of the subject area. Such information includes the existence of any Aboriginal objects of cultural value to Aboriginal people in or near the subject area (whether declared under s.84 of the NPW Act or not), including places of social, spiritual and cultural value, historic places with cultural significance and potential places/areas of historic, social, spiritual and/or cultural significance.

Please also consider the following when providing information:

- Do you have information on any Aboriginal objects within or near the subject area?
- Do you or somebody you know have information of cultural values, stories in relation to the subject area and if that information can be shared?

If you or your organisation has sensitive or restricted public access information for determining or managing the heritage values of the subject area, it is proposed that the proponent will manage this information (if provided by the Aboriginal community) in accordance with a sensitive cultural information management protocol. It is anticipated that the protocol will include making note of and managing the material in accordance with the following key limitations as advised by Aboriginal people at the time of the information being provided:

- Any restrictions on access of the material.
- Any restrictions on communication of the material (confidentiality).
- Any restrictions on the location/storage of the material.
- Any cultural recommendations on handling the material.
- Any names and contact details of persons authorised within the relevant Aboriginal group to make decisions concerning the Aboriginal material and degree of authorisation.
- Any details of any consent given in accordance with customary law.



- Any access and use by the RAPs of the cultural information.

Please consider the above list when providing your recommendations regarding any culturally sensitive information.

QUESTIONNAIRE

To streamline information gathering during Stage 2 and 3, and to inform the proponent for any field inspection component, Urbis requests the following information from you:

1. **Cultural connection:** Please describe the nature of your cultural connection to the country on which the subject area is situated. Please include any relevant cultural knowledge or knowledge of Aboriginal objects or places within the subject area. Have you ever lived in or near the subject area? If you are a Traditional Owner, please state this clearly.
2. **Representing your community members:** Please state who you or your organisation represents. Do you or your organisation represent other members of the Aboriginal community? If so, please describe how information is provided to the other members, and how their information and knowledge may be provided back to the proponent and Urbis.
3. **Previous experience:** Please list your relevant (for example, in the area of the proposed project) previous experience in providing cultural heritage advice and survey participation.
4. **Schedule of Rates:** Please provide your Certificate of Currency including Product and Public Liability Insurance and Worker's Compensation. Please also include a schedule of rates (hourly/half day/day) for fieldwork participation, and include any expenses you may expect to incur, and these will be sought to be reimbursed. *Please note that it is for the discretion for the proponent to decide if they invite RAPs for site works and the consultation process does not guarantee paid employment.*

The above questions are provided as a questionnaire in Appendix B, for your convenience. Please complete the questionnaire and return it to:

Sam Richards
Senior Consultant, Archaeology
Urbis Pty Ltd
Level 8, 123 Pitt Street, Sydney, 2000
E: sam.richards@urbis.com.au
P: 02 8424 5136



Please provide the requested information by **10 February 2022**. Comments received after this date might be excluded from the draft ACHA. Please provide your comments in writing to the above contact.

Yours sincerely,

A handwritten signature in black ink, appearing to be "S. Richards", written over a horizontal line.

Samuel Richards
Senior Consultant

02 8424 5136

sam.richards@urbis.com.au

APPENDIX A – AHIMS BASIC AND EXTENSIVE SEARCH RESULTS

Urbis Pty Ltd - Angel Place L8 123 Pitt Street

Date: 11 November 2021

Level 8 123 Angel Street
Sydney New South Wales 2000

Attention: Aaron Olsen

Email: aolsen@urbis.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 327509.595 - 337632.187, Northings : 6240200.474 - 6250400.282 with a Buffer of 0 meters, conducted by Aaron Olsen on 11 November 2021.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

| | |
|-----------|--|
| 45 | Aboriginal sites are recorded in or near the above location. |
| 0 | Aboriginal places have been declared in or near the above location. * |

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

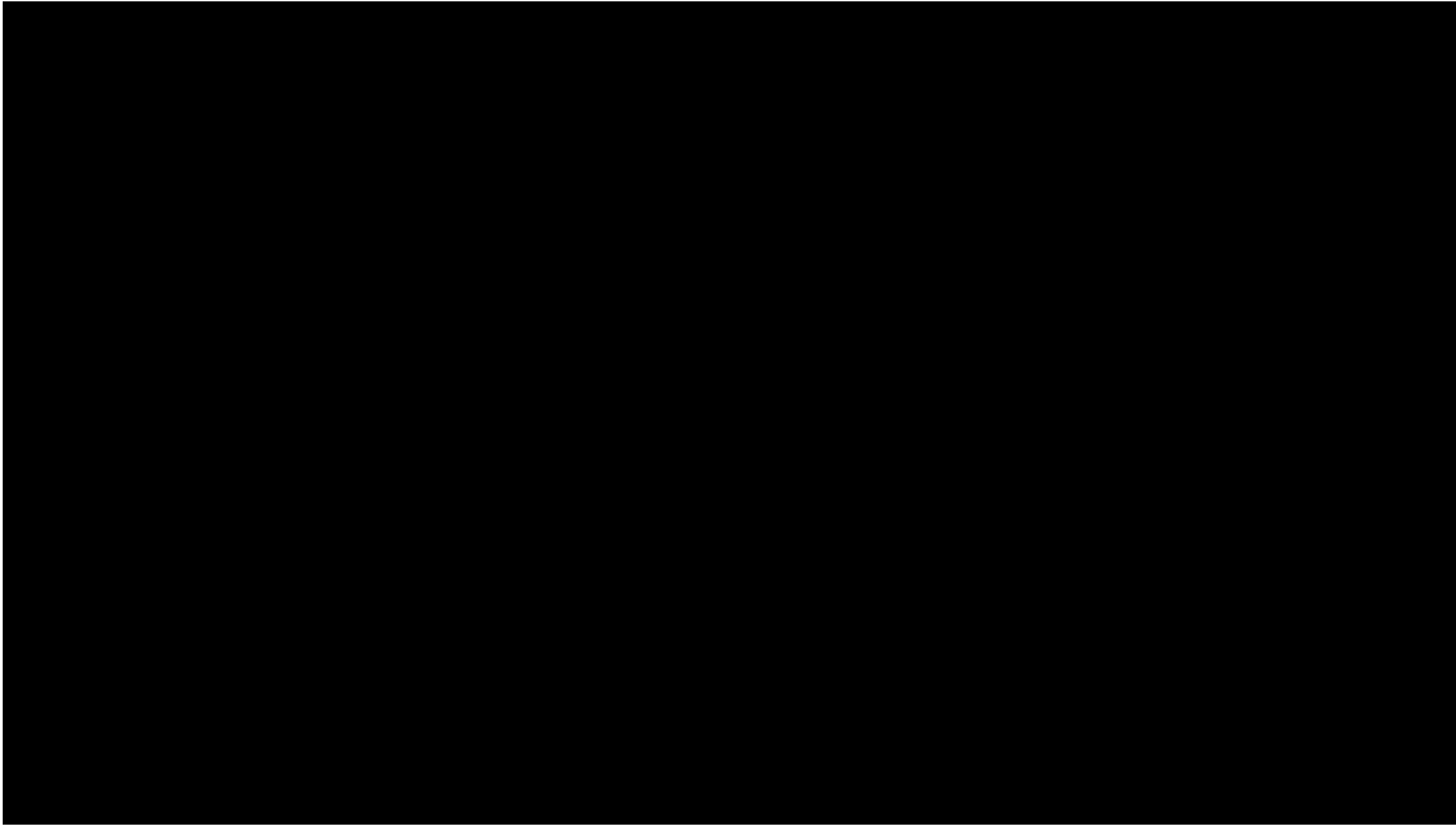


AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 520Garden_10km

Client Service ID : 638084



Report generated by AHIMS Web Service on 11/11/2021 for Aaron Olsen for the following area at Datum :GDA, Zone : 56, Eastings : 327509.595 - 337632.187, Northings : 6240200.474 - 6250400.282 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 45

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

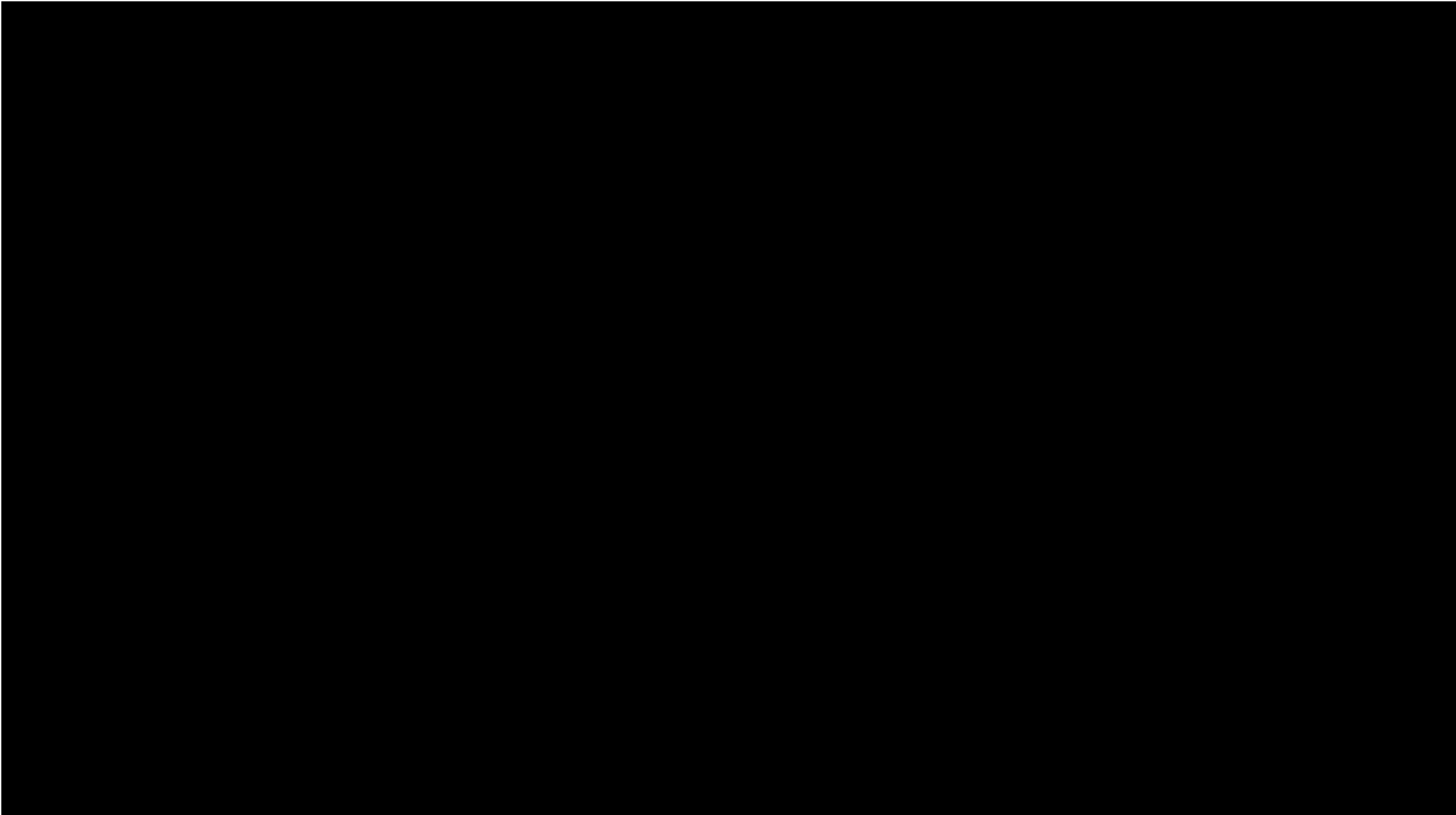


AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 520Garden_10km

Client Service ID : 638084



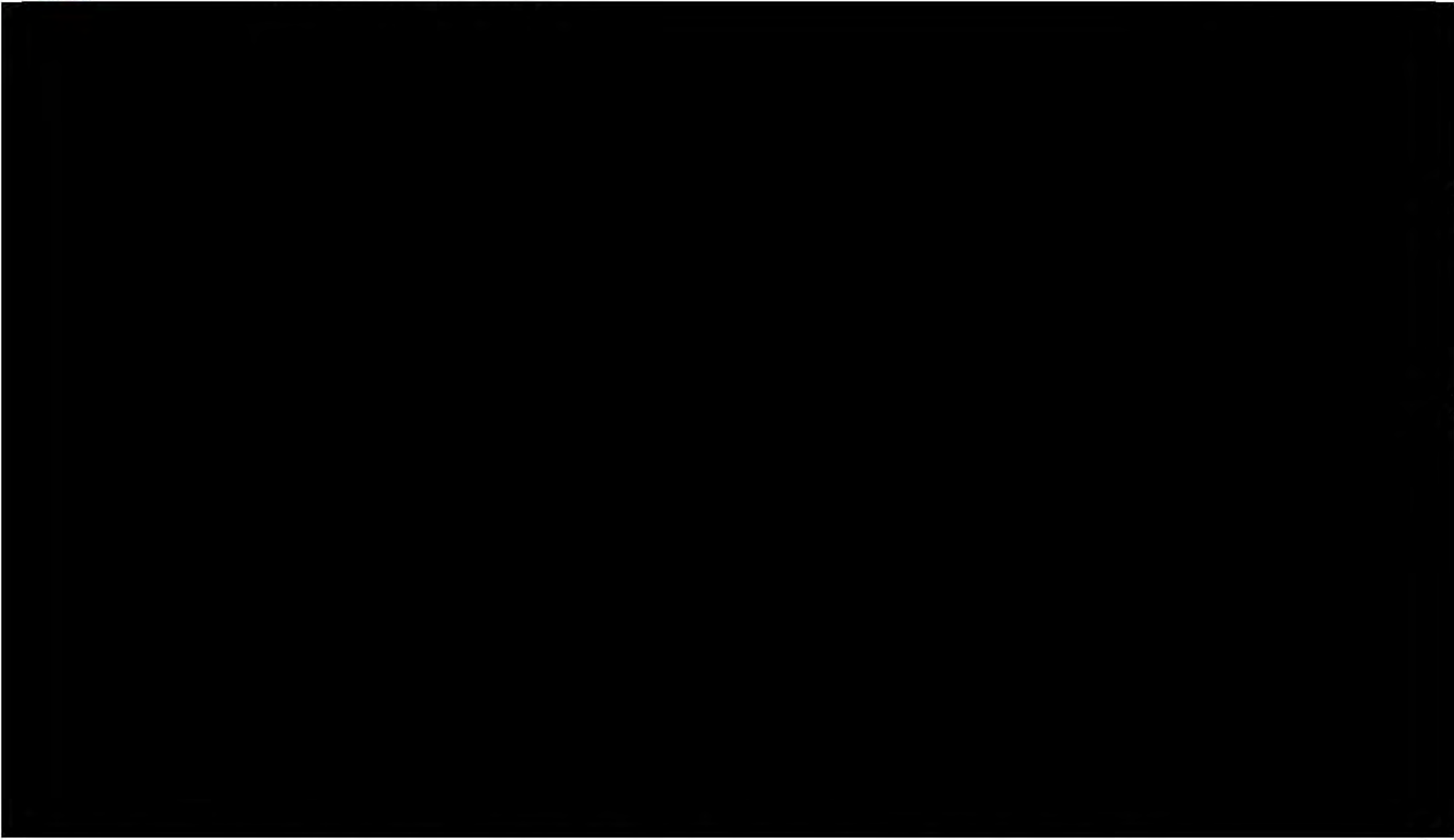
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AHIMS Web Services (AWS)

Extensive search - Site list report



Report generated by AHIMS Web Service on 11/11/2021 for Aaron Olsen for the following area at Datum :GDA, Zone : 56, Eastings : 327509.595 - 337632.187, Northings : 6240200.474 - 6250400.282 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 45

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 520Garden_10km

Client Service ID : 638084

**** Site Status**

Valid - The site has been recorded and accepted onto the system as valid

Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

Not a site - The site has been originally entered and accepted onto AH MS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 11/11/2021 for Aaron Olsen for the following area at Datum :GDA, Zone : 56, Eastings : 327509.595 - 337632.187, Northings : 6240200.474 - 6250400.282 with a Buffer of 0 meters.. Number of Aboriginal sites and Aboriginal objects found is 45

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

APPENDIX B – ACHA QUESTIONNAIRE

1. **Cultural connection:** Please describe the nature of your cultural connection to the country on which the subject area is situated. Please include any relevant cultural knowledge or knowledge of Aboriginal objects or places within the subject area. Have you ever lived in or near the subject area? If you are a Traditional Owner, please state this clearly.



