

# 2-8 Lanceley Place and 14 Campbell Street, Artarmon.

Aboriginal Cultural Heritage  
Assessment Report (ACHAR)

Report to Goodman

LGA: Willoughby

April 2024



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## EXECUTIVE SUMMARY

Artefact Heritage has been engaged by Goodman Property Services (Goodman, the proponent) to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) for the proposed development of a data centre at 2-8 Lanceley Place and 14 Campbell Street, Artarmon. The proposal is in the Willoughby Local Government Area (LGA) and lies with the boundaries of the Metropolitan Local Aboriginal Land Council (LALC).

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the Lanceley Place Data Centre project (SSD-66777221) dated 23 January 2024. Consultation for this ACHAR has been completed.

### Overview of findings

The following results and recommendations are based on consideration of the requirements of Aboriginal heritage guidelines including:

- The Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010a) – known as The Code of Practice
- Guide to investigating and assessing and reporting on Aboriginal Cultural Heritage in New South Wales (OEH 2011) – known as ACHAR guidelines.
- The Aboriginal Cultural Heritage consultation requirements for proponents 2010 (OEH 2010b)- known as Consultation Guidelines)
- The SEARs

This ACHAR assessed the study area as having nil-low potential to retain intact archaeological deposits that may contain Aboriginal artefacts based on the following:

- an extensive search of the Aboriginal Heritage Information Management System (AHIMS) which did not identify any sites listed in the study area
- no previously unrecorded Aboriginal sites or objects were identified within the study area during the site inspection
- in depth background research and assessment following an archaeological survey
- historical images support a history of extensive disturbance in the study area as a result of its location within a brick works and quarry which operated since at least the 1930s to the 1960s
- since the 1960s buildings have been demolished and replacements built over the study area, and new roads constructed around it, all of which would have further impacted the ground surface.
- the detrimental effects to soil integrity due to continued quarrying and later construction works has augmented already high levels of disturbance of the soil profile such that the study area and its surrounds are classified as “disturbed terrain”
- the predictive model for the study area does not support the likelihood of archaeological sensitivity being present because of extensive disturbance

- the site officer of the Metropolitan LALC was in agreement that the study area was highly disturbed
- as there are no archaeological values in the site, there is no scientific significance
- the completion of the consultation process with RAPs who were supportive of the project.

## Recommendations

Based on the results of this assessment and in accordance with Aboriginal heritage guidelines mandated in the SEARs, the following recommendations are made:

- as the study area was found to be disturbed and to have a nil-low potential for Aboriginal objects to be located within it, it is recommended that further assessment is not required.
- as neither Metropolitan LALC site officer nor the RAPs identified any socio/cultural, historic or aesthetic significance associated with the heritage study area, further assessment is not required.
- if changes are made to the proposal that may result in impacts to areas not assessed by this ACHAR further assessment would be required
- unexpected Aboriginal objects remain protected by the *National Parks and Wildlife Act 1974*. If any such objects, or potential objects, are uncovered in the course of the activity, all work in the vicinity should cease immediately. A qualified archaeologist should be contacted to assess the find and Heritage NSW and Metropolitan LALC must be notified.
- if human remains, or suspected human remains, are found in the course of the activity, all work in the vicinity should cease, the site should be secured, and the NSW Police and Heritage NSW should be notified.

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## GLOSSARY

**Aboriginal cultural heritage:** The material (objects) and intangible (mythological places, dreaming stories etc) traditions and practices associated with past and present-day Aboriginal communities.

**Aboriginal object:** Any deposit, object or material evidence (not being a handicraft made for sale), including Aboriginal remains, relating to the Aboriginal habitation of NSW.

**Aboriginal place:** Any place declared to be an Aboriginal place under s.94 of the *National Parks and Wildlife Act 1974*.

**AFG:** An acronym for 'Aboriginal focus group'. This refers to organised meetings where RAPs can be consulted.

**AHIMS:** Acronym for 'Aboriginal heritage information management system'. AHIMS is a register that contains information about NSW Aboriginal heritage, and it is maintained by DECCW.

**Alignment:** The general route (e.g. of a roadway, pipeline) in plan and elevation.

**Alluvium:** A deposit left by the flow of water. It can include sediments of gravel, mud or sand.

**Archaeological object:** any object that was made, affected, used, or modified in some way by humans in the past and has been discarded.

**Archaeology:** The scientific study of human history, with focus on material remains and ethnographic evidence.

**Area of archaeological sensitivity:** A part of the landscape that contains demonstrated occurrences of cultural material. The precise level of sensitivity will depend on the density and significance of the material.

**Artefact:** An item of cultural material created by humans.

**Artefact scatter:** Where two or more stone artefacts are found within an area of potential archaeological deposit or a site.

**Backed blade:** Bladelets that have one edge blunted by steep retouch to form a back.

**Basalt:** A common volcanic rock. It is fine grained (approximately 45-50 per cent silica) and rich in iron and magnesium.

**Bedrock:** A consolidated rock that is unbroken and un-weathered, located beneath soil or rock fragments.

**Bifacial flaking:** The removal of flakes from two faces of a single platform.

**Bipolar:** A method of flaking stone, especially quartz, where cores are rested upon an anvil during flaking.

**Bipolar core:** A core used to create bipolar flakes.

**Blade:** A stone flake that is at least twice as long as it is wide.

**Bioturbation:** Disturbance in soil profiles caused by living organisms, such as ants and roots.

**Bulb of percussion:** A partial cone of force produced when a flake is struck off a core. The cone occurs on the ventral (inside surface) of the flake.

**Burials:** Burial sites may be composed of a single burial, isolated individuals in a general area, or cemeteries containing many individuals.

**Chert:** A fine grained rock composed of cryptocrystalline silica. It exhibits a range of textures and colours including red, green or black. Chert is easy to work and retains a sharp edge for an extensive period of time before resharpening is required. It has a low to medium fracture toughness.

**Clay:** A type of sediment with particles less than 4 microns in size and that is composed of clay minerals (Keary 2001: 49).

**Conglomerate:** Is a geological term used to describe clasts that are cemented in a fine-grained matrix. It is a sedimentary rock.

**Core:** A stone piece from which a flake has been removed by percussion (striking it) or by pressure. It is identified by the presence of flake scars showing the negative attributes of flakes, from where flakes have been removed.

**Cortical platform:** This term is used to describe a platform that has cortex present and may indicate that the core's surface (where the flake was struck) was previously un-worked.

**Cortex:** The outer weathered surface of stone; if smooth, it can indicate the source of stone was a pebble.

**Crenation:** Refers to a flaked artefact's vitrified surface appearance. This appearance is caused by heat exposure and materialises as relatively uniform patterns.

**Crushed platform:** This term is used to describe a flake that has a damaged platform and where the platform's attributes cannot be recorded as a result.

**Cryptocrystalline:** Very finely crystalline aggregate in which crystals are so small as to be indistinguishable except under powerful magnification.

**Cultural heritage assessment report:** A report combining an Aboriginal archaeological assessment and Aboriginal cultural assessment, required to be submitted to DECCW for any Part 6 *National Parks and Wildlife Act 1974* approval or prepared for projects under Section 5.1 of the *Environmental Planning and Assessment Act 1979* where Aboriginal cultural heritage is identified as a key issue.

**Debitage:** Small, unmodified flakes produced as part of the flaking process, but discarded unused.

**Distal:** Term of view used to describe the lower portion of a flake in respect to where the striking force terminates.

**Distal flake:** A broken flake with the presence of a termination and the absence of a platform or impact point.

**Dorsal:** The side of a flake that was originally part of the core's outer surface (often referred to as the 'dorsal surface').

**Easting:** This is a measurement used to determine location. The easting is the x-coordinate and relates to the vertical lines on a map, which divide east to west. It increases in size when moving further east.