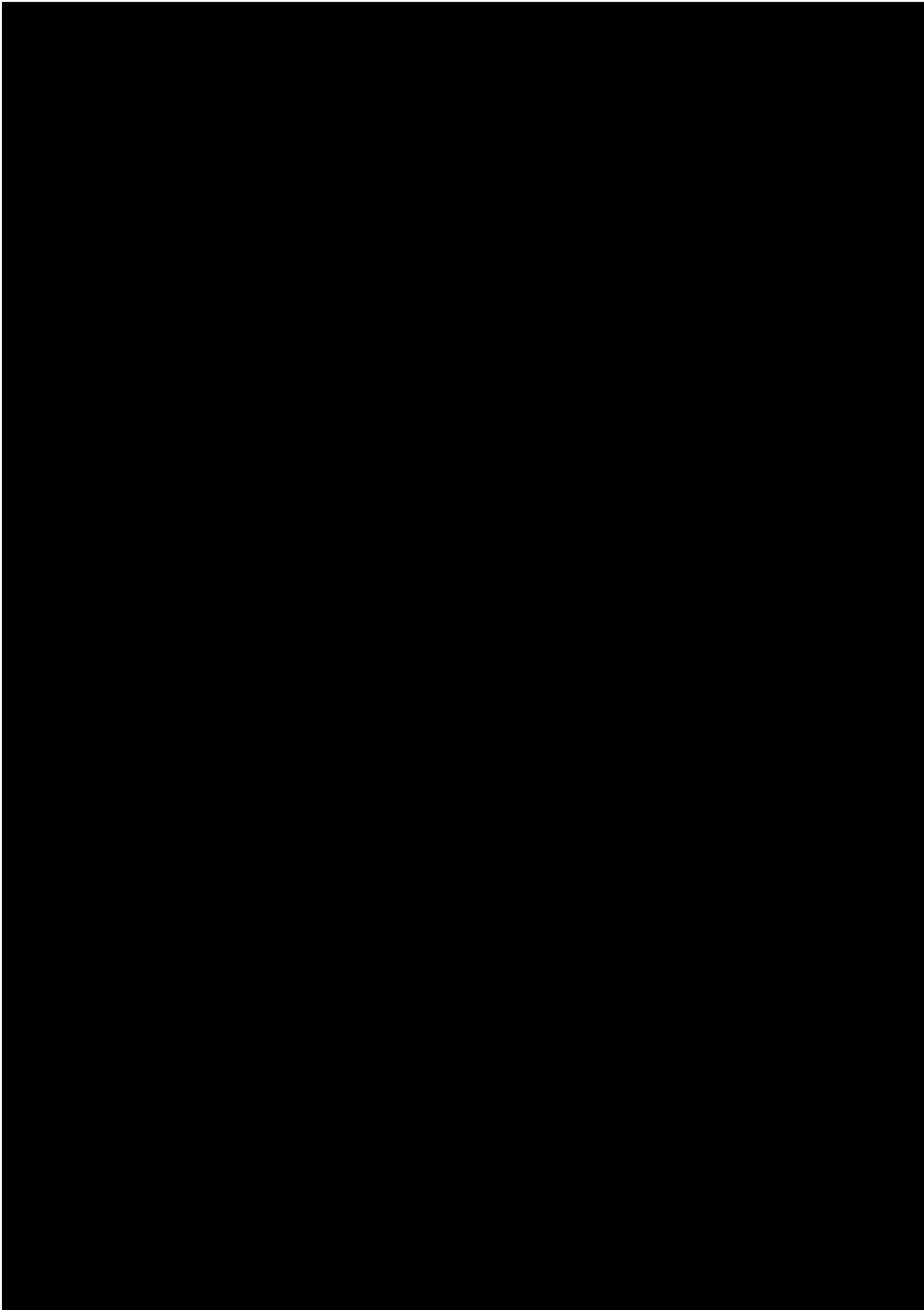
2. **Representing your community members:** Please state who you or your organisation represents. Do you or your organisation represent other members of the Aboriginal community? If so, please describe how information is provided to the other members, and how their information and knowledge may be provided back to the Proponent and Urbis.

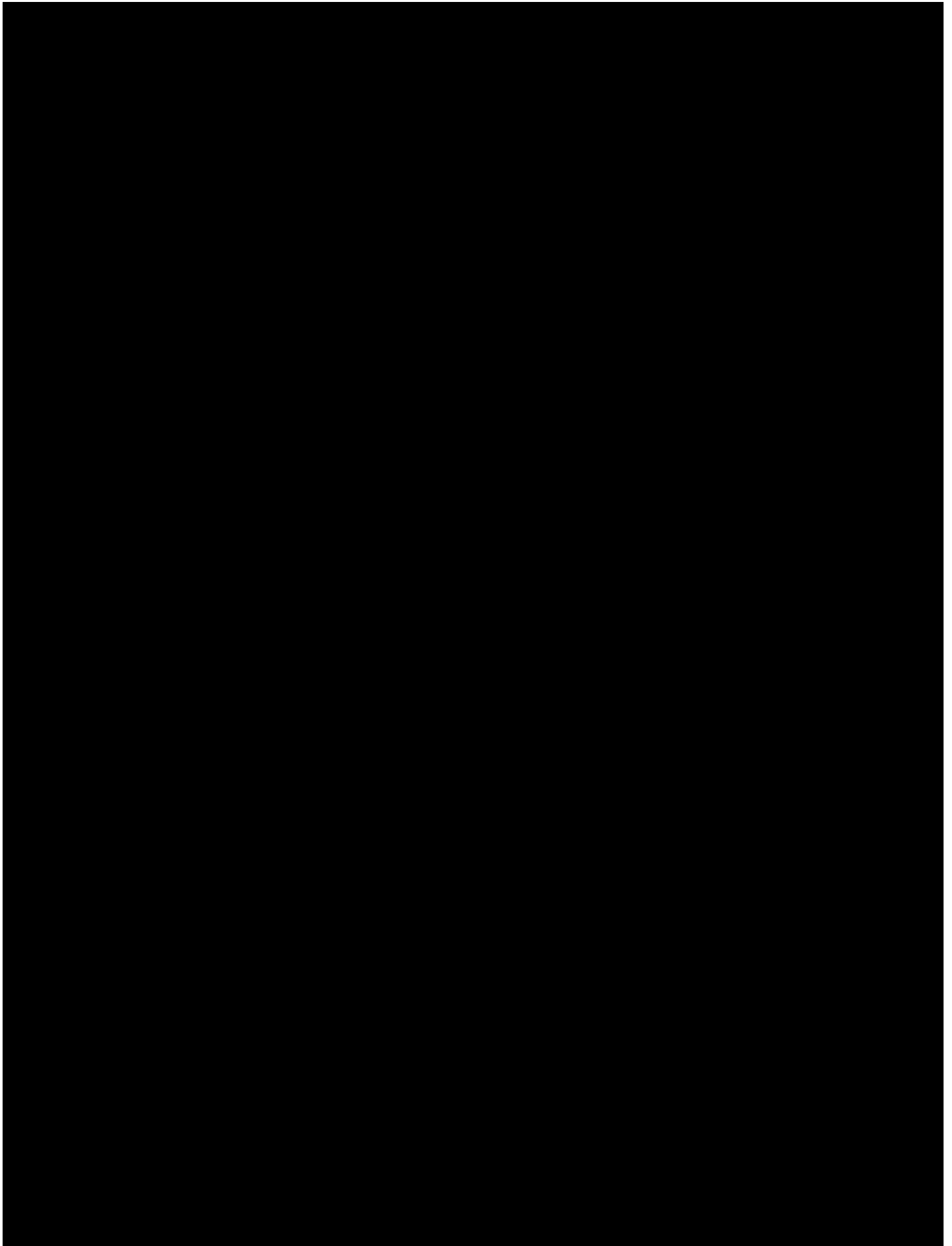


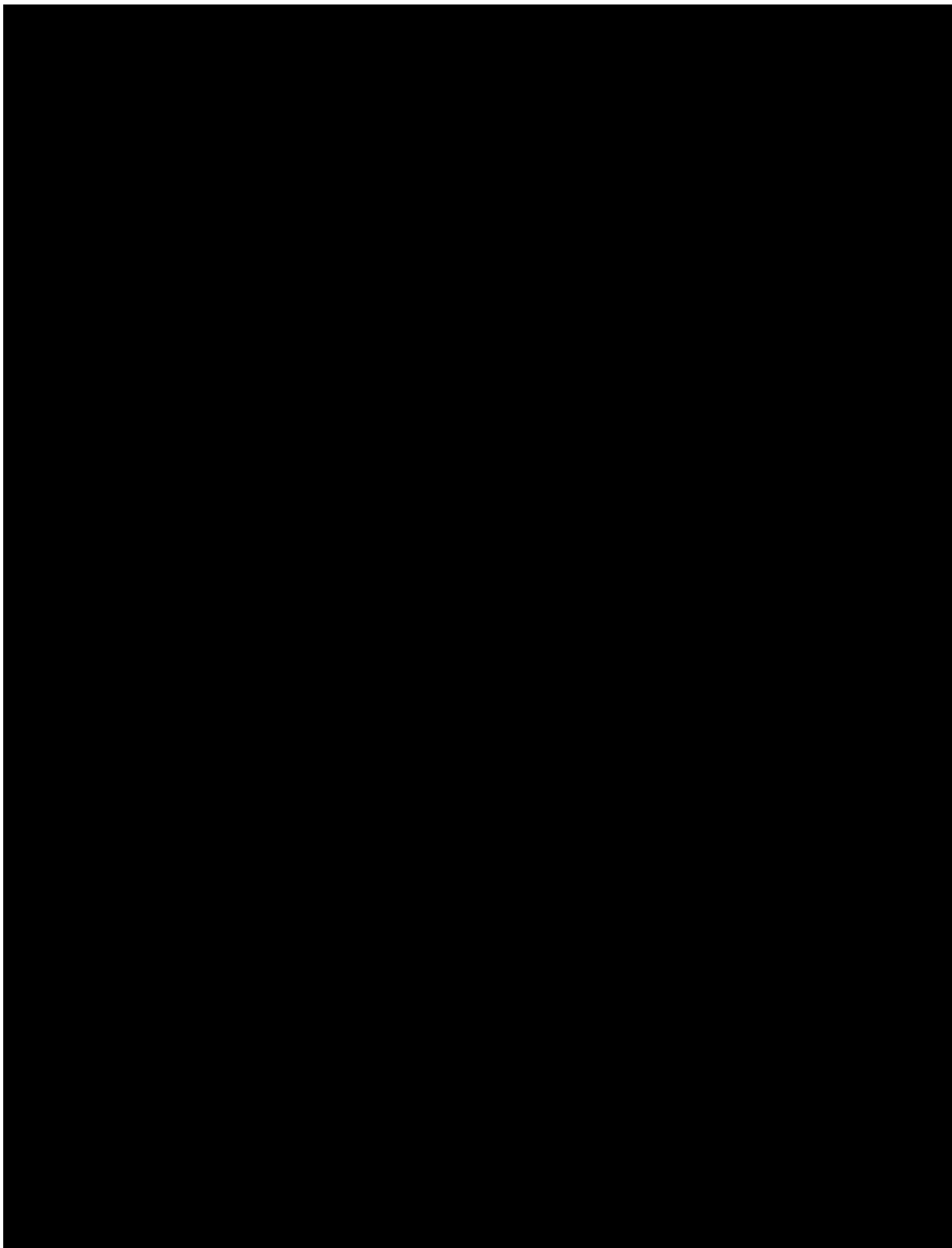
-
-
3. **Previous experience:** Please list your relevant (for example, in the area of the proposed project) previous experience in providing cultural heritage advice and survey participation.

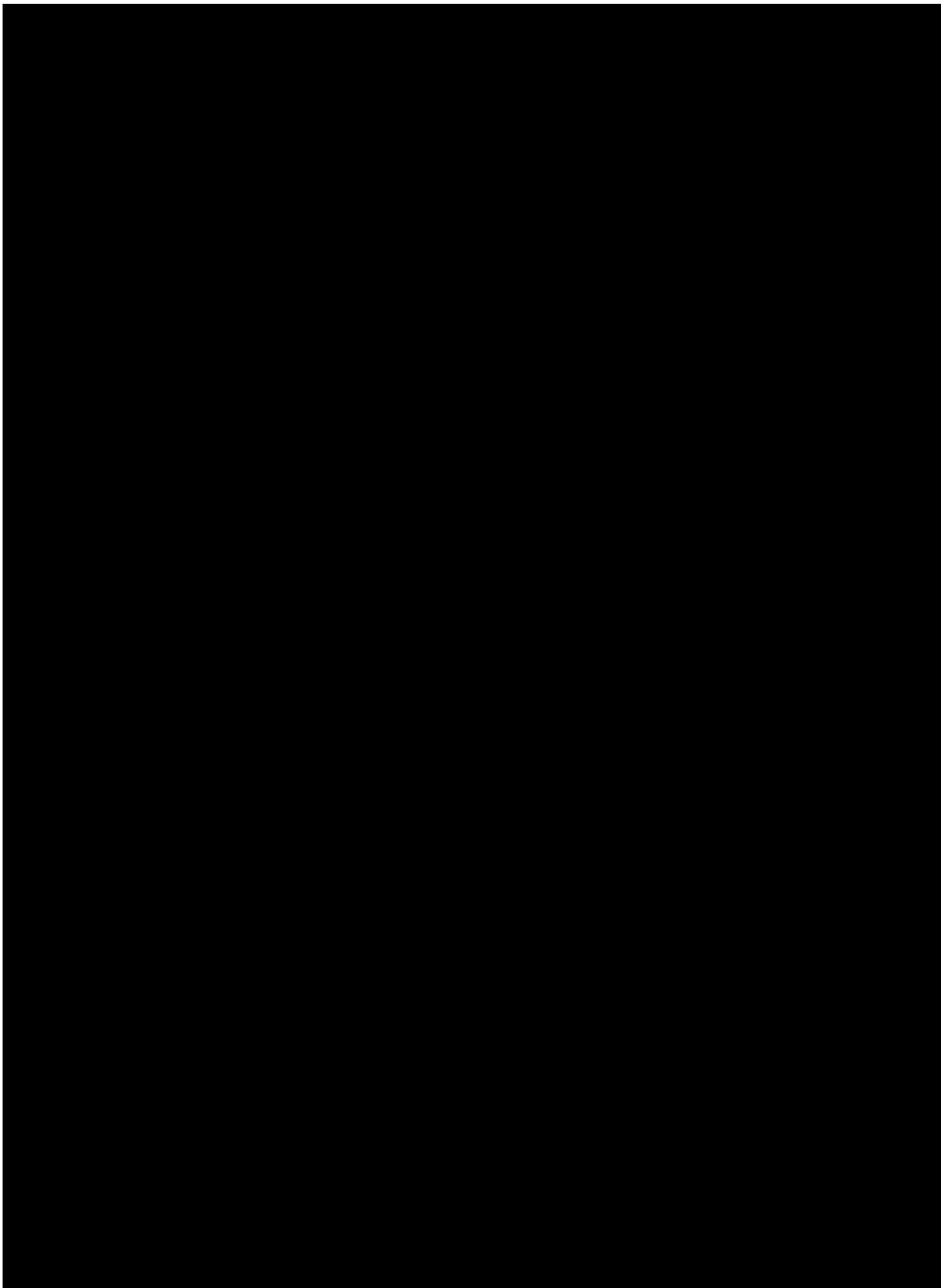


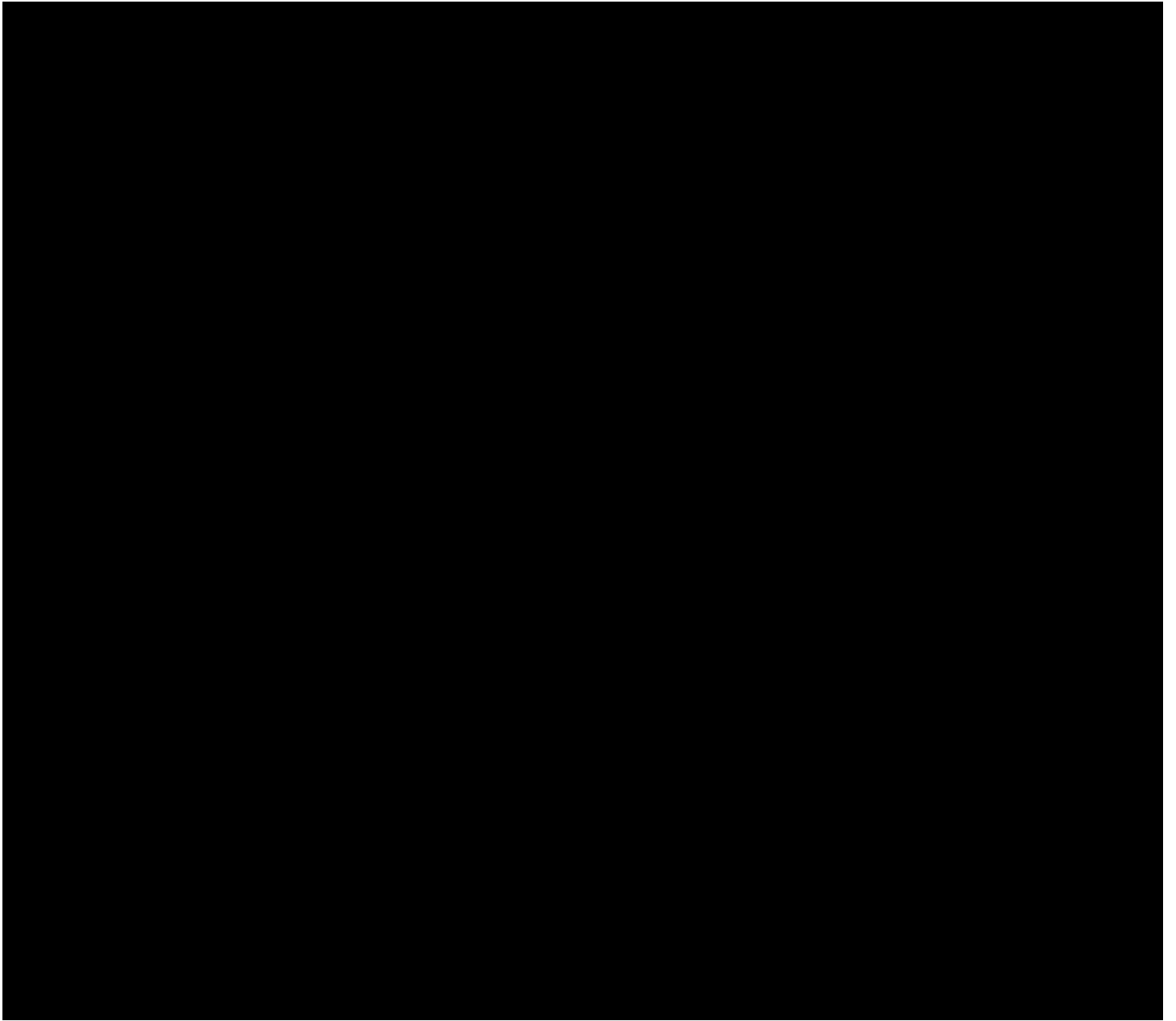
4. **Schedule of Rates:** Please provide your Certificate of Currency including Product and Public Liability Insurance and Worker's Compensation. Please also schedule of rates (hourly/half day/day) for fieldwork participation, and include any expenses you may expect to incur, and these will be sought to be reimbursed. Please note that it is for the discretion for the Proponent to decide if they invite RAPs for site works and the consultation process does not guarantee paid employment.