**Edge damage:** Where the edge of a tool has been used, resulting in microscopic fractures along the surface.

**Exposure:** The level of ground exposure is based on the whether the landform is eroding, aggrading or stable.

**Feather termination:** A feather termination has a 'minimal thickness at the distal end and an acute angle between the dorsal and ventral surfaces' (Holdaway and Stern 2008: 129). In appearance, a feather termination becomes gradually thinner towards the end of the flake.

**Fine grained siliceous material:** A rock that has a high content of silica and that is fine grained in appearance without any further identifying characteristics.

**Flake:** A stone piece removed from a core by percussion (striking it) or by pressure. It is identified by the presence of a striking platform and bulb of percussion, not usually found on a naturally shattered stone.

**Flake scar:** Often called a 'negative flake scar', it is the remnant of a previous flake that was struck from the core. This appears on the dorsal surface of a flake.

**Flaked fragment:** This is a chipped stone artefact which cannot be classed as a flake, core or retouched flake, the reason being that the defining attributes are missing. This often happens when a core contains a number of incipient fracture planes. Artefacts that are heavily weathered or which have been shattered in a fire are also difficult to categorise.

**Flaked platform:** This term is used to describe a platform that has been worked previously; one or more flakes were removed prior.

**Floodplain:** The area covered by water during a major flood and/or the area of alluvium deposits laid down during past floods.

**Fluvial:** Pertaining to or produced from a river.

**Focalised platform:** A small platform that is intentionally prepared for percussion by overhang removal.

**Footprint:** The scale, extent or mark that a development makes on the land in relation to its surroundings.

**Geometric microliths:** Backed at one end, the other end or both, these tools are made on geometric shaped flakes, <80 mm maximum dimension.

**Geomorphic:** Relating to the structure, shape and development of landforms.

**Greywacke:** A term used to describe a form of immature sedimentary sandstone with clay content.

**Hammerstone:** A piece of stone used to knock flakes from a core. Evidence of pitting or bashing can usually be seen along some part of the margins of this artefact.

**Hinge termination:** A hinge termination occurs 'when the fracture meets the surface of the core at approximately right angles to the longitudinal axis of the flake' (Holdaway and Stern 2008: 130). This can present as a rounded surface that curves downwards at the distal end of a flake.

**Holocene:** The Holocene epoch forms part of the late Quaternary period and extends from about 11,000 years ago to the present day.

**Hornfels:** Metamorphosed aphanitic sedimentary rock with extremely small particle size. Formed by high-temperature metamorphism of shale and has flaking qualities.

**Humic:** Soil that contains organic matter (from 'humus').

**Igneous:** After magma or lava cools and solidifies, it forms igneous rock. This can happen in volcanic and plutonic (under the surface of the earth) scenarios. An example of this is basalt.

**In situ:** A description of any cultural material that lies undisturbed in its original point of deposition.

**Ironstone:** A type of sedimentary rock that contains iron.

**Jurassic:** A geological period that dates from approximately 200 to 145 million years ago in the Mesozoic era.

**Knapping:** The removal of flakes and flaked pieces from a stone core by the use of percussion.

**Layer:** In stratigraphy, it is used to describe a horizon (soil, rock, charcoal) that is distinct from its surrounds.

**Land system:** Description for an area of land based on an assessment of a series of environmental characteristics including geology, geomorphology, climate, soils and vegetation.

**Loam:** Soil that contains roughly equal concentrations of silt, sand and clay.

**Longitudinally split flake:** This is a flake that is broken (split) from the point of percussion (the strike) through to the termination.

**Manuport:** An unmodified piece of stone transported to a site by humans.

**Mechanical trench:** This refers to a trench that is excavated for archaeological purposes with a mechanical excavator. Machine excavation allows for a greater sample size to be studied in PADs of low to moderate sensitivity. Due to the large amounts of soil produced from a mechanical excavator, the soil is sieved mechanically.

**Medial:** Term of view referring to the intermediate section or middle section of a broken flake.

**Medial flake:** Absence of proximal and distal margins, but with an identifiable ventral surface.

**Mesozoic:** Refers to a geological era that included three periods, two of which were the Jurassic and Cretaceous. The Mesozoic era spanned from approximately 245 to 65 million years ago.

**Metamorphism:** The process where an existing rock (which can be sedimentary or igneous) is transformed into another mineral through the application of temperature and pressure. An example of this is hornfels.

**Micron:** A micron is also known as a micrometre. It is a unit of length and has the symbol 'µm'. In metres, it is  $1.0 \times 10^{-6}$  metre or 0.000001 metre.

**Midden:** The term midden is a Danish word meaning a mound of kitchen refuse. In archaeological terms, a midden refers to an accumulation of shell deposited after people had collected and eaten shellfish. These could contain estuarine and freshwater shellfish species in addition to faunal remains, stone artefacts and charcoal from cooking fires. In northern NSW in many areas, burials have been recorded in direct association with midden deposits.

**Mudstone:** A sedimentary rock formed from mud/clay.

**Muller:** A large stone artefact which differs in construction depending on the environment. These were used as an aide for processing seeds and other low return plant material or ochre.

**Multi-platform core:** Is a core with more than one identifiable platform.

**Munsell colour:** This is a colour code chart used to standardise colour specifications.



**Natural/mythological sites:** These may not exhibit any physical or archaeological evidence, but their identification is derived from local Aboriginal tradition and oral history. These sites often have mythological associations and are associated with ceremonial activity in the past. These sites are sometimes prominent landmarks, such as mountains, rivers, rocky outcrops, and headlands (e.g. Glenugie Peak, the Clarence and Richmond Rivers).

**Non-diagnostic:** An amorphous piece of stone that is neither a flake, flaked fragment, core or retouched flake.

**Northing:** This is a measurement used to determine location. The northing is the y-coordinate and relates to the horizontal lines on a map, which divide north to south. It increases in size when moving further north.

**Notched tool:** Flakes that exhibit a small area of retouch, forming a concave edge on lateral or distal margin.

**Oriented length:** This is a measurement taken from the point of impact through to the termination.

**Oriented thickness:** This is a measurement taken from where the oriented width and oriented length intersect.

**Oriented width:** This is a measurement taken across the middle of a flake (halfway between the point of impact and the termination).

**Overhang removal:** This occurs when a platform is prepared for striking; small flakes are struck before a flake is detached, leaving visible scars behind.

**Potential Archaeological Deposit (PAD):** A PAD is a location that is considered to have a potential for subsurface cultural material. This is determined from a visual inspection of the site, background research of the area and the landform's cultural importance.

**pH:** A measure of the acidity or alkalinity of the soil. Neutral is indicated by a pH of 7, with strongly acidic being 0 and strongly basic (alkaline) being 14. The 'pH' is said to stand for 'potential of hydrogen'.

**Platform:** On a flake, this is a core remnant from where the flake was struck off the core.

**Platform width:** This is a measurement taken across the width of a platform between the two lateral margins of a flake.

**Platform thickness:** This is a measurement taken from the ventral to dorsal surfaces of a flake (beginning at the point of impact/percussion).

**Pleistocene:** The Pleistocene is an epoch within the early Quaternary period, extending from about 1.6 million years ago to about 11,700 years ago. The end of the Pleistocene is marked by the last of the great ice ages.

**Plunge termination:** This occurs when the ventral surface 'curves markedly away from the face of a core...and continues directly into the core, removing the base of the core' (Holdaway and Stern 2008: 132). This can present as a 'J' shape when holding the flake in profile.

**Proximal:** Term of view used to describe the upper portion of a flake in respect from where it was initially struck off a core.

**Proximal flake:** A broken flake with the presence of a platform, but the absence of a termination.

**Pot-lidded:** The damage caused by exposure to extreme heat, resulting in a circular depression on the surface of a stone artefact.

**Pressure flaking:** A process to remove a flake from a core by applying pressure (from a piece of wood or bone) along the core's edge.