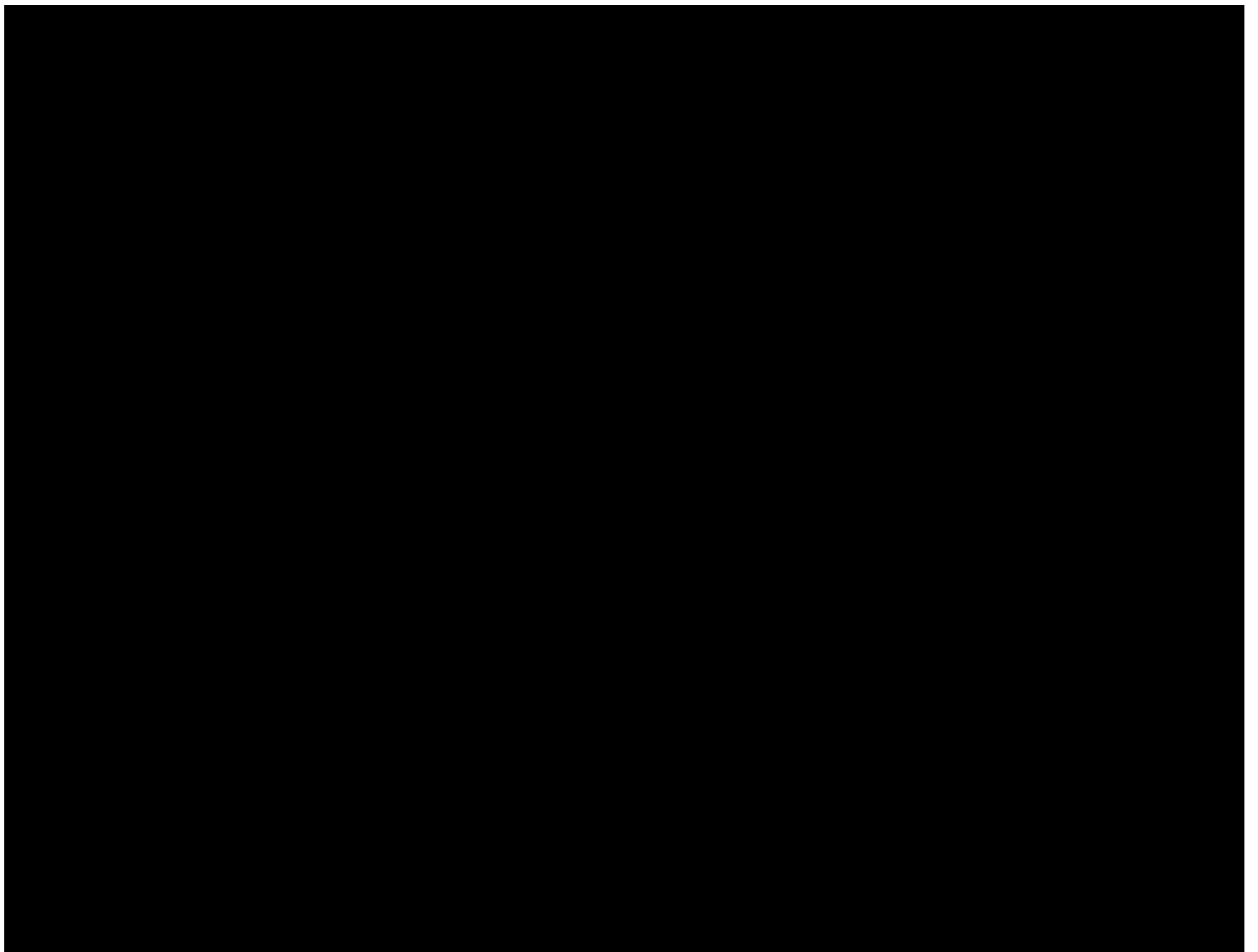


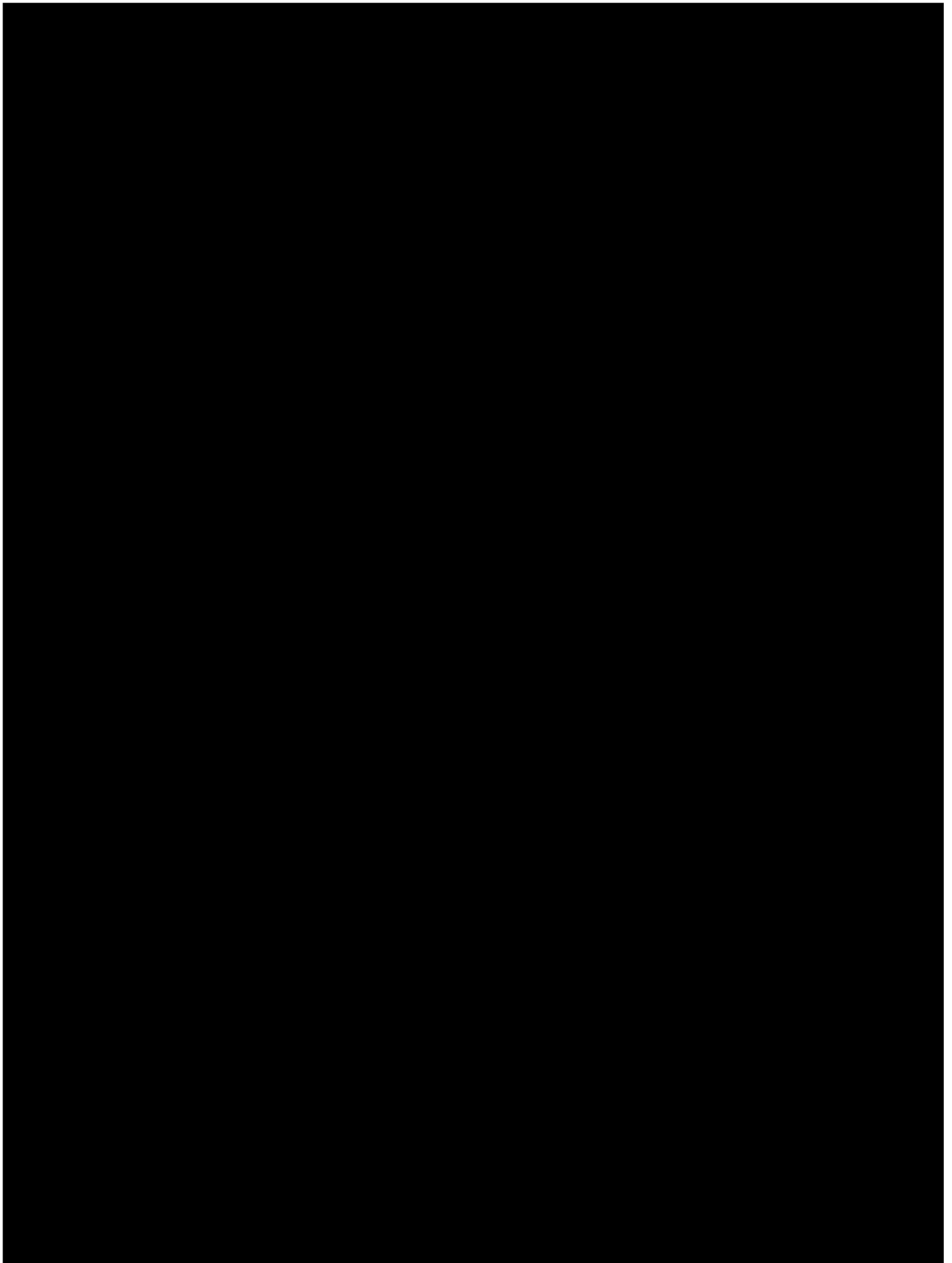


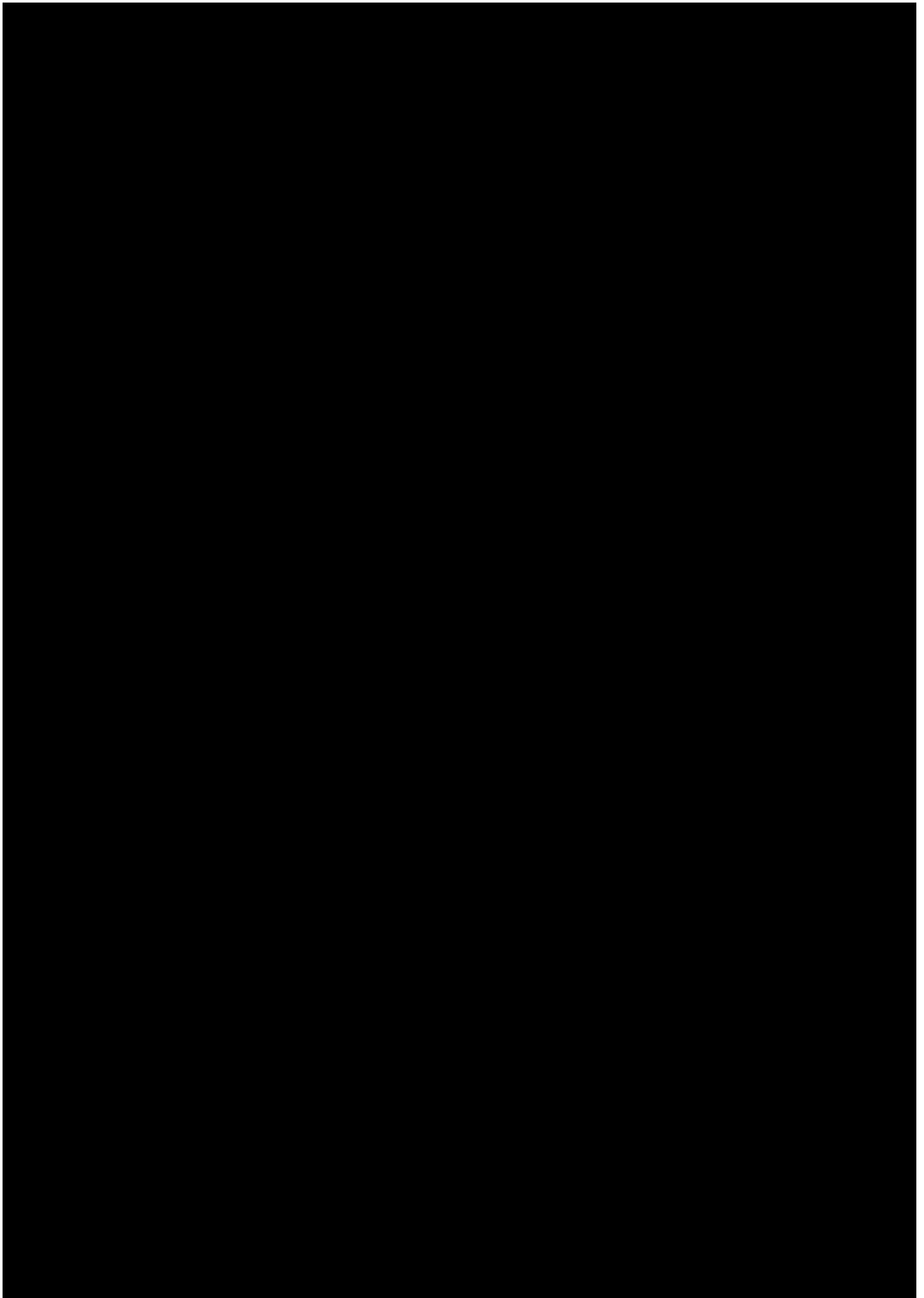


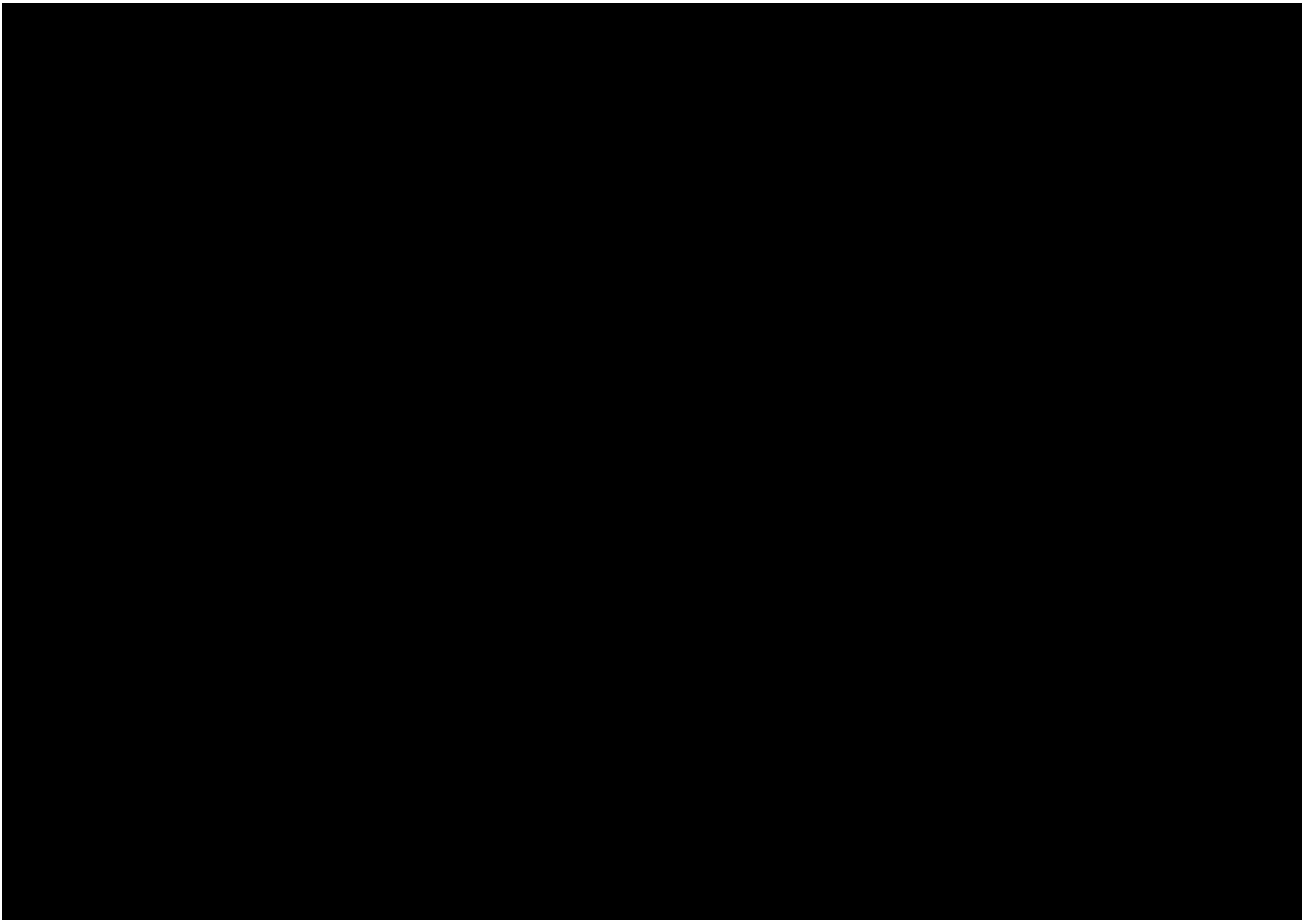


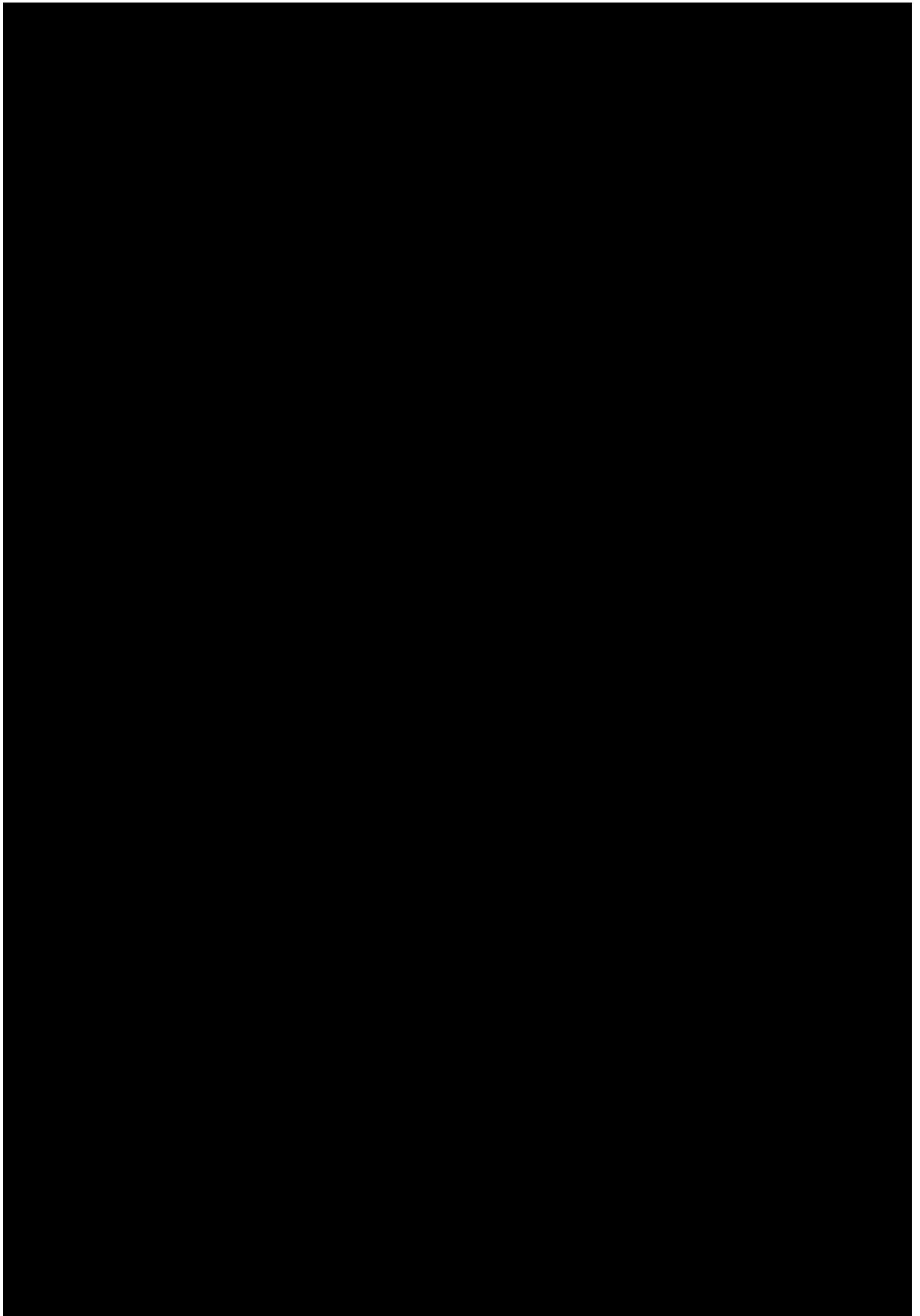


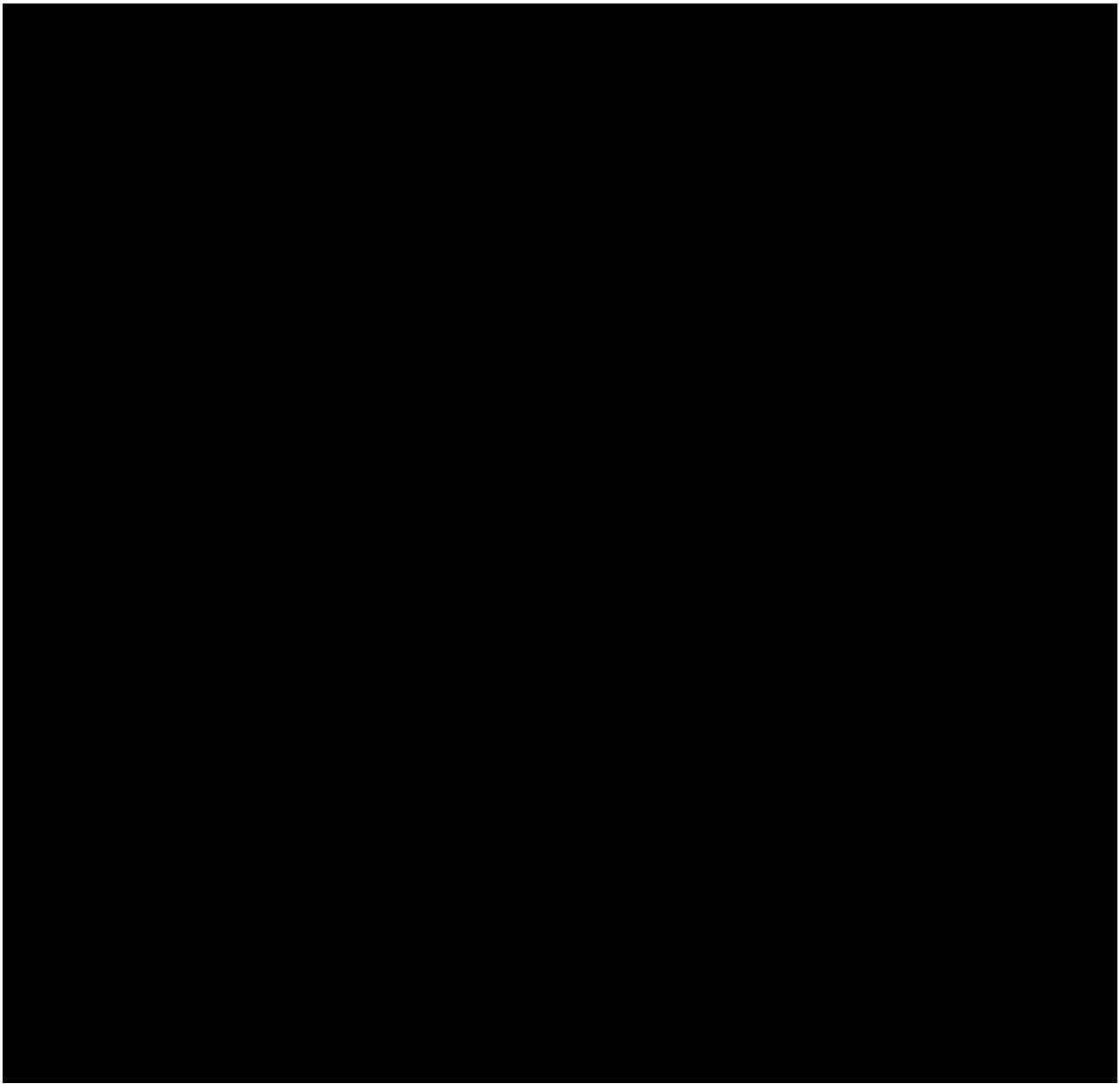


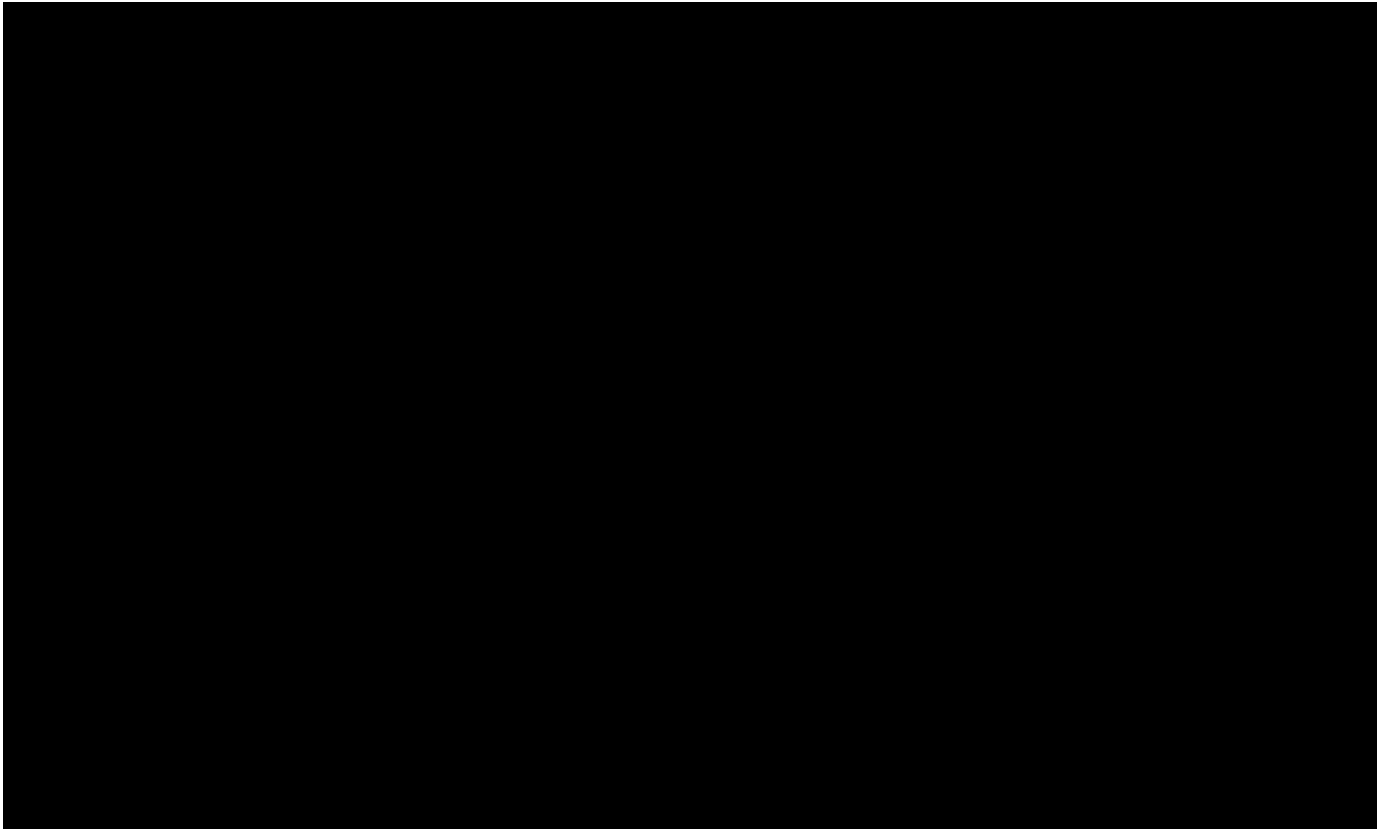


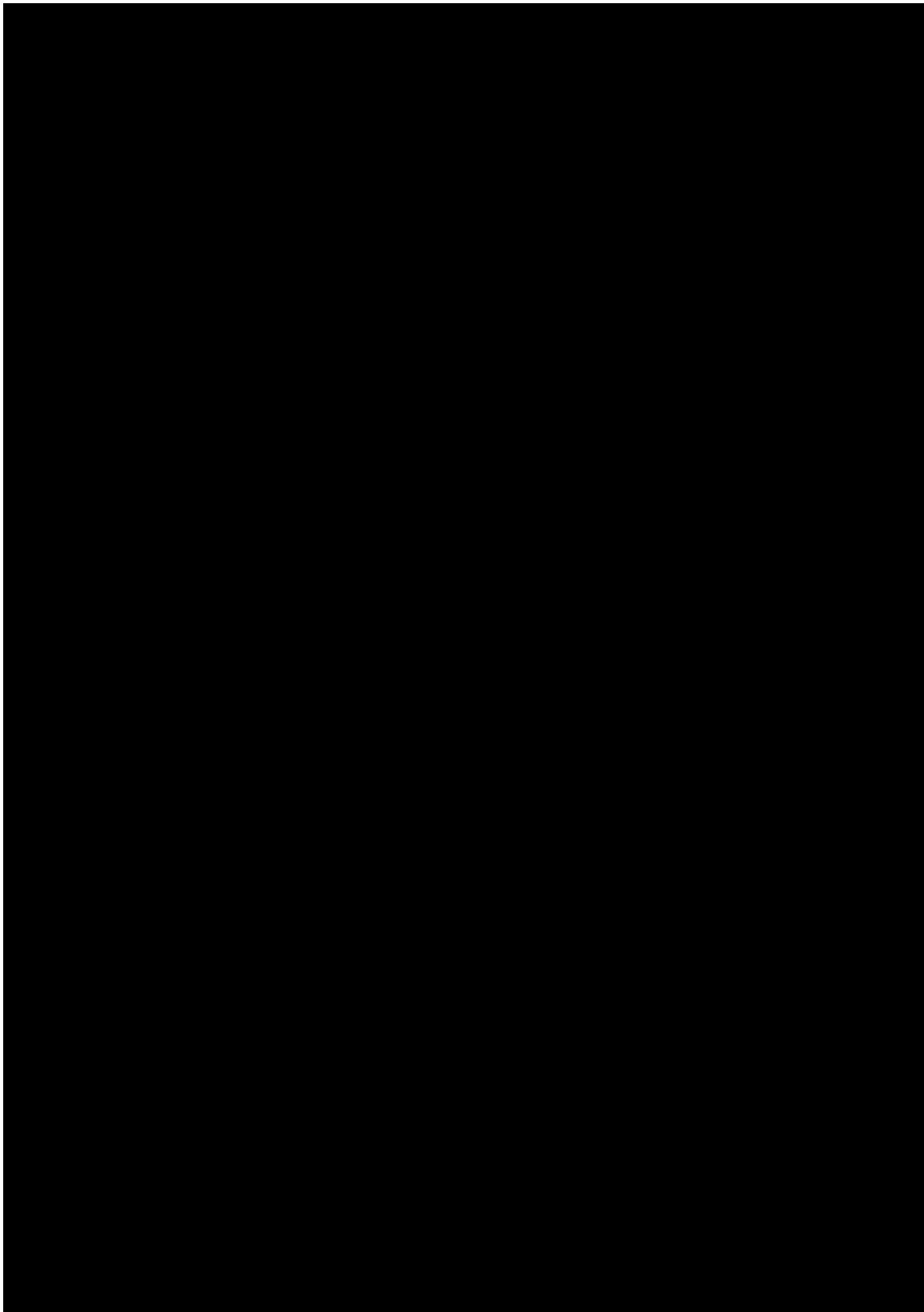


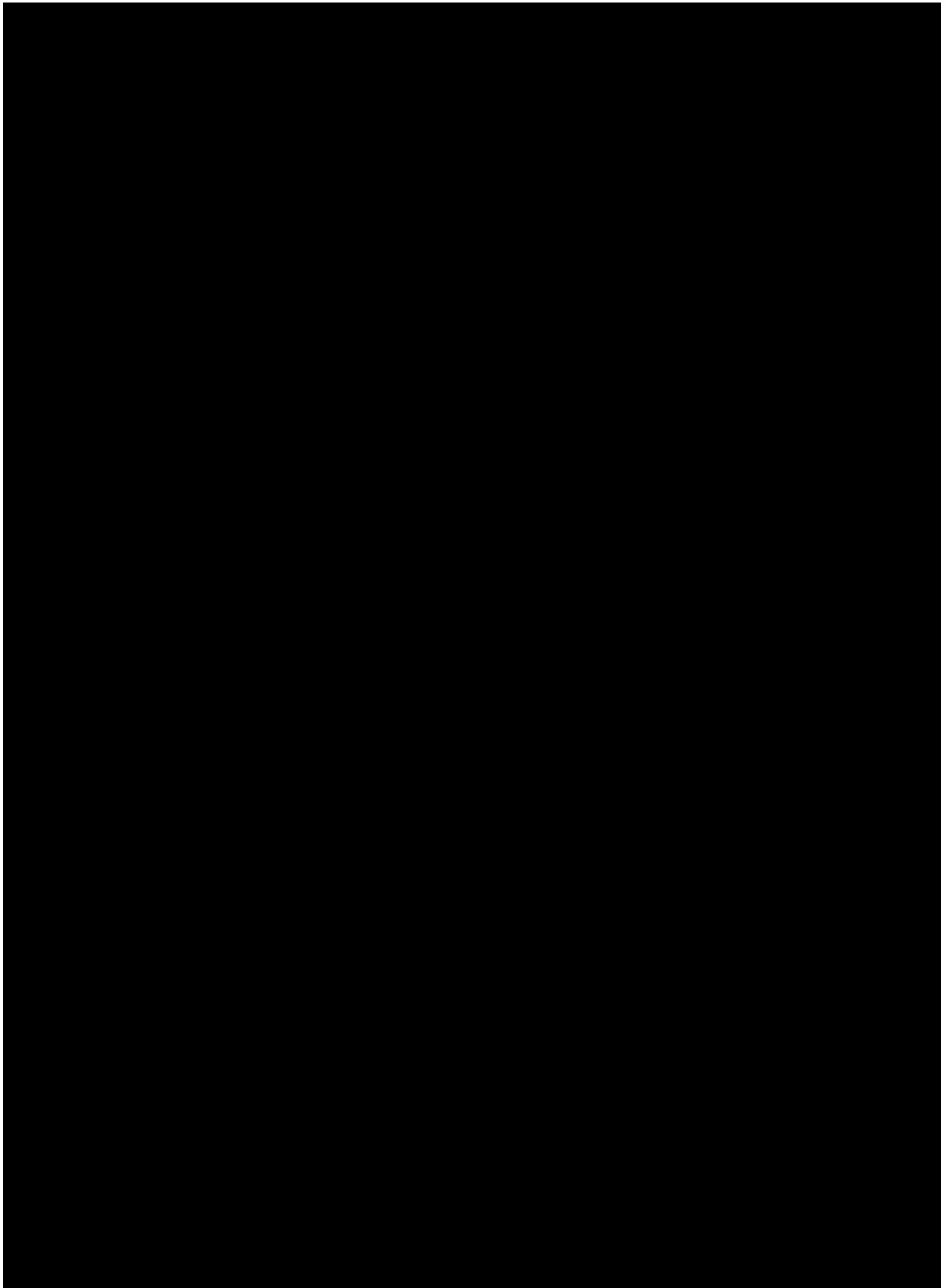


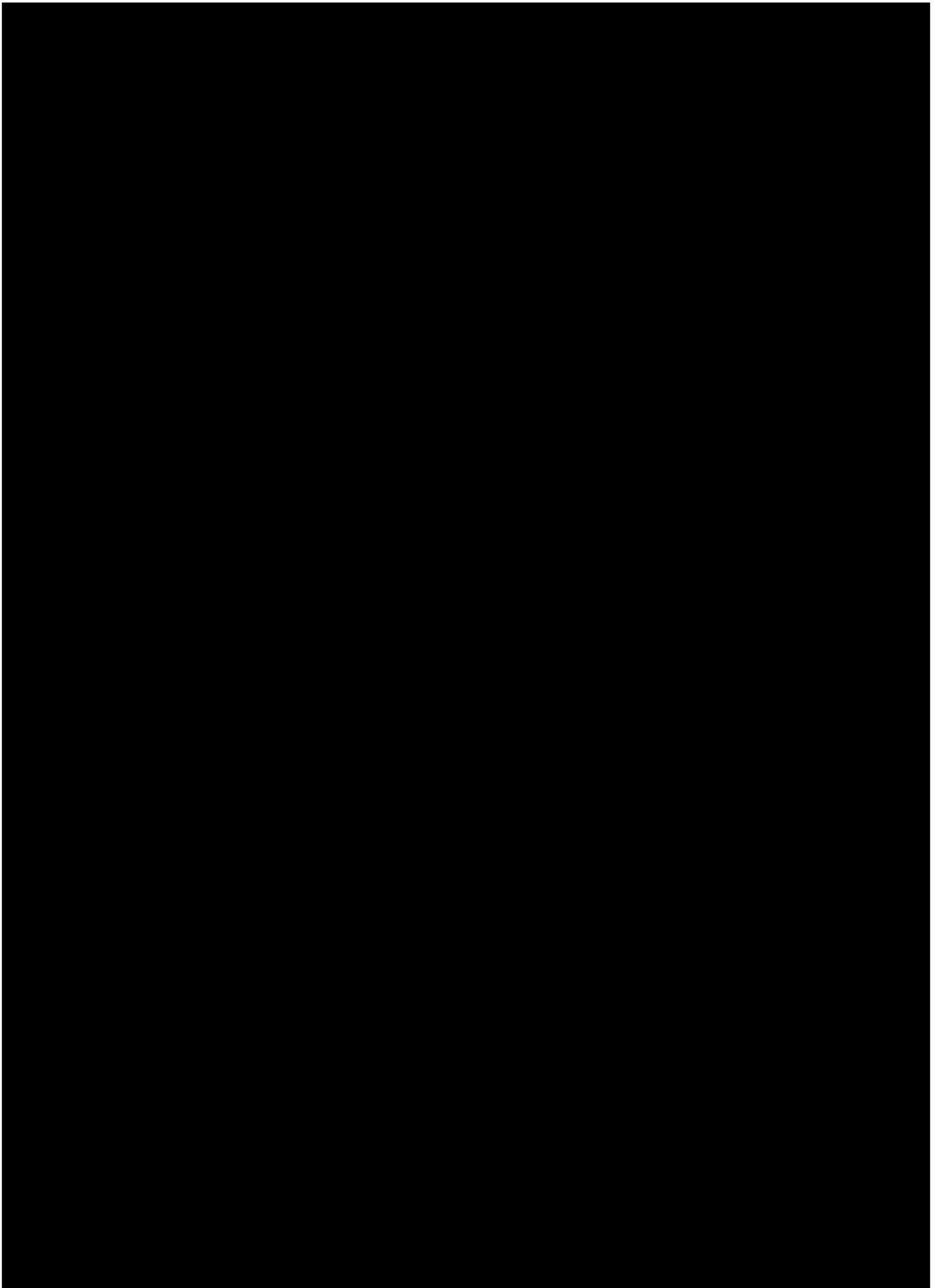


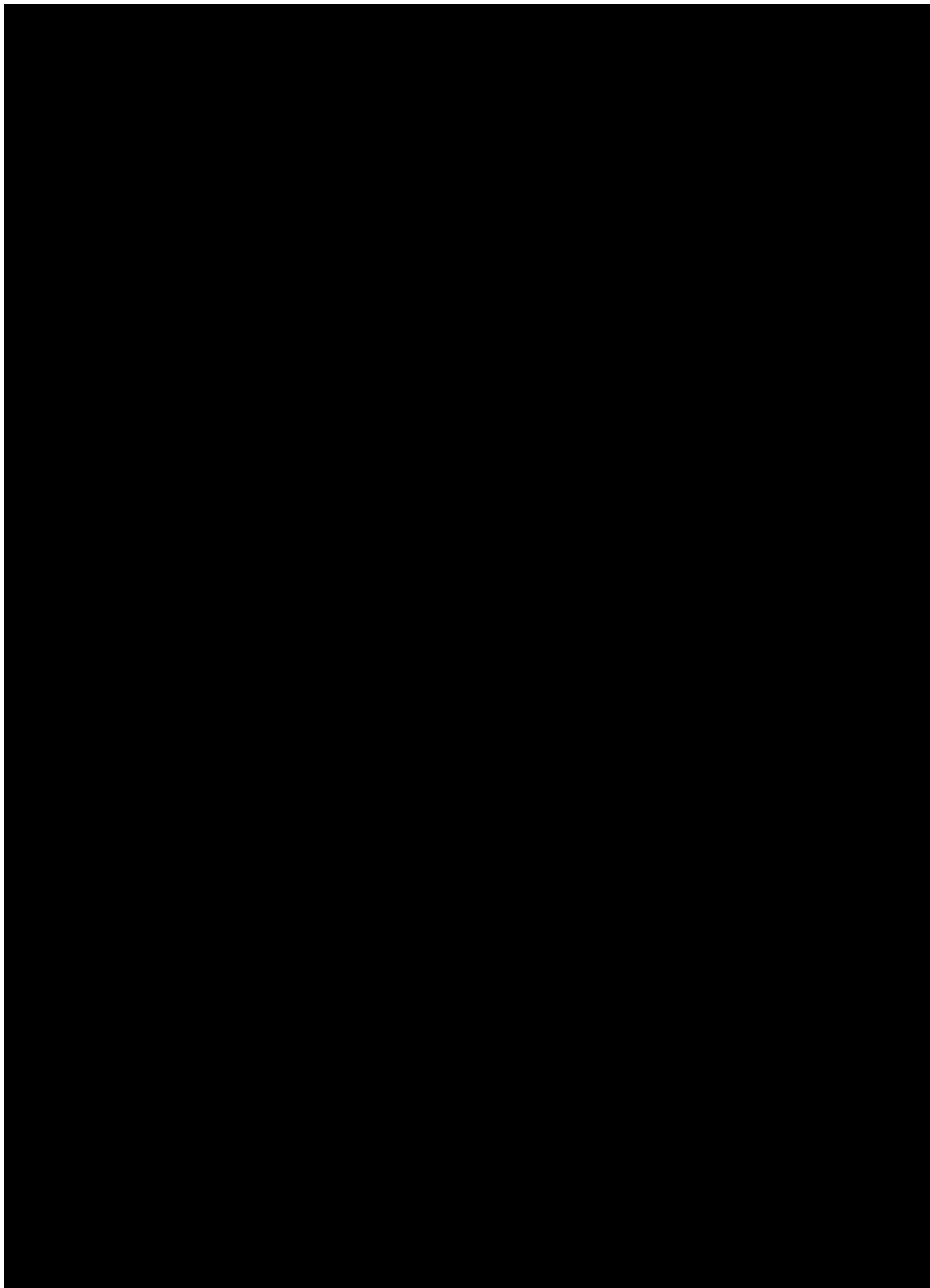




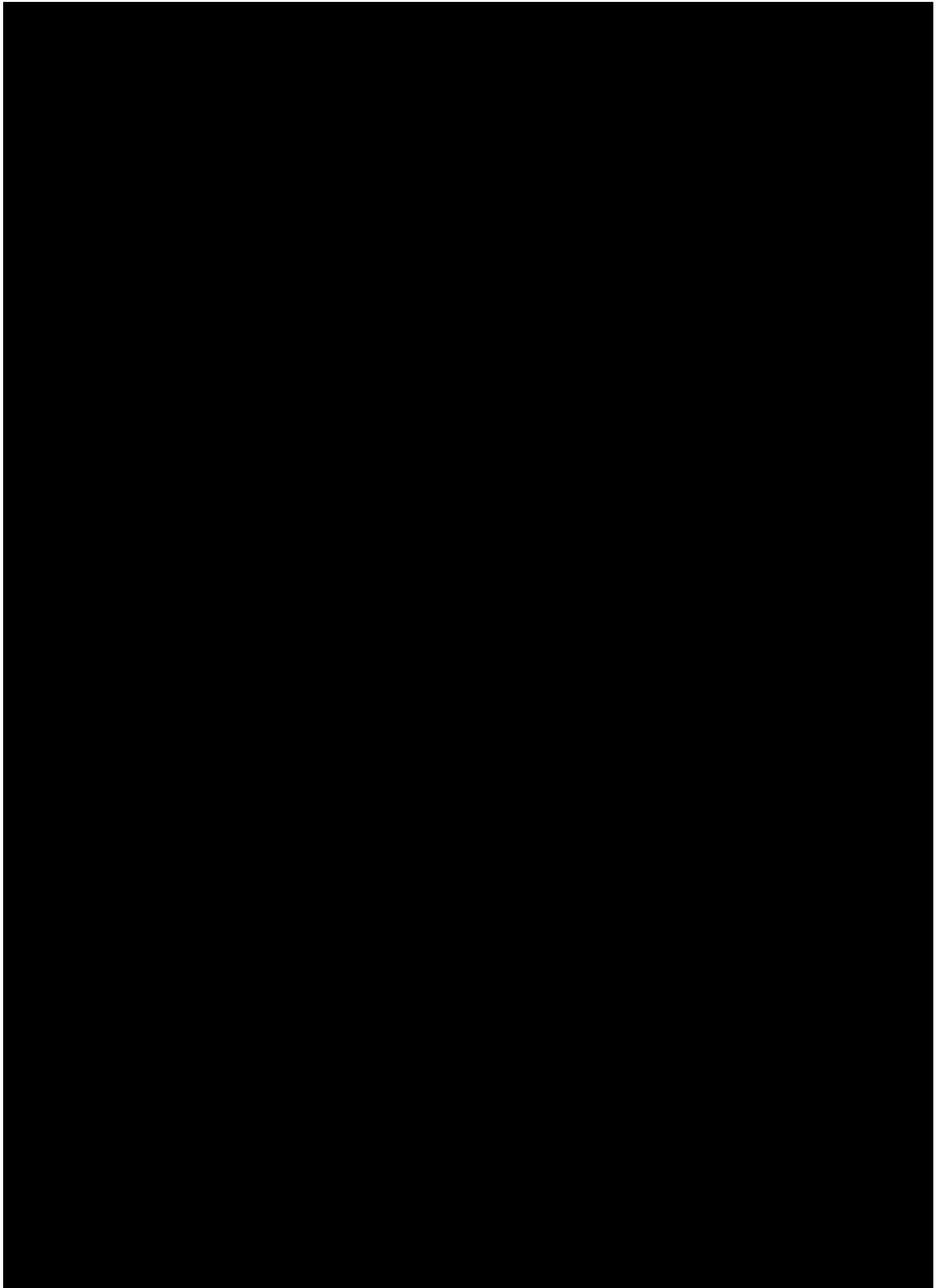


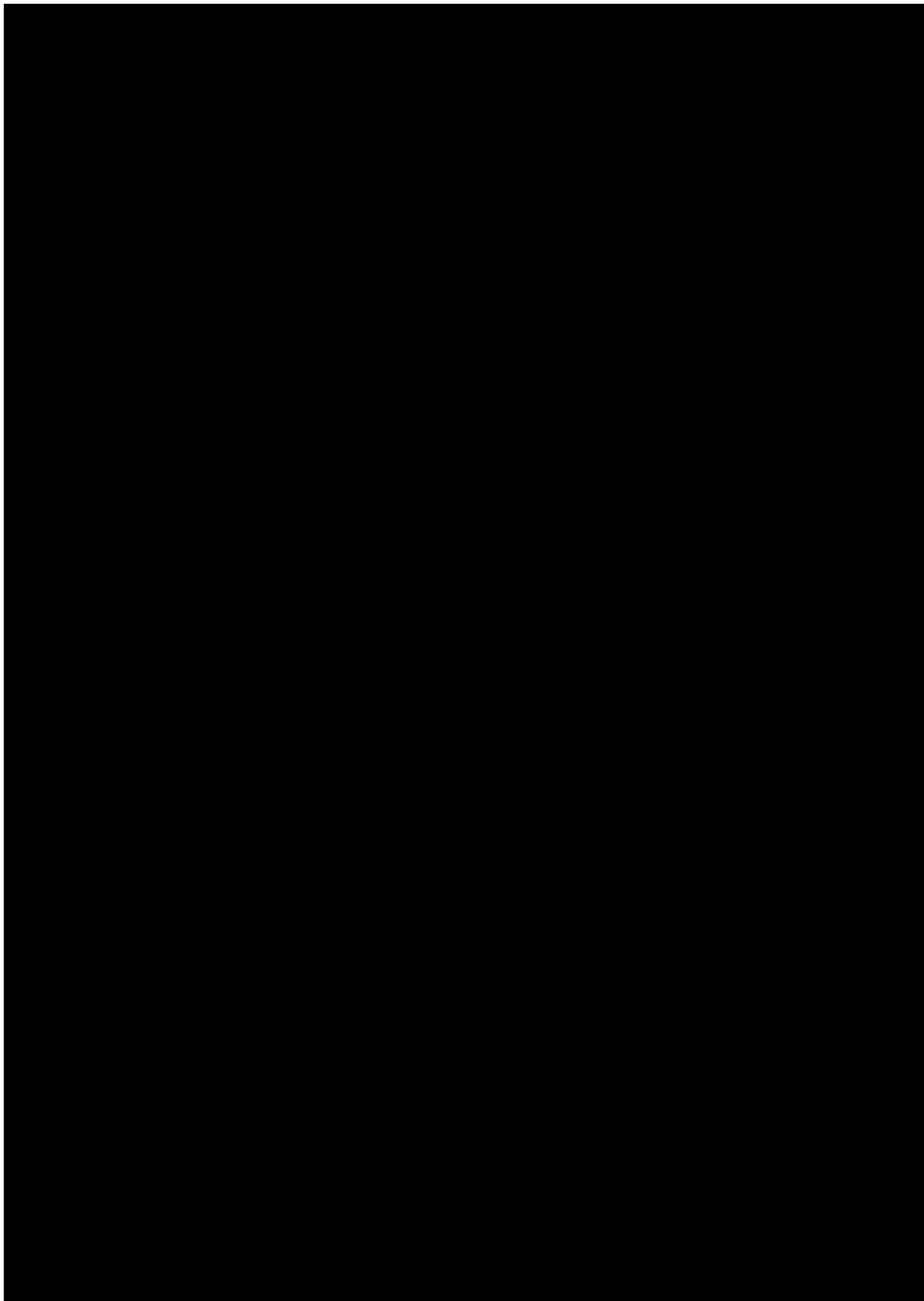
















From: [Aaron Olsen](#)
Cc: [Sam Richards](#); [Stewart Johnson](#); [Lachlan Andrew](#)
Bcc: [REDACTED]
Subject: 520 Gardeners Road, Alexandria - Aboriginal Cultural Heritage Assessment - Details of Site Visit
Date: Thursday, 17 February 2022 12:56:00 PM
Attachments: [image001.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)

Good afternoon

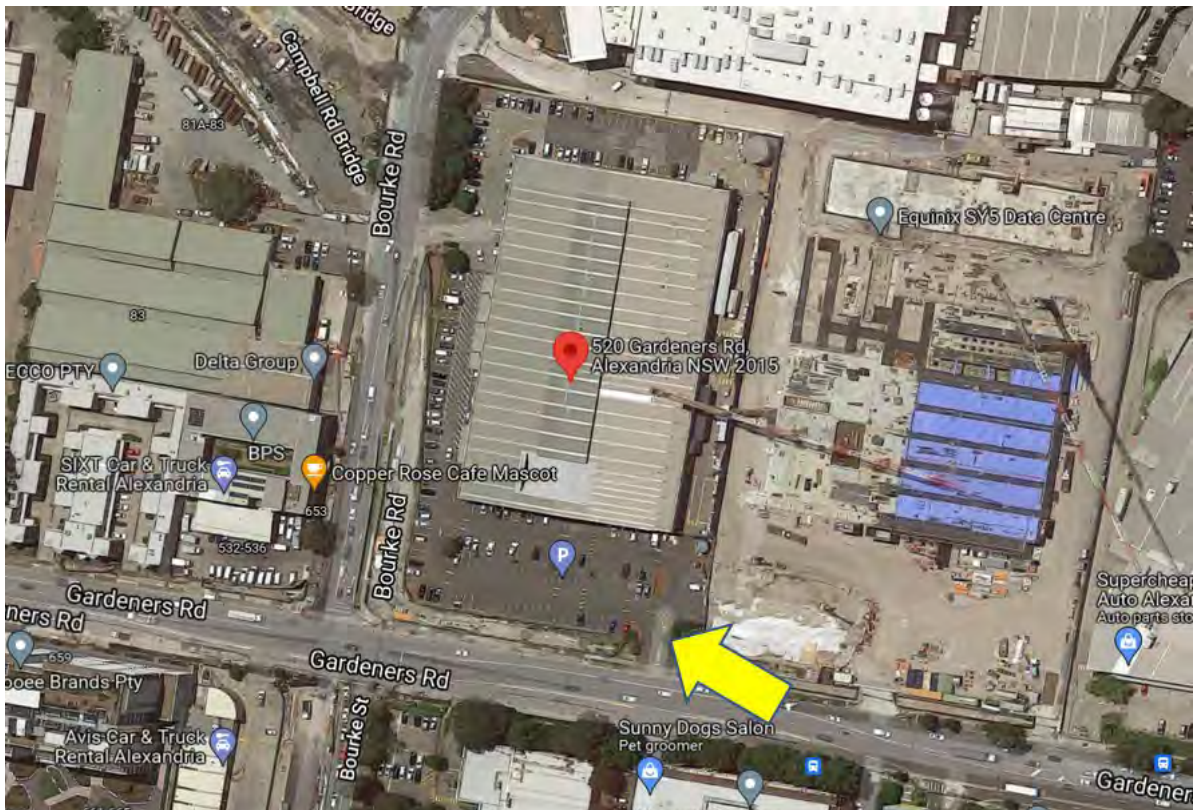
Thank you for registering your interest in the site visit and meeting for 520 Gardeners Road, Alexandria as part of the Aboriginal Cultural Heritage Assessment of that site.

The details of the site visit are as follows:

Date: Tuesday 22 February 2022

Time: 10am start (till approximately 12pm)

Location: 520 Gardeners Road, Alexandria (meeting place indicated by the yellow arrow on the map below)



The agenda for the site visit will include an initial meeting to discuss the proposed works and ACHA methodology, followed by a tour of the site.

Please bring the following protective equipment (PPE):

- Hi-vis shirt or vest
- Steel-capped boots
- Face mask

As the subject area is entirely outdoors, we also strongly recommend bringing wet weather gear and sunscreen.

If you feel unwell on the day, please do not attend the site visit. If you need to get in touch with us on the day to cancel, or for any other reason, please contact:

Sam Richards

Mobile: [REDACTED]

If you have any questions before then, please let me know.

Kind regards

Aaron

AARON OLSEN

CONSULTANT

D +61 2 8233 9957

T +61 2 8233 9900

E aolsen@urbis.com.au

ANGEL PLACE, LEVEL 8, 123 PITT STREET
SYDNEY, NSW 2000, AUSTRALIA

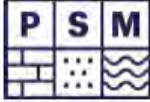
Our highest priority is the health and wellbeing of our people, clients and community. **[Click here to read Urbis' response to COVID-19.](#)**

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APPENDIX E

GEOTECHNICAL BOREHOLE LOGS

DRAFT



Borehole ID
BH A
Page 1 of 8

Engineering Log - Non Cored Borehole

Project No.: PSM4029

| | |
|---|-----------------------|
| Client: Charter Hall | Commenced: 09/08/2021 |
| Project Name: 520 Gardeners Road Alexandria | Completed: 09/08/2021 |
| Hole Location: | Logged By: BT |
| Hole Position: 332588.0 m E 6245377.0 m N MGA2020 Zone 56 | Checked By: AS |

| | | |
|--------------------------------------|-------------------|----------------------------------|
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Hole Diameter: | Bearing: | Datum: AHD Operator: JK Drilling |

| Drilling Information | | | | Soil Description | | | | | | Observations | | | | | | |
|----------------------|-------------|---------|-------|-----------------------|----------|--------|-----------|-------------|-----------------------|--|--------------------|--------------------------------|-----------------------------|--|--|--|