**Quarry:** In this report, 'quarry' can refer to a native source of stone that was mined by Aboriginal people in the past. Rock from these sites could be used to make artefacts.

**Quartz:** A mineral composed of silica with an irregular fracture pattern. The quartz used in artefact manufacture is generally semi-translucent, although it varies from milky white to glassy. Glassy quartz can be used for conchoidal flaking, but poorer quality material is more commonly used for block fracturing techniques. Quartz can be derived from water worn pebbles, crystalline or vein (terrestrial) sources.

**Quartzite:** A form of metamorphosed sandstone. It is often white or grey in colour but can occur in other shades due to mineral impurities.

**Resource zone:** An area of the landscape or part of the environment that provides a resource (be it food or material items such as a source of stone for making artefacts) for Aboriginal people. Swamps are good examples of rich resource zones.

**Retouch:** A flake, flaked piece or core with intentional secondary flaking along one or more edges.

**Rhyolite:** Fine-grained to glassy acid volcanic rock similar to granite and micro granite

**Ridge straightening:** This is a 'flake that has a clearly identifiable dorsal ridge and is characterised by alternating flake removals down its dorsal surface' (Holdaway and Stern 2008: 150).

**Sand:** A material composed of small grains (0.625-2.0 mm) (Keary 2001: 233). Sand is formed from a variety of minerals and rocks, but commonly contains silica, such as quartz.

**Sandstone:** Is a sedimentary rock formed from sand-sized grains.

**Scarred trees:** Trees that feature Aboriginal derived scars are distinct due to the scar's oval or symmetrical shape and the occasional use of steel, or more rarely, stone axe marks on the scar's surface. Scarred trees are identified by the purposeful removal of bark for use in the manufacture of artefacts such as containers, shields and canoes. The bark was also used for the construction of shelters. Other types of scarring include toeholds cut in the trunks or branches of trees for climbing purposes and the removal of bark to indicate the presence of burials in the area.

**Sediment:** Is a mineral that has undergone erosion or weathering and that is then deposited via aeolian, glacial or fluvial means.

**Sedimentary:** Sedimentary rock is formed through the accumulation of sediment deposits that are then consolidated. An example of this is mudstone.

**Shale:** A sedimentary rock of well-defined layers comprised of small particles (less than 4 microns in size) (Keary 2001: 16) sourced from weathered or eroded materials.

**Silt:** A sediment with grains ranging from 4.0-62.5 microns in size (Keary 2001: 245). It can be found as a soil or in water.

**Single platform core:** Is a core with one identifiable platform.

**Scraper:** A stone tool, usually with steep retouch along its edges that was ethnographically used to make wooden implements or process foods and other resources.

**Silcrete:** Soil, clay or sand sediments that have silicified under basalt through groundwater percolation. It ranges in texture from very fine grained to coarse grained. At one extreme it is cryptocrystalline with very few clasts. It generally has characteristic yellow streaks of titanium oxide that occur within a grey and less commonly reddish background. Used for flaked stone artefacts.

**Spit:** Refers to an arbitrarily defined strata of soil removed during excavation (often 50 millimetres to 100 millimetres in depth).

**Step termination:** This occurs when a 'flake terminates abruptly in a right-angle break' (Holdaway and Stern 2008: 130).

**Stratification:** The way in which soil forms in layers.

**Stratigraphy:** The study of soil stratification (layers) and deposition.

**Subsurface testing:** An archaeological method used to determine the cultural sensitivity of an area by excavating small (0.5 metre x 0.5 metre) pits and recording the stratigraphy, material remains (such as stone tools) and disturbance.

**Survey:** In archaeological terms, this refers to walking over a surface while studying the location of artefacts and landmarks. These are then recorded and photographed.

**Termination:** Refers to the shape of the distal end of a flake.

**Tool:** A stone flake that has undergone secondary flaking or retouch.

**Use wear:** A pattern of wear that is left on a stone artefact due to utilisation.

**Ventral:** The side of a flake that was originally attached to the core (often called the 'ventral surface'). Features such as the bulb of percussion are found on this surface of a flake.

**Visibility:** Refers to the degree to which the surface of the ground can be observed. This may be influenced by natural processes such as wind erosion or the character of the native vegetation, and by land use practices, such as ploughing or grading. It is generally expressed in terms of the percentage of the ground surface visible for an observer on foot.

## INTRODUCTION

### 1.1 Project brief

Artefact Heritage has been engaged by Goodman Property Services (Goodman, the proponent) to prepare an Aboriginal Cultural Heritage Assessment Report (ACHAR) for the proposed development of a data centre at 2-8 Lanceley Place and 14 Campbell Street, Artarmon.

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the Lanceley Place Data Centre project (SSD-66777221) dated 23 January 2024. Consultation for this ACHAR has been completed.

The proposal will seek to develop sufficient data centre floor space, plus ancillary office space, to enable full utilisation of the 80MVA of power made available by Ausgrid for this site, including associated carparking and landscaping.

### 1.2 Description of the study area

The proposal is in the Willoughby Local Government Area (LGA) within the Artarmon Industrial Area and zoned 'IN1 - General Industrial'. It lies within the boundaries of the Metropolitan Local Aboriginal Land Council (LALC).

The study area is situated within an industrial area of Artarmon and is located at 2-8 Lanceley Place and 14 Campbell Street, Artarmon incorporating the following lots (see Figure 1):

- Lot 15 DP233037      14 Campbell Street
- Lot 14 DP233037      2 Lanceley Place
- Lot 13 DP233037      4 Lanceley Place
- Lot 12 DP233037      6 Lanceley Place
- Lot 11 DP 606737      8 Lanceley Place

The study area is approximately 5 kilometres (km) north of the Sydney Central Business District (CBD), 12 km north of Sydney Airport and 16 km north of Port Botany. The site is also located centrally between several strategic centres in the North District including St Leonards, Chatswood, North Sydney and Macquarie Park. The site area is 14,006 square metres (m<sup>2</sup>) and is legally described as Lots 11-15 in DP 233037. The site has a frontage to Lanceley Place and Campbell Street and is within close proximity to the arterial road network, including the Pacific Highway, M1, M2 and Lane Cove Tunnel.

### 1.3 Purpose and scope of the report

The proposal is being assessed as a State Significant Development (SSD) under Part 4 Division 4.1 of the *Environmental Planning and Assessment Act 1979*. The SEARs were issued for the proposal on 23 January 2024 (SSD-66777221). Regarding Aboriginal cultural heritage, the SEARs require:

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#### 19. Aboriginal Cultural Heritage

*Provide an Aboriginal Cultural Heritage Assessment Report prepared in accordance with relevant guidelines, identifying, describing and assessing any impacts on any Aboriginal cultural heritage values on the land.*

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Artefact Heritage has been engaged to prepare an ACHAR to meet this condition of the SEARs.

This report considers the impacts the proposed construction might have on Aboriginal cultural heritage and the potential archaeological resources within the study area. This ACHAR has been prepared to address condition 19 of the project SEARs and includes:

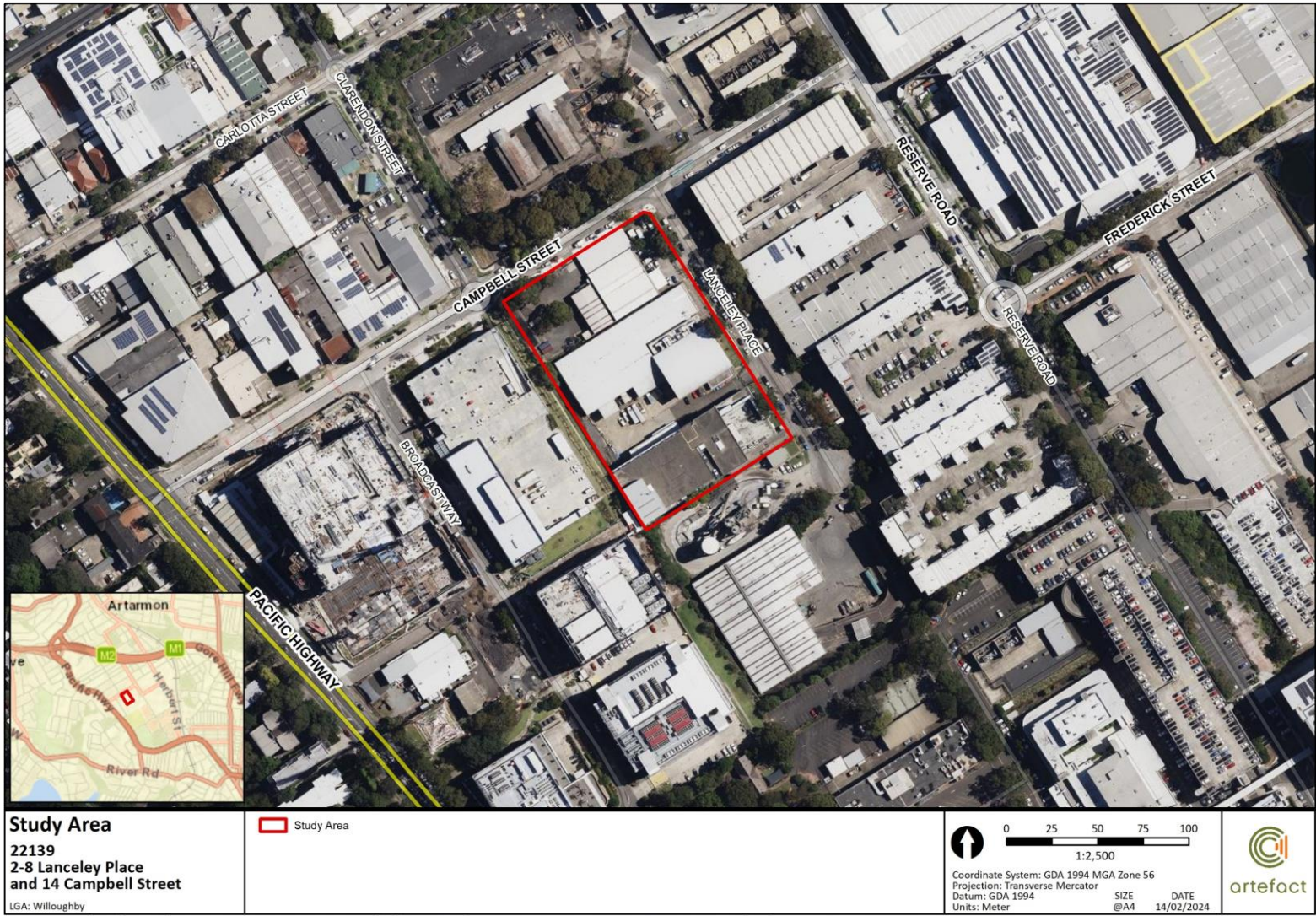
- Assessment of the Aboriginal cultural heritage values of the study area and identification of any specific areas of cultural significance
- Assessment of archaeological potential for the study area
- Aboriginal stakeholder consultation

This ACHAR has been undertaken in accordance with the following guidelines:

- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales 2010 (DECCW 2010a)
- Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011)
- Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW 2010b).



Figure 1. The study area



## 1.4 Secretary's Environmental Assessment Requirements

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the Lanceley Place Data Centre project (SSD-66777221) dated 23 January 2024. Specifically, this report has been prepared to respond to the SEARs requirements listed in Table 1.

**Table 1. Secretary's Environmental Requirements**

Item	Secretary's Environmental Assessment Requirements	Where addressed in this report
19	<b>Provide an Aboriginal Cultural Heritage Assessment Report prepared in accordance with relevant guidelines, identifying, describing and assessing any impacts on any Aboriginal cultural heritage values on the land.</b>	<b>This report</b>

## 1.5 Authorship

This ACHAR has been prepared by Elizabeth Bonshek (Senior Heritage Consultant, Artefact Heritage) and HollyMae Steane Price (Heritage Consultant, Artefact Heritage) with review and management provided by Sandra Wallace (Director, Artefact Heritage).

## 2.0 LEGISLATIVE CONTEXT

### 2.1 Introduction

There are several pieces of legislation that are relevant to the assessment of Aboriginal cultural heritage for the proposal. This chapter provides a summary of these Acts and the potential implications for the proposal.

### 2.2 NSW National Parks and Wildlife Act 1974

The *National Parks and Wildlife Act 1974* (NPW Act) provides statutory protection to all Aboriginal places and objects. Under Section 86 of the NPW Act it is an offence to harm or desecrate Aboriginal objects or places. An Aboriginal Place is declared by the Minister, under Section 84 of the NPW Act in recognition of its special significance with respect to Aboriginal culture. An Aboriginal object is defined as:

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*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.*

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All Aboriginal objects, whether recorded or not, are protected under the NPW Act. The protection provided to Aboriginal objects applies irrespective of the level of their significance or issues of land tenure. However, areas are only gazetted as Aboriginal Places if the Minister is satisfied that sufficient evidence exists to demonstrate that the location was and/or is of special significance to Aboriginal culture.

If it is assessed that sites exist or there is a likelihood of existing within the activity area and maybe impacted by the proposed activity, further archaeological investigations may be required. The SSD requirements state that attempts to avoid damage must be made. Where damage is unavoidable the ACHAR and EIS must outline mitigation measures.

If the project is assessed as an SSDA under Part 4 Division 4.7 of the *Environmental Planning & Assessment Act 1979*, an AHIP issued under the NPW Act is not required for works undertaken in accordance with the SSD Conditions of Approval issued by DPIE.

#### 2.2.1 National Parks and Wildlife Regulation 2019

Under the authority of the NPW Act, the National Parks and Wildlife Regulation 2019 provides regulations for Aboriginal heritage assessment and consultation with registered Aboriginal parties.

Part 5 (Division 2) of the National Parks and Wildlife Regulation sets out the requirements of a due diligence assessment process and provides requirements for more detailed assessment and consultation with registered Aboriginal parties for activities that may result in harm to Aboriginal objects. This includes:

- Clause 60 – consultation process to be carried out before application for Aboriginal Heritage Impact Permit (AHIP)
- Clause 61 – application for AHIP to be accompanied by cultural heritage assessment report.



In order to comply with Clause 60 and 61 of the National Parks and Wildlife Regulation 2019, preparation of an ACHAR and consultation with RAPs must be in accordance with the following guidelines:

- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales 2010 (DECCW 2010a)
- Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011)
- Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW 2010b).

The current assessment has been carried out in accordance with the above guidelines in order to meet the SEARs which refer to them.

## 2.3 NSW Environmental Planning and Assessment Act 1979

The *Environmental Planning & Assessment Act 1979* (EP&A Act) provides planning controls and requirements for environmental assessment in the development approval process. The EP&A Act consists of three main parts of direct relevance to Aboriginal cultural heritage: Part 3 which governs the preparation of planning instruments; Part 4 which relates to development requiring consent; and Part 5 which relates to activity that does not require consent.

Should the project receive SEARs it would be subject to assessment and approval by the NSW Minister for Planning and Public Spaces under Part 4 Section Division 4.7 of the EP&A Act, which establishes an assessment and approval regime for SSD.

An EIS supported by the current assessment has been prepared to assess the impacts of the proposal, in accordance with SEARs.

Section 4.12(8) of the EP&A Act provides that environmental planning instruments (such as local environmental plans and SEPPs) do not, with some exceptions, apply to SSD projects. Notwithstanding, the environmental planning instruments that are relevant to the proposal have been considered for consistency, as described below.