| Method | Penetration | Support | Water | Samples Tests Remarks | Recovery | RL (m) | Depth (m) | Graphic Log | Classification Symbol | Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations | Moisture Condition | Consistency / Relative Density | Hand Penetrometer UCS (kPa) | Structure, Zoning, Origin, Additional Observations | | |
| AD/T | N | V | | | | | 0.0 | [Grid] | | ASPHALT - 130 mm. | D | D | 100 | | | |
| | | | | | | | | | | CONCRETE - 200 mm. | D | D | 200 | | | |
| WB | C | | | | | | 0.5 | [SP] | SP | Gravelly Silty SAND: brown-grey, medium to coarse grained, sub-rounded to sub-angular, gravel up to 40 mm. | M | VD | 300 | | | |
| | | | | | | | 1.0 | [SP] | | | | | | | | |
| | | | | | | | 1.5 | [SP] | | | | | | | | |
| | | | | | | | 2.0 | [SP] | | | | | | | | |
| WB | C | | | | | | 2.0 | [SM] | SM | Silty SAND: grey, medium to coarse grained, sub-rounded to sub-angular. | M | D | 400 | | | |
| | | | | | | | 2.5 | [SM] | | | | | | | | |
| | | | | | | | 3.0 | [SM] | | | | | | | | |
| WB | C | | | | | | 3.0 | [CI] | CI | Sandy CLAY: dark grey, medium plasticity, dark grey; medium grained, sub-rounded sand. | W | F | 500 | | | |
| | | | | | | | 3.5 | [SM] | SM | Silty SAND: grey, medium to coarse grained, sub-rounded to sub-angular. | W | | | | | |
| WB | C | | | | | | 4.0 | [SM] | SM | Silty SAND: dark grey, coarse grained, sub-angular. | W | | 600 | | | |
| | | | | | | | 4.5 | [SM] | | | | | | | | |

| | | | | | |
|--|--|---|---|--|---|
| Method AD/T - Auger drilling TC bit AD/V - Auger drilling V bit WB - Washbore SPT - Standard penetration test FT - Push tube AS - Auger soring CT - Continuous push tube 1.5m long 76mm diameter | Penetration No resistance Refusal | Water Inflow Partial Loss Complete Loss | Samples and Tests U - Undisturbed Sample D - Disturbed Sample SPT - Standard Penetration Test ES - Environmental Sample TW - Thin Walled LB - Large Disturbed Sample | Moisture Condition D - Dry M - Moist W - Wet | Consistency/Relative Density VS - Very soft SO - Soft FI - Firm ST - Stiff VSst - Very stiff H - Hard VL - Very loose L - Loose MD - Medium dense D - Dense VD - Very dense Ce - Cemented C - Compact |
|--|--|---|---|--|---|

Logged in accordance with AS 1726:2017 Geotechnical site investigations



Borehole ID
BH A
Page 2 of 8

Engineering Log - Non Cored Borehole

Project No.: PSM4029

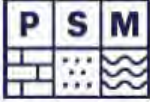
| | |
|---|-----------------------|
| Client: Charter Hall | Commenced: 09/08/2021 |
| Project Name: 520 Gardeners Road Alexandria | Completed: 09/08/2021 |
| Hole Location: | Logged By: BT |
| Hole Position: 332588.0 m E 6245377.0 m N MGA2020 Zone 56 | Checked By: AS |

| | | |
|--------------------------------------|-------------------|-----------------------|
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Hole Diameter: | Bearing: | Datum: AHD |
| | | Operator: JK Drilling |

| Drilling Information | | | | | Soil Description | | | | | Observations | | | | |
|----------------------|-------------|---------|-------|-----------------------|------------------|--------|------------------|-------------|-----------------------|---|--------------------|--------------------------------|---------------------------------|--|
| Method | Penetration | Support | Water | Samples Tests Remarks | Recovery | RL (m) | Depth (m) | Graphic Log | Classification Symbol | Material Description | Moisture Condition | Consistency / Relative Density | Hand Penetrometer UCS (kPa) | Structure, Zoning, Origin, Additional Observations |