### 2.3.1 Willoughby Local Environmental Plan (LEP)

Planning decisions within LGAs are guided by Local Environmental Plans (LEPs).

LEPs are prepared by councils in accordance with the EP&A Act to guide planning divisions for LGAs. Each LGA is required to develop and maintain an LEP that includes Aboriginal and historical heritage items listed within its schedule and which are protected under the EP&A Act and the Heritage Act 1977.

The study area falls within the Willoughby Local Environmental Plan (2012). Should the project be granted status as an SSD, a development application would not be required to be approved by Council.

A review of the Willoughby LEP (2012) undertaken on 11 August 2022 by Phillip Obah did not identify any listed items of Aboriginal heritage significance within or in the vicinity of the study area.

## 2.4 NSW Aboriginal Land Rights Act 1983

The *Aboriginal Land Rights Act 1983* (ALR Act) established Aboriginal Land Councils (at State and Local levels). These bodies have a statutory obligation under the ALR Act to:

- (a) take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law, and
- (b) promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.

The study area is within the boundary of the Metropolitan LALC.

## 2.5 NSW Native Title Act 1994

The *Native Title Act 1994* was introduced to work in conjunction with the Commonwealth *Native Title Act 1993*. Native Title claims, registers and Indigenous Land Use Agreements are administered under the Act.

Request for information concerning any determinations in regard to the study area were made to the Native Title Tribunal on the 17 June 2022. There are no Native Title claims currently registered in the study area.

## 2.6 Commonwealth Environment Protection and Biodiversity Conservation Act 1999

The *Environment and Heritage Legislation Amendment Act (No. 1) 2003* amends the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) to include 'national heritage' as a matter of national environmental significance and protects listed places to the fullest extent under the Constitution. It also establishes the National Heritage List and the Commonwealth Heritage List. The *Australian Heritage Council Act 2003* establishes a new heritage advisory body – the Australian Heritage Council – to the Minister for the Environment and Energy and retains the Register of the National Estate. The *Australian Heritage Council (Consequential and Transitional Provisions) Act 2003* repeals the *Australian Heritage Commission Act 1975*, amends various Acts as a consequence of this repeal and allows the transition to the current heritage system.

Together the above three Acts provide protection for Australia's natural, Indigenous and non-Indigenous heritage. The new framework includes:

- A new National Heritage List of places of national heritage significance
- A Commonwealth Heritage List of heritage places owned or managed by the Commonwealth
- The creation of the Australian Heritage Council, an independent expert body to advise the Minister on the listing and protection of heritage places
- Continued management of the non-statutory Register of the National Estate.



### 2.6.1 National Heritage List

The NHL is a list of places with outstanding heritage value to our nation, including places overseas. So important are the heritage values of these places that they are protected under the EPBC Act. This means that a person cannot take an action that has, will have, or is likely to have, a significant impact on the national heritage values of a national heritage place without the approval of the Australian Government Minister for the Environment and Heritage.

A search on 11 March 2024 did not find any items listed on the National Heritage List located within the study area for this assessment.

### 2.6.2 Commonwealth Heritage List

The Commonwealth Heritage List (CHL) is a list of places managed or owned by the Australian Government and not of relevance to this project.

A search on 11 March 2024 did not find any items listed on the National Heritage List located within the study area for this assessment.

## 3.0 ABORIGINAL COMMUNITY PARTICIPATION

### 3.1 Aboriginal consultation

Aboriginal community consultation has been conducted in accordance with the Consultation Requirements (DECCW 2010a). A consultation log has been maintained which details all correspondence with the registered Aboriginal parties for the ACHAR (see Appendix).

### 3.2 Stage 1 Identification of stakeholders and registration of interest

The consultation for this ACHAR commenced on 1 July 2022. In accordance with step 4.1.2 of the Consultation Requirements, Artefact Heritage corresponded with the following organisations by email on the 1 July 2022 requesting the details of Aboriginal people who may hold cultural knowledge relevant to determining the Aboriginal significance of Aboriginal objects and/or places within the local area:

- Heritage NSW
- Willoughby City Council
- Native Title Service Corporation (NTSCorp)
- National Native Title Tribunal
- Office of the Registrar, Aboriginal Land Rights Act 1983
- Metropolitan Local Aboriginal Land Council.

In addition to this, and in accordance with Step 4.1.3 of the Consultation Requirements, an advertisement was placed in the Koori Mail, on 20 June 2022, inviting the participation of Aboriginal people who may hold cultural knowledge relevant to determining the Aboriginal significance of Aboriginal objects and/or places within the local area.

In accordance with Step 4.1.3 of the Consultation Requirements, on the 7 July 2022, emails or letters were sent to all Aboriginal persons or organisations identified through advertisement or through responses from agencies contacted as part of Step 4.1.2. In accordance with Step 4.2 the letters provided details about the location and nature of the proposal, as well as an invitation to register as an Aboriginal stakeholder. As a result of that process five groups/ individuals registered their interest (see Table 2).

**Table 2. Registered Aboriginal parties for the study area**

Name	Comments	Response
Phil Khan, Kamilaroi Yankuntjatjara Working Group	Please register	Registered on consultation log
Ryan Johnson & Darleen Johnson-Carroll, Murra Bidgee Mullangari Aboriginal Corporation	Please register	Registered on consultation log
Amanda de Zwart, Amanda Hickey Cultural Services	Please register	Registered on consultation log
Lillie Carroll and Paul Boyd, Didge Ngunawal Clan	Please register	Registered on consultation log
Carolyn Hickey, A1 Indigenous	Please register	Registered on consultation log

### 3.3 Stage 2/3 Presentation of project information and assessment methodology

A copy of the proposed assessment methodology was sent to registered Aboriginal parties (RAPs) by email on 27 July 2022, requesting comments at the close of 28 days. At the end of this period, 4 groups/individuals had responded (Table 3).

**Table 3: Summary of RAP comments on ACHAR methodology.**

Name	Comments	Response
Ryan Johnson & Darleen Johnson-Carroll, Murra Bidgee Mullangari Aboriginal Corporation	"I have read the project information and ACHAR for the above project, I endorse the recommendations made."	Included in consultation log and report
Wendy Smith, Gulaga	Approves of methodology	Included in consultation log and report
Phil Khan, Kamilaroi Yankuntjatjara Working Group	"We would like to recommend interpretation connecting with country, wed like to agree to your recommendations and we support your report. we look forward to furthering consultation"	Included in consultation log and report

### 3.4 Stage 4 Review of ACHAR

On 30 August 2022 the draft ACHAR was emailed to the RAPs for feedback and comment (28 day feedback period). Table 4 presents the comment of the RAPs who responded.

**Table 4: Summary of RAP comments on draft ACHAR.**

Name	Comments	Response
Ryan Johnson, Murra Bidgee Mullangari Aboriginal Corporation	I have read the project information and draft ACHAR for the above project, I endorse the recommendations made.	Included in consultation log and report
Phil Khan, Kamilaroi Yankuntjatjara Working Group	Thank you for your Draft ACHAR, due to high disturbance, nil registered sites in the area and the site survey I agree and support your recommendation not to proceed with further archaeological investigation.	Included in consultation log and report

The consultation requirements do not stipulate that contact with the RAPs must be maintained over a prescribed period of time. *Applying for an Aboriginal Heritage Impact Permit: A Guide for Applicants* (OEH 2011) states that when applying for an AHIP, consultation with the RAPs should not have gaps in contact greater than six months. As this project will be seeking approval as SSD, an AHIP is not applicable. The existing consultation has therefore been utilised for this updated ACHAR. In addition, the ACHAR concluded that Aboriginal objects are unlikely to be present within the study area and no further investigation would be required. Therefore, it is recommended that the updated ACHAR be provided to the registered stakeholders for information.

On 12 March 2024 the updated draft ACHAR was emailed to the RAPs for feedback and comment (28 day feedback period). Table 5 presents the comment of the RAPs who responded.