| WB | | | | | | | 6 7 8 9 | | SM | Silty SAND: dark grey, coarse grained, sub-angular. (continued) | W | | 100 200 300 400 500 | |

| | | | | | |
|--|--|---|---|--|--|
| Method AD/T - Auger drilling TC bit AD/V - Auger drilling V bit WB - Washbore SPT - Standard penetration test PT - Push tube AS - Auger screwing CT - Continuous push tube 1.5m long 70mm diameter | Penetration No resistance Refusal | Water Inflow Partial Loss Complete Loss | Samples and Tests U - Undisturbed Sample D - Disturbed Sample SPT - Standard Penetration Test ES - Environmental Sample TW - Thin Walled LB - Large Disturbed Sample | Moisture Condition D - Dry M - Moist W - Wet | Consistency/Relative Density VS - Very soft S - Soft F - Firm St - Stiff VSt - Very stiff H - Hard VL - Very loose L - Loose MD - Medium dense D - Dense VD - Very dense Ce - Cemented C - Compact |
|--|--|---|---|--|--|

Logged in accordance with AS 1726:2017 Geotechnical site investigations



Borehole ID
BH A
Page 3 of 8

Engineering Log - Non Cored Borehole

Project No.: PSM4029

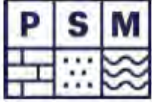
| | |
|---|-----------------------|
| Client: Charter Hall | Commenced: 09/08/2021 |
| Project Name: 520 Gardeners Road Alexandria | Completed: 09/08/2021 |
| Hole Location: | Logged By: BT |
| Hole Position: 332588.0 m E 6245377.0 m N MGA2020 Zone 56 | Checked By: AS |

| | | |
|--------------------------------------|-------------------|-----------------------|
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Hole Diameter: | Bearing: | Datum: AHD |
| | | Operator: JK Drilling |

| Drilling Information | | | | | Soil Description | | | | | Observations | | | | |
|----------------------|-------------|---------|-------|-----------------------|------------------|--------|-----------|-------------|-----------------------|--|--------------------|--------------------------------|---------------------------------|--|
| Method | Penetration | Support | Water | Samples Tests Remarks | Recovery | RL (m) | Depth (m) | Graphic Log | Classification Symbol | Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations | Moisture Condition | Consistency / Relative Density | Hand Penetrometer UCS (kPa) | Structure, Zoning, Origin, Additional Observations |
| WB | | | | | | | 11 | | | CLAY band: dark grey. | | | 100 200 300 400 500 | |
| | | C | | | | | 12 | | | CLAY band: dark grey. | | | | |
| | | | | | | | 13 | | | CLAY band: dark grey. | | | | |
| | | | | | | | 14 | | | CLAY band: dark grey. | | | | |

| | | | | | |
|--|--|---|---|--|---|
| Method AD/T - Auger drilling TC bit AD/V - Auger drilling V bit WB - Washbore SPT - Standard penetration test PT - Push tube AS - Auger screwing CT - Continuous push tube 1.5m long 76mm diameter | Penetration No resistance Refusal | Water Inflow Partial Loss Complete Loss | Samples and Tests U - Undisturbed Sample D - Disturbed Sample SPT - Standard Penetration Test ES - Environmental Sample TW - Thin Walled LB - Large Disturbed Sample | Moisture Condition D - Dry M - Moist W - Wet | Consistency/Relative Density VS - Very soft S - Soft Tm - Firm St - Stiff VSt - Very stiff H - Hard VL - Very loose L - Loose MD - Medium dense D - Dense VD - Very dense Ce - Cemented C - Compact |
|--|--|---|---|--|---|