**Table 5: Summary of RAP comments on updated draft ACHAR**

Name	Comments	Response
Darleen Johnson, Murra Bidgee Mullangari Aboriginal Corporation	I have read the project information and draft ACHAR for the above project, I endorse the recommendations made.	Included in consultation log and report
Phil Khan, Kamilaroi Yankuntjatjara Working Group	Thank you for your Updated Draft ACHAR, we would like to agree and support your recommendations. We look forward to working alongside you on this project.	Included in consultation log and report
Paul Boyd Didge Ngunawal Clan	We are happy with the ACHAR And also ready to proceed to the next step.	Included in consultation log and report

The findings and recommendations of the ACHAR were supported by the RAPs through the consultation process.



## 4.0 ENVIRONMENTAL CONTEXT

### 4.1 Geology and soils

The study area crosses the Glenorie and Disturbed Terrain soilscape (eSpade, 2022) (see Figure 2). The geology within the Glenorie soilscape rests on the Wianamatta Group Ashfield Shale and Bringelly structures. The Ashfield Shale contains laminite and dark grey shale, while the Bringelly shale includes shale, calcareous claystone, laminite, fine to medium grained lithic-quartz sandstone.

The soilscape within Disturbed Terrain is no longer natural and consists of artificial fill, with scoured estuarine sand and mud, demolition rubble, industrial and household waste, in addition to rocks and soil materials (eSpade, 2022). The soil in the Disturbed Terrain comprises turf fill, generally capped with up to 40 cm of sandy loam or topped with 60cm of compacted clay over fill or waste materials (eSpade, 2022).

The Glenorie soilscape is shallow to moderately deep (less than 1 m), and includes red podzolic soils; however, on crests it includes red and yellow podzolic soils and on upper slopes soils can be more than 200 cm deep, consisting of yellow and gleyed podzolic soils along drainage lines (eSpade, 2022).

### 4.2 Landform and hydrology

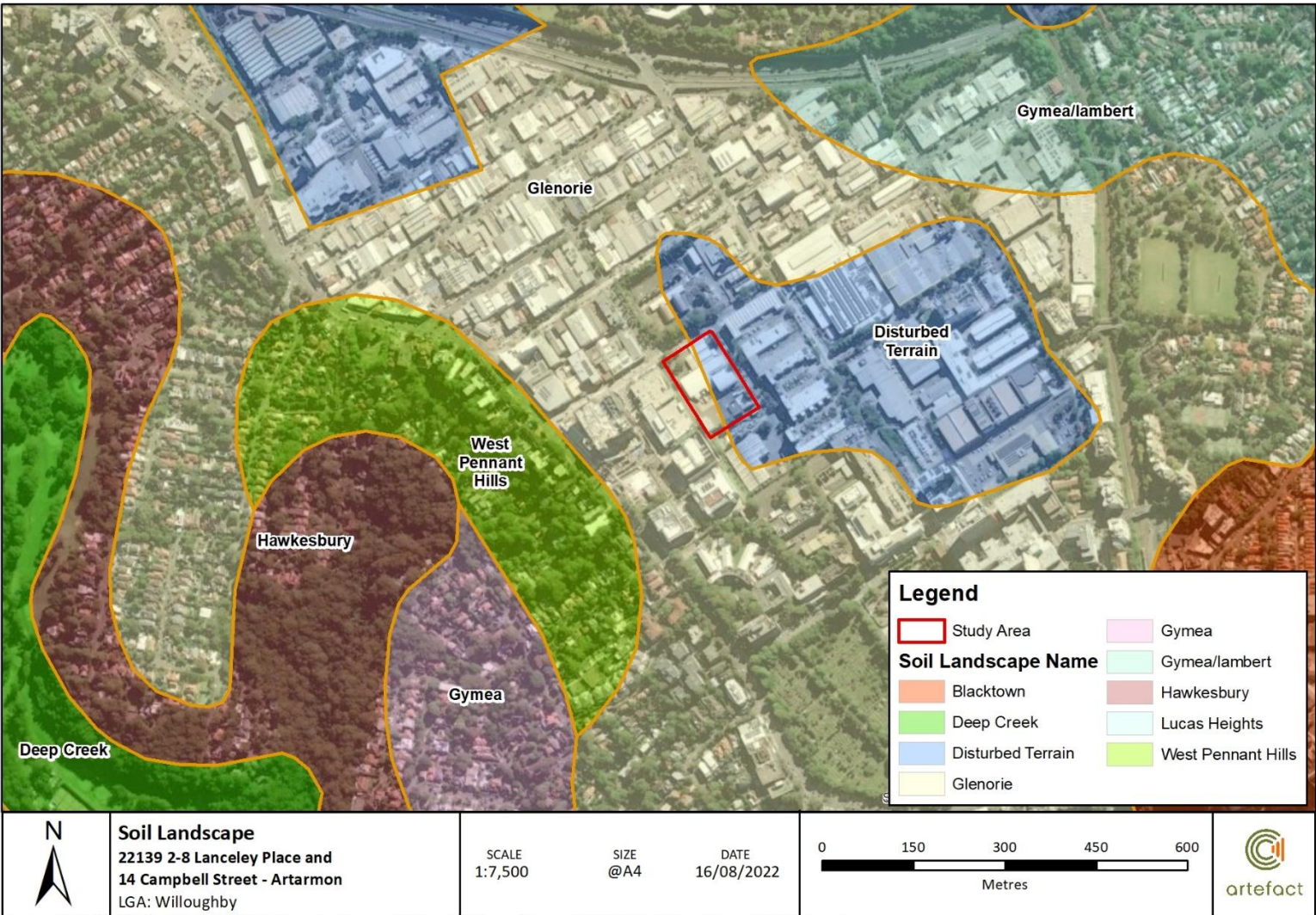
The study area sits within two different soilscape, geology and topography, the Glenorie and Disturbed Terrain (see Figure 2). Although the study area overlaps with landform disturbed by human activity (eSpade, 2022) the neighbouring landform may provide insight into the area prior to disturbance because the Disturbed Terrain is surrounded sits within the Glenorie terrain.

The Glenorie topography is characterised by low rolling and steep hills, with local relief of 50-120m; convex narrow ridges of 20-300m and hillcrests which grade into moderately inclined side slopes with narrow concave drainage lines., Moderately inclined slopes of 10-15% are dominant landform elements (eSpade, 2022).

There are two creeks that are within a 1km radius of the study area: Gore Creek, located 447m south of the study area and Flat Rock Creek 927m northeast of the study area (Figure 3).

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Figure 2. Location of study area across Disturbed Terrain and Glenorie soils.



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Figure 3. Location of the study area in relation to local hydrology.