Logged in accordance with AS 1726:2017 Geotechnical site investigations



Borehole ID
BH A
Page 4 of 8

Engineering Log - Non Cored Borehole

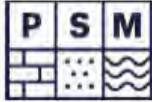
Project No.: PSM4029

| | |
|---|-----------------------|
| Client: Charter Hall | Commenced: 09/08/2021 |
| Project Name: 520 Gardeners Road Alexandria | Completed: 09/08/2021 |
| Hole Location: | Logged By: BT |
| Hole Position: 332588.0 m E 6245377.0 m N MGA2020 Zone 56 | Checked By: AS |

| | | |
|--------------------------------------|-------------------|-----------------------|
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Hole Diameter: | Bearing: | Datum: AHD |
| | | Operator: JK Drilling |

| Drilling Information | | | | | Soil Description | | | | | Observations | | | | |
|----------------------|-------------|---------|-------|-----------------------|------------------|--------|-----------|-------------|-----------------------|--|--------------------|--------------------------------|-----------------------------|--|
| Method | Penetration | Support | Water | Samples Tests Remarks | Recovery | RL (m) | Depth (m) | Graphic Log | Classification Symbol | Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations | Moisture Condition | Consistency / Relative Density | Hand Penetrometer UCS (kPa) | Structure, Zoning, Origin, Additional Observations |
| WB | | | | | | | 15.5 | | | CLAY band: dark grey. | | | | |
| | | | | | | | 16.5 | | CH | CLAY: grey, high plasticity. | | | | |
| | | | | | | | 17.5 | | | Becomes orange-grey. | | | | |
| | | | | | | | 18.5 | | | | | | | |
| | | | | | | | 19.5 | | | | | | | |

| | | | | | |
|--|--|---|---|--|--|
| Method AD/T - Auger drilling TC bit AD/V - Auger drilling V bit WB - Washbore SPT - Standard penetration test PT - Push tube AS - Auger soring CT - Continuous push tube 1.5m long 78mm diameter | Penetration No resistance Refusal | Water Inflow Partial Loss Complete Loss | Samples and Tests U - Undisturbed Sample D - Disturbed Sample SPT - Standard Penetration Test ES - Environmental Sample TW - Thin Walled LB - Large Disturbed Sample | Moisture Condition D - Dry M - Moist W - Wet | Consistency/Relative Density VS - Very soft S - Soft F - Firm St - Stiff VSt - Very stiff H - Hard VL - Very loose L - Loose MD - Medium dense D - Dense VD - Very dense Ce - Cemented C - Compact |
|--|--|---|---|--|--|



Borehole ID
BH A
Page 5 of 8

Engineering Log - Non Cored Borehole

Project No.: PSM4029

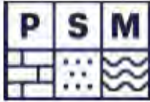
| | |
|---|-----------------------|
| Client: Charter Hall | Commenced: 09/08/2021 |
| Project Name: 520 Gardeners Road Alexandria | Completed: 09/08/2021 |
| Hole Location: | Logged By: BT |
| Hole Position: 332588.0 m E 6245377.0 m N MGA2020 Zone 56 | Checked By: AS |

| | | |
|--------------------------------------|-------------------|----------------------------------|
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Hole Diameter: | Bearing: | Datum: AHD Operator: JK Drilling |

| Drilling Information | | | | | Soil Description | | | | | Observations | | | | | |
|---|-------------|---------|-------|-----------------------|------------------|--------|-----------|-------------|-----------------------|--|--------------------|--------------------------------|-----------------------------|--|--|
| Method | Penetration | Support | Water | Samples Tests Remarks | Recovery | RL (m) | Depth (m) | Graphic Log | Classification Symbol | Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations | Moisture Condition | Consistency / Relative Density | Hand Penetrometer UCS (kPa) | Structure, Zoning, Origin, Additional Observations | |
| WB | C | | | | | | 21 | | | Becomes orange-grey. (continued) | W | | | | |
| | | | | | | | | | | Becomes reddish grey. | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | 22 | | | | | | | | |
| | | | | | | | 23 | | | | | | | | |
| | | | | | | | 24 | | | | | | | | |
| Continued from non-cored borehole sheet | | | | | | | | | | | | | | | |

| | | | | | |
|--|--|---|---|--|--|
| Method AD/T - Auger drilling TC bit AD/V - Auger drilling V bit WB - Washbore SPT - Standard penetration test PT - Push tube AS - Auger screwing CT - Continuous push tube 1.5m long 78mm diameter | Penetration No resistance Refusal | Water Inflow Partial Loss Complete Loss | Samples and Tests U - Undisturbed Sample D - Disturbed Sample SPT - Standard Penetration Test ES - Environmental Sample TW - Thin Walled LB - Large Disturbed Sample | Moisture Condition D - Dry M - Moist W - Wet | Consistency/Relative Density VS - Very soft S - Soft F - Firm St - Stiff VSt - Very stiff H - Hard VL - Very loose L - Loose MD - Medium dense D - Dense VD - Very dense Ce - Cemented C - Compact |
|--|--|---|---|--|--|

Logged in accordance with AS 1726:2017 Geotechnical site Investigations



Borehole ID
BH A
Page 6 of 7

Engineering Log - Cored Borehole

Project No.: PSM4029

| | |
|---|-----------------------|
| Client: Charter Hall | Commenced: 09/08/2021 |
| Project Name: 520 Gardeners Road Alexandria | Completed: 09/08/2021 |
| Hole Location: | Logged By: BT |
| Hole Position: 332588.0 m E 6245377.0 m N MGA2020 Zone 56 | Checked By: AS |

| | | |
|--------------------------------------|-------------------|----------------------------------|
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Barrel Type and Length: NLMC 3 m | Bearing: | Datum: AHD Operator: JK Drilling |

| Drilling Information | | | | | Rock Substance | | | | | Rock Mass Defects | | | | | |
|----------------------|-------|---------|------------------------|--------------|----------------|-----------|-------------|--|----------------------------|----------------------------|---------------------|---|--------------------|--|--|
| Method | Water | RQD (%) | Sample and Field Tests | WPT (Logons) | RL (m) | Depth (m) | Graphic Log | Material Description | Weathering | Strength Is(50) | Defect Spacing (mm) | Defect Descriptions / Comments | | | |
| | | | | | | | | ROCK NAME particle/grain characteristics, colour, fabric/texture, inclusions or minor components, moisture, mineral composition, alteration Continued from non-cored borehole sheet | XW HW MW SW FR | ● - Axial ○ - Diametral | | Description, alpha/beta, infilling or coating, shape, roughness, thickness, other | | | |
| | | | | | | 26.00 | | CLAY: red - grey and brown, high plasticity, hard. | | | | 25.00: PP: 380 kPa. | | | |
| | | | | | | 26.20 | | Becomes grey. | | | | 25.20: PP: 370 kPa. | | | |
| | | | | | | 26.40 | | | | | | 25.40: PP: 410 kPa. | | | |
| | | | | | | 26.60 | | | | | | 25.60: PP: 510 kPa. | | | |
| | | | | | | 26.80 | | | | | | 25.80: PP: 500 kPa. | | | |
| | | | | | | 27.00 | | SHALE: dark grey. | | | | 26.00: PP: 480 kPa. | | | |
| | | | | | | 27.20 | | | | | | 26.20: PP: 480 kPa. | | | |
| | | | | | | 27.40 | | | | | | 26.40: PP: 460 kPa. | | | |
| | | | | | | 27.60 | | | | | | 26.60: PP: 280 kPa. | FZ | | |
| | | | | | | 27.80 | | | | | | 26.80: PP: 270 kPa. | FZ | | |
| | | | | | | 28.00 | | | | | | 27.00: PP: 180 kPa. | BP, 10°, CL, 10 mm | | |
| | | | | | | 28.20 | | | | | | 27.20: PP: >800 kPa. | FZ, 20 mm | | |
| | | | | | | 28.40 | | | | | | BP, 0°, CL, 15 mm | BP, 0°, CN, CU, S | | |
| | | | | | | 28.60 | | | | | | BP, 0°, CN, CU, S | BP, 0°, CL, S | | |
| | | | | | | 28.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, SN, PR, S | | |
| | | | | | | 29.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 29.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 29.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 29.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 29.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 30.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 30.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 30.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 30.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 30.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 31.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 31.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 31.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 31.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 31.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 32.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 32.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 32.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 32.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 32.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 33.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 33.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 33.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 33.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 33.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 34.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 34.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 34.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 34.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 34.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 35.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 35.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 35.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 35.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 35.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 36.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 36.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 36.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 36.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 36.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 37.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 37.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 37.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 37.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 37.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 38.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 38.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 38.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 38.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 38.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 39.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 39.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 39.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 39.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 39.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 40.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 40.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 40.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 40.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 40.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 41.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 41.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 41.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 41.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 41.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 42.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 42.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 42.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 42.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 42.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 43.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 43.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 43.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 43.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 43.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 44.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 44.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 44.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 44.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 44.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 45.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 45.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 45.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 45.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 45.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 46.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 46.20 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 46.40 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 46.60 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 46.80 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 47.00 | | | | | | BP, 0°, CN, PR, S | BP, 0°, CN, PR, S | | |
| | | | | | | 47.20 | | | | | | | | | |



Borehole ID
BH A
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Engineering Log - Cored Borehole

Project No.: PSM4029

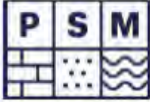
| | |
|---|-----------------------|
| Client: Charter Hall | Commenced: 09/08/2021 |
| Project Name: 520 Gardeners Road Alexandria | Completed: 09/08/2021 |
| Hole Location: | Logged By: BT |
| Hole Position: 332588.0 m E 6245377.0 m N MGA2020 Zone 56 | Checked By: AS |

| | | |
|--------------------------------------|-------------------|----------------------------------|
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Barrel Type and Length: NLMC 3 m | Bearing: | Datum: AHD Operator: JK Drilling |

| Drilling Information | | | | Rock Substance | | | | Rock Mass Defects | | | | |
|----------------------|-------|---------|----------------------------------|----------------|--------|-----------|-------------|--|----------------------------|---|---------------------------------|--|
| Method | Water | ROD (%) | Samples and Field Tests | WPT (Lugeons) | RL (m) | Depth (m) | Graphic Log | Material Description ROCK NAME: particle/grain characteristics, colour, fabric/texture, inclusions or minor components, moisture, mineral composition, alteration | Weathering | Strength Is(50) ● - Axial ○ - Diametral | Defect Spacing (mm) | Defect Descriptions / Comments Description, alpha/beta, infilling or coating, shape, roughness, thickness, other |
| NLMC | | 98 | 19(E) 0=1 MPa 19(E) 0=0.4 MPa | | | 31 | | SHALE dark grey (continued) | XW HW MW SW FR | V L M H VH EH | 420 60 200 600 1000 | BP, 10°, CN, PR, S BP, 10°, CN, PR, S FZ JT, 20°, CN, ST, S JT, 20°, CN, ST, S SM, CL FZ JT, 0°, CN, PR, S JT, 0°, CN, PR, S JT, 90°, CN, PR, S JT, 0°, CN, PR, S JT, 0°, CN, PR, S JT, 0°, CN, PR, S JT, 0°, CN, PR, S |
| | | | | | | 31 | | Hole Terminated at 31.00 m Target depth | | | | |
| | | | | | | 32 | | | | | | |
| | | | | | | 33 | | | | | | |
| | | | | | | 34 | | | | | | |

| | | | | | |
|---|---|--|--|---|---|
| Method AD/T - Auger drilling TC bit AD/V - Auger drilling V bit WB - Washbore HQ3 - Wireline core (63.5 mm) PQ3 - Wireline core (85.0 mm) SPT - Standard penetration test PT - Push tube WPT - Water pressure test | Water Inflow Partial Loss Complete Loss Graphic Log/Core Loss Core recovered (hatching indicates material) No core recovery | Weathering XW - Extremely Weathered HW - Highly Weathered MW - Moderately Weathered SW - Slightly Weathered FR - Fresh Strength VL - Very Low L - Low M - Medium H - High VH - Very High EH - Extremely High | Defect Type FT - Fault SS - Shear Surface SZ - Shear Zone BP - Bedding parting SM - Seam IS - Infilled Seam JT - Joint CO - Contact CZ - Crushed Zone VN - Vein FZ - Fracture Zone BSH - Bedding Shear DB - Drilling Break | Infilling/Coating CN - Clean SN - Stain VN - Veneer CO - Coating RF - Rock fragments G - Gravel S - Sand Z - Silt CA - Calcite CL - Clay FE - Iron QZ - Quartz X - Carbonaceous | Roughness SL - Slickensided POL - Polished S - Smooth RF - Rough VR - Very Rough Shape FR - Flat CU - Curved UN - Undulating ST - Stepped IR - Irregular |
|---|---|--|--|---|---|

Logged in accordance with AS 1726:2017 Geotechnical site Investigations



Borehole ID
BH B
Page 1 of 8

Engineering Log - Non Cored Borehole

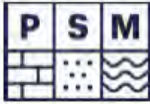
Project No.: PSM4029

| | | |
|---|-----------------------|-----------------------|
| Client: Charter Hall | Commenced: 10/08/2021 | |
| Project Name: 520 Gardeners Road Alexandria | Completed: 10/08/2021 | |
| Hole Location: | Logged By: JD | |
| Hole Position: 332601.0 m E 6245232.0 m N MGA2020 Zone 56 | Checked By: AS | |
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Hole Diameter: 125 mm | Bearing: | Datum: AHD |
| | | Operator: JK Drilling |

| Drilling Information | | | | | | Soil Description | | | | | | Observations | | |
|----------------------|-------------|---------|-------|-----------------------|----------|------------------|-----------|-------------|-----------------------|--|--------------------|--------------------------------|-----------------------------|---|
| Method | Penetration | Support | Water | Samples Tests Remarks | Recovery | RL (m) | Depth (m) | Graphic Log | Classification Symbol | Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations | Moisture Condition | Consistency / Relative Density | Hand Penetrometer UCS (kPa) | Structure, Zoning, Origin, Additional Observations |
| AD/T | N | | V | | | | 0.00 | [Grid] | | ASPHALT - 120 mm. | D | D | 100 | |
| | | | | | | | | | | CONCRETE - 200 mm. | D | D | 200 | |
| AD/T | N | | V | | | | 0.50 | [SP] | SP | Gravelly SAND with Silt: brown, sub-rounded, gravels up to 40 mm. | | D | | |
| | | | | | | | | | | | | | | |
| AD/T | N | | V | | | | 1.00 | [SP] | SP | | M | L | | |
| | | | | | | | | | | | | | | |
| AD/T | N | | V | | | | 1.50 | [SP] | SP | | L | L | | |
| | | | | | | | | | | | | | | |
| AD/T | N | | V | | | | 2.00 | [SM] | SM | Silty SAND: grey, medium to coarse grained, sub-rounded to sub-angular. | W | L | | 2.00: Encountered interbedded clay bands up to 500mm thick. |
| | | | | | | | | | | | | | | |
| AD/T | N | | V | | | | 2.50 | [SM] | SM | | W | L | | |
| | | | | | | | | | | | | | | |
| AD/T | N | | V | | | | 3.00 | [SM] | SM | | W | L | | |
| | | | | | | | | | | | | | | |
| AD/T | N | | V | | | | 3.50 | [SM] | SM | CLAY band: dark grey. | W | L | | |
| | | | | | | | | | | | | | | |
| AD/T | N | | V | | | | 4.00 | [SM] | SM | | W | L | | |
| | | | | | | | | | | | | | | |

| | | | | | |
|--|--|---|---|--|--|
| Method AD/T - Auger drilling TC bit AD/V - Auger drilling V bit WB - Washcore SPT - Standard penetration test PT - Push tube AS - Auger screwing CT - Continuous push tube 1.5m long 76mm diameter | Penetration No resistance Refusal | Water Inflow Partial Loss Complete Loss | Samples and Tests U - Undisturbed Sample D - Disturbed Sample SPT - Standard Penetration Test ES - Environmental Sample TW - Thin Walled LB - Large Disturbed Sample | Moisture Condition D - Dry M - Moist W - Wet | Consistency/Relative Density VS - Very soft Mv - Soft Fm - Firm St - Stiff VSt - Very stiff H - Hard VL - Very loose L - Loose MD - Medium dense D - Dense VD - Very dense Cc - Cemented C - Compact |
|--|--|---|---|--|--|