#### 4.2.1 Vegetation

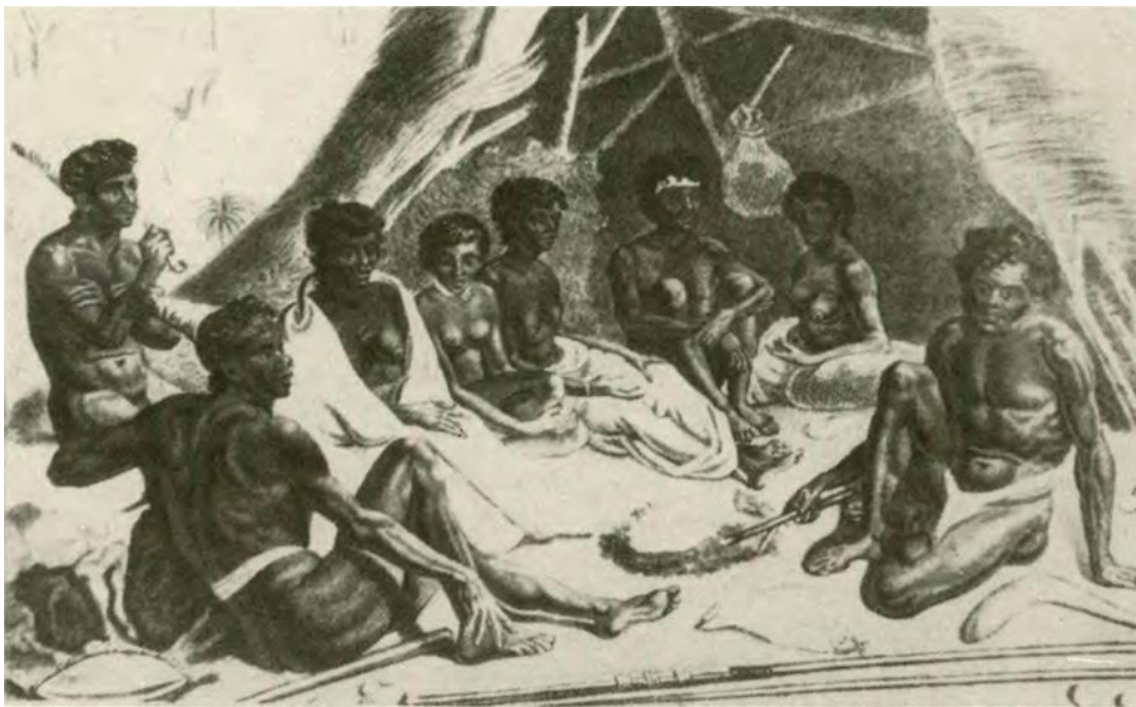
The local landscape would have been characterised by tall open forests, and dominated by blue gum (*Eucalyptus saligna*) and blackbutt (*E. pilularis*). Other species include turpentine (*Syncarpia glomulifera*), grey ironbark (*E. paniculate*), white stringybark (*E. globoidea*) and rough-barked apple (*Angophora floribunda*). Pittosporum (*Pittosporum undulatum*) and coffee bush (*Breynia oblongifolia*) are common understorey species.

In residential areas most of the original vegetation has been cleared, except for larger trees (for example in parts of Dalrymple Hay Reserve at St Ives and in Blackwood Memorial Sanctuary at Beecroft) (eSpade, 2022).

#### 4.3 Aboriginal historical context

Artarmon sits within the country of the Cammeragal and the Walumedegal people (Warner 1988: 2). The boundaries of the Cammeragal stretch from Sydney Harbour to Brisbane Water. It has been noted that the Cammeragal people have been living in the area for 40,000 years or more (Warner, 1988: 2). Cammeray, Artarmon's neighbouring suburb to the east gets its name from the Cammeragal, (Warner, 1988: 2). The Cammeragal people daily lifestyle included 'fishing from rivers and creeks, hunted wild animals, held communal feasts, and made their drawings on flat sandstone rocks', (Warner, 1988: 2). In 1804, ten years after land grants were issued, the Cammeragal people clashed with early settlers; then twelve years later, more trouble arose when maize crops grown by some of the Lane Cove settlers were raided (Warner, 1988: 2). What has been left behind by the Cammeragal people at present are the names of roads such as Burra Road and Coree Road, in addition, Muttama Road (Warner, 1988: 2). There is little evidence remaining from the Cammeragal people, however findings of middens, compacted by oyster shells from feasts to show they lived in the area long ago (Warner, 1988: 2).

**Figure 4. The First Australians, Lithograph from 'Voyages in the Antarctic and Round the World' (1819-1821) by Capt. Bellinghausen, published 1831 (Warner 1988: 3).**



## 4.4 European history and land use

Most land grants in what is now the Artarmon area were awarded by acting Lieutenant-Governor Francis Grose of the N.S.W. Corps during 1793 to 1794 (Warner, 1988: 4). The name of the suburb Artarmon may have come from the ancestral home of William Gore (Ardthelmon -pronounced Art-e-mon, Grace Warner, 1988: 6) an Irishman who arrived in Sydney in 1805 and who was the Provost-Marshall at the time of the Rum Rebellion of 1808., In 1810, Gore received a land grant of 150 acres on the eastern side of Artarmon. The land was described as sloping down from what is now Mowbray Road towards Artarmon railway station, with the latter roughly the centre of Gore's grant (Warner, 1988: 6).

By 1815 Gore was the biggest landowner in the district, buying up properties around him he expanded his farmland which reached between the Pacific Highway and Artarmon railway station and made his fortunes by clearing the land for timber (Warner, 1988: 6).

Since 1788 Artarmon has been known for the natural resources needed for the brickmaking industry (Warner 1988: 18). The shale at Gore Hill proved highly suitable for brickmaking and bricks were first made at the Gore Hill Estate in 1828 and a number of brickmakers operated there. E R Lanceley, who gave his name to the road the study area is situated, was in the brickmaking industry and took over the Oswin Brickworks in 1873 (Warner, 1988: 20). Lanceley then formed a partnership with other brickmakers J B Magney and O W Wynton, under the business name North Sydney Brick and Tile Company, located at Herbert Street (see Figure 5). The works were connected to tramways for the transportation of bricks (Warner, 1988: 6, & Willoughby City Library, 2022). Lanceley became well known in the brickmaking industry. The North Sydney Brick and Tile Company had two pits: one, known as the "old" No.1 yard, which was bounded by the Royal North Shore Hospital, Reserve Road, Campbell and Clarendon Streets; and "new yard" or No 2, bounded by Herbert Street, Cleg Street and Reserve Road. An underground tunnel under Reserve Road joined the two and houses occupied both sites until both pits required the land that were on (Warner 1988: 24). Warner (1988: 24) includes a quote from the Suburban Herald published in 1928 which stated:

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*It will be many years before the supplies of shale from which they (N.S. Brick & Tile Co.) draw is exhausted. At the present rate it will take about 40 years. By that time the contour of the parish in which there are operating will be completely changed. It will have been levelled off for factories of other description, for it is likely that St. Leonards will always be the industrial centre of the North Shore"*

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Brickmaking ceased during the Second World War and production redirected to supporting the armed forces. In the late 1940s the area was rezoned as an industrial estate and new businesses moved in. By 1965 brickmaking the County of Cumberland recommended that brickmaking in the area cease, excepting N.S. Brick & Tile Co, but that company too ceased operations in Artarmon, relocating works to Baulkham Hills. The buildings on the land in Gore Hill were demolished and the land subdivided in 1960 and sold between 1964-64 (Warner, 1988: 25). Lanceley Place was created during the subdivision of the brick pit

European occupation of the Artarmon area transformed the landscape. The works at the brick pits resulted in the land, including the land the study area is on, being classified as Disturbed Terrain.



Warner (1988: 1) provides a description of the land prior to the arrival of settlers:

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*A high ridge runs along the western boundary of Artarmon. Along the crest of this ridge the timber-getters first hauled their wagons [sic] to make a rough track. Much later this became Pacific Highway. On the western and Lane Cove side of the ridge is the valley through which the Lane Cove River flows. On the eastern side of the high ridge is Artarmon, the land sloping down to form the valley where Flat Rock Creek flows on its way to Middle Harbour. Some of these creeks were wiped out when the brickmakers scooped their big holes on the western side of Artarmon, but the main watershed is still there, the water run-off being collected to flow under Clarke Bridge on its way to Middle Harbour. There was very little level land. We know that because Willoughby Council had to use filling to make Artarmon parks and ovals. Except for these and the man-made flatness of the west Artarmon industrial area, Artarmon is pleasant hilly country. As a result Artarmon residents have good views: distant views stretching to the city of Sydney, or nearby views of the thousands of trees which grow well in Artarmon soil.*

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Figure 5. Aerial view of Lanceley's No. 2 Brickworks at Herbert Street, Cleg Street and Reserve Road (courtesy of Willoughby Municipal Library)



#### 4.4.1 Historical Imagery

In the 1930s the roads currently in place had not yet been constructed. The study area appears to be a small segment within a brick works and quarry which extended over a much larger area. The presence of a long shadow probably indicates the location of the factory chimney and kilns within the study area. The land to the north of the study area has been excavated, and a deep cut into the landscape is visible. This cut is visible today along Carlotta Street, but it now extends to run along the edge of that street. The surface of the study area appears very disturbed, with vehicle tracks and buildings present. The deep cut visible today along the western border of the study area does not appear to be present as vehicle tracks appear to run across the surface in this area. Residential houses appear to the northwest of the study area. There appear to be no trees within the study area (Figure 6).