Logged in accordance with AS 1726.2017 Geotechnical site investigations



Borehole ID
BH B
Page 2 of 8

Engineering Log - Non Cored Borehole

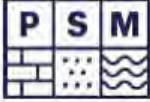
Project No.: PSM4029

| | |
|---|-----------------------|
| Client: Charter Hall | Commenced: 10/08/2021 |
| Project Name: 520 Gardeners Road Alexandria | Completed: 10/08/2021 |
| Hole Location: | Logged By: JD |
| Hole Position: 332601.0 m E 6245232.0 m N MGA2020 Zone 56 | Checked By: AS |

| | | |
|--------------------------------------|-------------------|----------------------------------|
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Hole Diameter: 125 mm | Bearing: | Datum: AHD Operator: JK Drilling |

| Drilling Information | | | | | Soil Description | | | | | Observations | | | | |
|----------------------|-------------|---------|-------|-----------------------|------------------|--------|-----------|-------------|-----------------------|--|--------------------|---------------------------------|-----------------------------|--|
| Method | Penetration | Support | Water | Samples Tests Remarks | Recovery | RL (m) | Depth (m) | Graphic Log | Classification Symbol | Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations | Moisture Condition | Consistency / Relative Density | Hand Penetrometer UCS (kPa) | Structure, Zoning, Origin, Additional Observations |
| WB | | C | | | | | 6 | | SM | Silty SAND: grey, medium to coarse grained, sub-rounded to sub-angular. (continued) | W | 100 200 300 400 500 | | |
| | | | | | | | 7 | | | | | | | |
| | | | | | | | 8 | | | | | | | |
| | | | | | | | 9 | | | | | | | |

| | | | | | |
|--|--|---|---|--|--|
| Method ADT - Auger drilling TC bit ADV - Auger drilling V bit WB - Washbore SPT - Standard penetration test PT - Push tube AS - Auger screwing CT - Continuous push tube 1.5m long 76mm diameter | Penetration No resistance Refusal | Water Inflow Partial Loss Complete Loss | Samples and Tests U - Undisturbed Sample D - Disturbed Sample SPT - Standard Penetration Test ES - Environmental Sample TW - Thin Walled LB - Large Disturbed Sample | Moisture Condition D - Dry M - Moist W - Wet | Consistency/Relative Density VS - Very soft S - Soft M - Firm St - Stiff VSt - Very stiff H - Hard VL - Very loose L - Loose MD - Medium dense D - Dense VD - Very dense Ce - Cemented C - Compact |
|--|--|---|---|--|--|



Borehole ID
BH B
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Engineering Log - Non Cored Borehole

Project No.: PSM4029

| | |
|---|-----------------------|
| Client: Charter Hall | Commenced: 10/08/2021 |
| Project Name: 520 Gardeners Road Alexandria | Completed: 10/08/2021 |
| Hole Location: | Logged By: JD |
| Hole Position: 332601.0 m E 6245232.0 m N MGA2020 Zone 56 | Checked By: AS |

| | | |
|--------------------------------------|-------------------|----------------------------------|
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Hole Diameter: 125 mm | Bearing: | Datum: AHD Operator: JK Drilling |

| Drilling Information | | | | | | Soil Description | | | | | | Observations | | |
|----------------------|-------------|---------|-------|-----------------------|----------|------------------|-----------|-------------|-----------------------|--|--------------------|--------------------------------|---------------------------------|--|
| Method | Penetration | Support | Water | Samples Tests Remarks | Recovery | RL (m) | Depth (m) | Graphic Log | Classification Symbol | Material Description SOIL NAME: Plasticity, behaviour or particle characteristics of primary component, colour, secondary components, additional observations | Moisture Condition | Consistency / Relative Density | Hand Penetrometer UCS (kPa) | Structure, Zoning, Origin, Additional Observations |
| WB | | C | | | | | 21 | | CH | CLAY: orange-grey to brown-grey, high plasticity. (continued) | | | 100 200 300 400 500 | |
| | | | | | | | 22 | | | Continued on cored borehole sheet | W | | | |
| | | | | | | | 23 | | | | | | | |
| | | | | | | | 24 | | | | | | | |

| | | | | | |
|--|--|---|---|--|---|
| Method AD/T - Auger drilling TC bit AD/V - Auger drilling V bit WB - Washbore SPT - Standard penetration test PT - Push tube AS - Auger soring CT - Continuous push tube 1.5m long 76mm diameter | Penetration No resistance Refusal | Water Inflow Partial Loss Complete Loss | Samples and Tests U - Undisturbed Sample D - Disturbed Sample SPT - Standard Penetration Test ES - Environmental Sample TW - Thin Walled LB - Large Disturbed Sample | Moisture Condition D - Dry M - Moist W - Wet | Consistency/Relative Density VS - Very soft S - Soft Fm - Firm St - Stiff VSt - Very stiff H - Hard VL - Very loose L - Loose MD - Medium dense D - Dense VD - Very dense Ge - Cemented C - Compact |
|--|--|---|---|--|---|

Logged in accordance with AS 1726:2017 Geotechnical site investigations



Borehole ID
BH B
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Engineering Log - Cored Borehole

Project No.: PSM4029

| | |
|---|-----------------------|
| Client: Charter Hall | Commenced: 10/08/2021 |
| Project Name: 520 Gardeners Road Alexandria | Completed: 10/08/2021 |
| Hole Location: | Logged By: JD |
| Hole Position: 332601.0 m E 6245232.0 m N MGA2020 Zone 56 | Checked By: AS |

| | | |
|--------------------------------------|-------------------|----------------------------------|
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Barrel Type and Length: NLMC 3 m | Bearing: | Datum: AHD Operator: JK Drilling |

| Drilling Information | | | | | | Rock Substance | | | | | | Rock Mass Defects | | | | | | | | | |
|----------------------|-------|---------|--|---------------|-----------|----------------|--|------------|----|----|-----------------|-------------------|----|---------------------|--------------------------------|---|----|----|--|--|---|
| Method | Water | RQD (%) | Samples and Field Tests | WPT (Lugeons) | Depth (m) | Graphic Log | Material Description | Weathering | | | Strength Is(50) | | | Defect Spacing (mm) | Defect Descriptions / Comments | | | | | | |
| | | | | | | | ROCK NAME: particle/grain characteristics, colour, fabric/texture, inclusions or minor components, moisture, mineral composition, alteration | XW | HW | MW | SW | FR | VL | L | M | H | VH | EH | | | |
| | | | | | 21 | | | | | | | | | | | | | | | | |
| | | | | | 22 | | Continued from non-cored borehole sheet | | | | | | | | | | | | | | |
| | | | | | 23 | | CLAY: orange-grey to brown-grey, high plasticity. (continued) | | | | | | | | | | | | | | -22.50: PP: 190 kPa. -22.60: PP: 350 kPa. -22.75: PP: 310 kPa. -22.85: PP: 480 kPa. -23.00: PP: 550 kPa. |
| | | 33 | IS(50) σ=0.05 MPa IS(50) σ=0.05 MPa IS(50) σ=0.03 MPa IS(50) σ=0.01 MPa | | 24 | | SHALE: dark grey. | | | | | | | | | | | | | | -SM, 0°, CL, 200 mm 23.25: PP: >800 kPa. 23.35: PP: >800 kPa. -23.50: PP: 420 kPa. SM, 0°, CL, PR, 20 mm 23.60: PP: >800 kPa. BP, 0°, CL, PR, RF 23.75: PP: >800 kPa. 23.80: PP: 520 kPa. 23.90: PP: >800 kPa. BP, 0°, FE, PR, RF 24.00: PP: >800 kPa. BP, 0°, FE-SN, PR, RF FZ, 10°, RF, 100 mm JT, 30°, FE-SN, PR, RF BP, 15°, FE-SN, PR, VR 24.35: PP: >800 kPa. BP, 5°, FE-SN, PR, RF 24.45: PP: >800 kPa. BP, 5°, FE-SN, PR, RF 24.60: PP: 490 kPa. BP, 5°, FE-SN, PR, RF |

| | | | | | |
|---|---|--|--|--|---|
| Method AD/T - Auger drilling TC bit AD/V - Auger drilling V bit WB - Washbore HC3- Wireline core (53.5 mm) PQ3- Wireline core (85.0 mm) SPT - Standard penetration test PT - Push tube WPT - Water pressure test | Water Inflow Partial Loss Complete Loss Graphic Log/Core Loss Core recovered (hatching indicates material) No core recovery | Weathering XW - Extremely Weathered HW - Highly Weathered MW - Moderately Weathered SW - Slightly Weathered FR - Fresh Strength VL - Very Low L - Low M - Medium H - High VH - Very High EH - Extremely High | Defect Type FT - Fault SS - Shear Surface SZ - Shear Zone BP - Bedding parting SM - Seam IS - Infilled Seam JT - Joint CO - Contact CZ - Crushed Zone VN - Vein FZ - Fracture Zone BSH - Bedding Shear DB - Drilling Break | Infilling/Coating CN - Clean SN - Slan VN - Veneer CO - Coating RF - Rock fragments G - Gravel S - Sand Z - Silt CL - Clay FE - Iron QZ - Quartz X - Carbonaceous | Roughness SL - Silicified POL - Polished S - Smooth RF - Rough VR - Very Rough Shape PR - Planar CU - Curved UN - Undulating ST - Stepped IR - Irregular |
|---|---|--|--|--|---|

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Borehole ID

BH B

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Engineering Log - Cored Borehole

Project No.: PSM4029

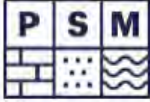
| | |
|---|-----------------------|
| Client: Charter Hall | Commenced: 10/08/2021 |
| Project Name: 520 Gardeners Road Alexandria | Completed: 10/08/2021 |
| Hole Location: | Logged By: JD |
| Hole Position: 332601.0 m E 6245232.0 m N MGA2020 Zone 56 | Checked By: AS |

| | | |
|--------------------------------------|-------------------|----------------------------------|
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Barrel Type and Length: NLMC 3 m | Bearing: | Datum: AHD Operator: JK Drilling |

| Drilling Information | | | | Rock Substance | | | | Rock Mass Defects | |
|----------------------|--------|-----------|-------------------------|--|----------------------------|----------------------------|---------------------------------|---|--|
| Method | Water | ROD (%) | Samples and Field Tests | Material Description | Weathering | Strength Is(50) | Defect Spacing (mm) | Defect Descriptions / Comments | |
| WPT (Logeons) | RL (m) | Depth (m) | Graphic Log | ROCK NAME: particle/grain characteristics, colour, fabric/texture, inclusions or minor components, moisture, mineral composition, alteration | XW HW MW SW FR | ● - Axial ○ - Diametral | <20 60 200 600 1000 | Description, alpha/beta, infilling or coating, shape, roughness, thickness, other | |
| | | | | SHALE: grey to dark grey. | | | | | BP, 5°, CL, PR, 5 mm 24.85: PF: 380 kPa. FZ, 0°, RF, 250 mm BP, 5°, CL, PR, 20 mm FZ, 0°, RF, 170 mm |
| | | 68 | Is(50) σ=0.13 MPa | | | | | | BP, 0°, CN, PR, S |
| | | | Is(50) σ=0.24 MPa | | | | | | BP, 0°, FE-SN, PR, S BP, 0°, CN, PR, RF |
| | | | Is(50) σ=0.16 MPa | | | | | | BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF |
| | | | Is(50) σ=0.08 MPa | | | | | | BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF |
| | | 27 | Is(50) σ=0.16 MPa | | | | | | BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF BP, 0°, CN, PR, RF BP, 0°, CL, PR, 120 mm BP, 5°, CN, PR, RF |
| | | | Is(50) σ=0.32 MPa | | | | | | BP, 0°, FE-SN, PR, RF BP, 0°, FE-SN, PR, RF FZ, 0°, RF, 20 mm BP, CL, PR, 5 mm BP, CL, PR, 5 mm BP, 5°, FE-SN, ST, RF |
| | | | Is(50) σ=0.24 MPa | | | | | | BP, 5°, FE-SN, PR, RF |
| | | | Is(50) σ=0.32 MPa | | | | | | FZ, 0°, RF, 100 mm |
| | | 29 | Is(50) σ=0.24 MPa | | | | | | BP, 5°, FE-SN, PR, S |
| | | | Is(50) σ=0.24 MPa | | | | | | BP, 0°, FE-SN, PR, RF |

| | | | | | |
|---|--|--|--|---|---|
| Method AD/T - Auger drilling TC bit AD/V - Auger drilling V bit WB - Washbore HQ3 - Wireline core (63.5 mm) PQ3 - Wireline core (85.0 mm) SPT - Standard penetration test PT - Push tube WPT - Water pressure test | Water Inflow Partial Loss Complete Loss Graphic Log/Core Loss Cores recovered (hatching indicates material) No core recovery | Weathering XW - Extremely Weathered HW - Highly Weathered MW - Moderately Weathered SW - Slightly Weathered FR - Fresh Strength VL - Very Low L - Low M - Medium H - High VH - Very High EH - Extremely High | Defect Type FT - Fault SS - Shear Surface SZ - Shear Zone BP - Bedding parting SM - Seam IS - Infilled Seam JT - Joint CO - Contact CZ - Crushed Zone VN - Vein FZ - Fracture Zone BSH - Bedding Shear DB - Drilling Break | Infilling/Coating CN - Clean SN - Stain VN - Veneer CO - Coating RF - Rock fragments G - Gravel S - Sand Z - Silt CA - Calcite CL - Clay FE - Iron QZ - Quartz X - Carbonaceous | Roughness SL - Stippled POL - Polished S - Smooth RF - Rough VR - Very Rough Shape PR - Planar CU - Curved UN - Undulating ST - Stepped IR - Irregular |
|---|--|--|--|---|---|

Logged in accordance with AS 1726:2017 Geotechnical site investigations



Borehole ID
BH B
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Engineering Log - Cored Borehole

Project No.: PSM4029

| | |
|---|-----------------------|
| Client: Charter Hall | Commenced: 10/09/2021 |
| Project Name: 520 Gardeners Road Alexandria | Completed: 10/08/2021 |
| Hole Location: | Logged By: JD |
| Hole Position: 332601.0 m E 6245232.0 m N MGA2020 Zone 56 | Checked By: AS |

| | | |
|--------------------------------------|-------------------|----------------------------------|
| Drill Model and Mounting: Hanjin DB8 | Inclination: -90° | RL Surface: No survey |
| Barrel Type and Length: NLMC 3 m | Bearing: | Datum: AHD Operator: JK Drilling |

| Drilling Information | | | | | Rock Substance | | | | Rock Mass Defects | | | |
|----------------------|-------|---------|-------------------------|---------------|----------------|-----------|-------------|--|----------------------------|----------------------------|---------------------|---|
| Method | Water | ROD (%) | Samples and Field Tests | WPT (Lugeons) | RL (m) | Depth (m) | Graphic Log | Material Description | Weathering | Strength Is(50) | Defect Spacing (mm) | Defect Descriptions / Comments |
| | | | | | | | | ROCK NAME: particle/grain characteristics, colour, fabric/texture, inclusions or minor components, moisture, mineral composition, alteration | XW HW MW SW FR | ● - Axial ○ - Diametral | | Description, alpha/beta, infilling or coating, shape, roughness, thickness, other |
| NLMC | | 67 | IS(50) s=2.24 MPa | | | 31 | | SHALE: grey to dark grey.(continued) | | | | BP, 0°, CN, PR, RF SM, 0°, CL, PR, 20 mm BP, 15°, FE-SN, ST, RF FZ, 0°, RF, 100 mm |
| | | | IS(50) s=2.55 MPa | | | 31 | | Hole Terminated at 31.00 m Target depth | | | | |
| | | | | | | 32 | | | | | | |
| | | | | | | 33 | | | | | | |
| | | | | | | 34 | | | | | | |

| | | | | | |
|---|---|--|--|---|---|
| Method AD/T - Auger drilling TC bit AD/V - Auger drilling V bit WB - Washbore HC3- Wireline core (53.5 mm) HC5- Wireline core (85.0 mm) SPT - Standard penetration test PT - Push tube WPT - Water pressure test | Water Inflow Partial Loss Complete Loss Graphic Log/Core Loss Core recovered (hatching indicates material) No core recovery | Weathering XW - Extremely Weathered HW - Highly Weathered MW - Moderately Weathered SW - Slightly Weathered FR - Fresh Strength VL - Very Low L - Low M - Medium H - High VH - Very High EH - Extremely High | Defect Type FT - Fault SS - Shear Surface SZ - Shear Zone BP - Bedding parting SM - Seam IS - Infilled Seam JT - Joint CZ - Crushed Zone VN - Vein FZ - Fracture Zone BSH - Bedding Shear DB - Drilling Break | Infilling/Coating CN - Clean SN - Slain VN - Veneer CO - Coating RF - Rock fragments G - Gravel S - Sand Z - Silt CA - Calcite CL - Clay FE - Iron QZ - Quartz X - Carbonaceous | Roughness SL - Slickensided POL - Polished S - Smooth RP - Rough VR - Very Rough Shape FR - Flunar CU - Curved UN - Undulating ST - Stepped IR - Irregular |
|---|---|--|--|---|---|

Logged in accordance with AS 1726.2017 Geotechnical site Investigations