In 1943 the relationship of the study area to the large brickworks is clearer (Figure 7). The larger pit to the right of the image is connected to the pit area surrounding the study area via a tunnel under Reserve Road. Vehicles moving through the tunnel toward the study area would have emerged into an excavated site, with deep cuts located along the three sides (along the eastern, southern and western boundaries of the block). At this stage the south part of the study area includes an excavated section of the quarry.

By 1971 Campbell Road has been constructed and the brick works have been demolished and the area would have been levelled for the construction of replacement buildings. The northern half of the study area has warehouses / office spaces erected on it, while the southern section appears derelict with evidence of vehicle tracks close to the boundaries. Lanceley Place is discernible as a dirt track. It is evident that the ground surface has experienced a second transformative phase since the 1930s and it is unlikely it contained remnant soils. The study area might at this period be filled with introduced material and soil. There are no trees visible in the study area (Figure 8).

By 1994 a hard surface car park had been constructed in the northwest section of the study area and trees appear to have been planted. The southern half of the study area had also been converted to car parking and a building which runs along the southern boundary has been constructed with roof top parking. The land use has not changed considerably since 1971 maintaining the industrial usage (Figure 9).

By 2002 the current layout of the buildings in the study area has been established. The land use also has not changed, having continued as industrial use in a completed modified soilscape (Figure 10).

Figure 6. The study area in the 1930s

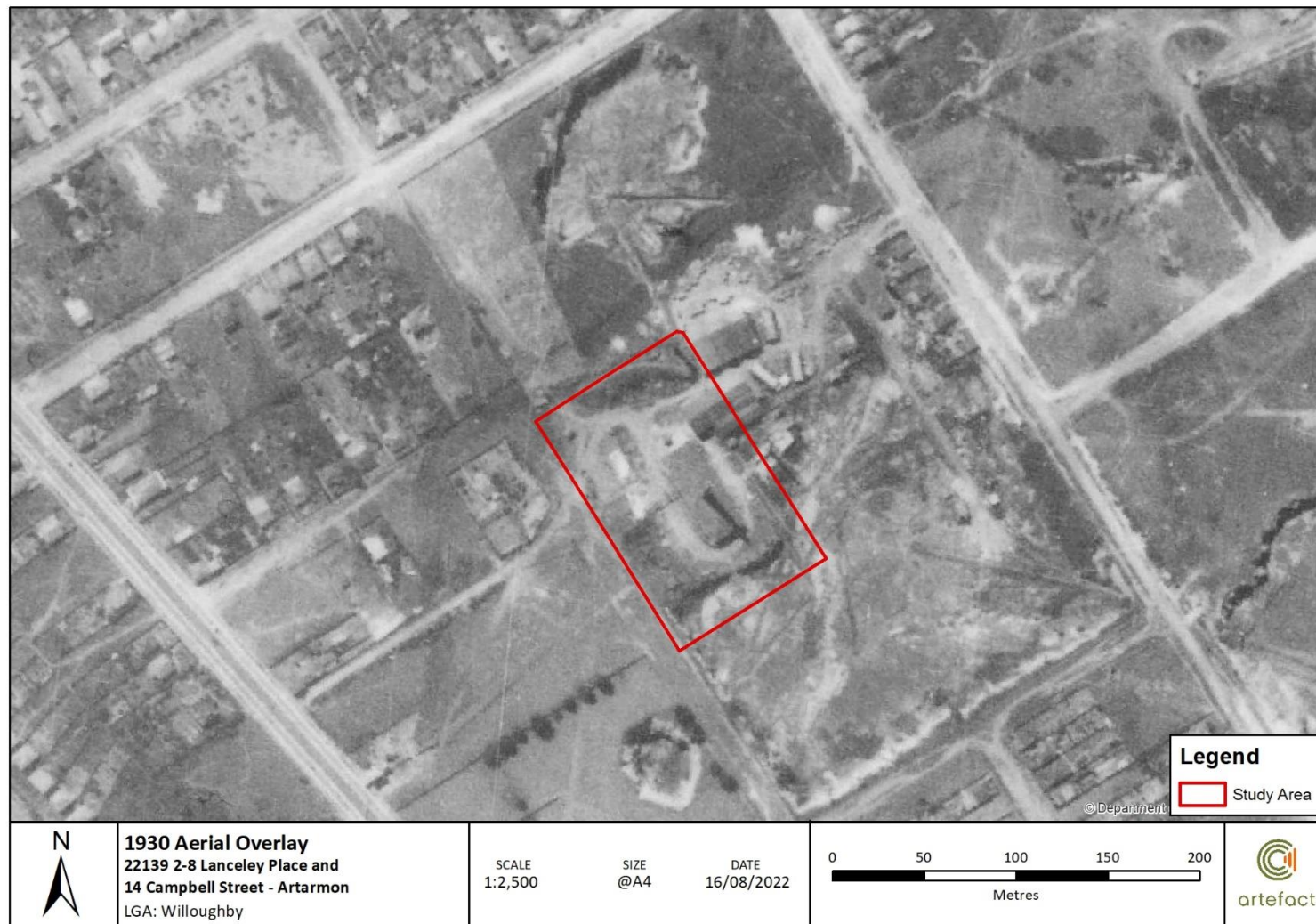




Figure 7. 1943 Six Maps Image



Figure 8. The study area in 1971.



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Figure 9. The study area in 1994.





Figure 10. The study area in 2002.



## 5.0 ARCHAEOLOGICAL AND ETHNOGRAPHIC CONTEXT

### 5.1 Ethnographic and historical evidence

Aboriginal people used different landscapes and resource strategies within their clan territories across the Sydney Basin. Certain resources were likely available seasonally, necessitating movement or trade across the landscape (Attenbrow 2010: 78). Aboriginal people hunted kangaroo and wallaby and snared possums and other small animals and birds for food and skins and tool making. For example, kangaroo tail sinews were used as a fastening cord, whilst 'bone points' which would have functioned as awls or piercers and are often found in the archaeological record (Attenbrow 2010:118). Ethnographic observations of early European settlers noted that Aboriginal people used a variety of animal parts; claws, talons, bone, skin, teeth, shell, fur and feathers for a variety of tools and for social and cultural uses. Plants were an important source of nutrition for past Aboriginal peoples with numerous species utilised for food, medicinal purposes as well as for making tools (Attenbrow 2010: 41). The broader region of the study area would have held a variety of resources throughout the changing seasons allowing for year-round occupation by traditional Aboriginal groups inhabiting the area.

### 5.2 Archaeological Evidence

Aboriginal people have lived in the Sydney area for more than 36,000 years. The oldest dated site in the greater Sydney region is Cranebrook Terrace which was dated at approximately 41,700 years Before Present (BP) with an error range of 5,000 years (Attenbrow 2010: 18; Karskens 2020). Evidence of Aboriginal occupation has been found dated to 50-60,000 BP at Lake Mungo in NSW, so it is likely that Aboriginal people have lived in the Sydney region for even longer than indicated by the oldest recorded dates we have at present. The archaeological material record provides evidence of this long occupation, but also provides evidence of a dynamic culture that has changed through time.

The existing archaeological record is limited to certain 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. Archaeological analyses of these artefacts in their contexts have provided the basis for the interpretation of change in material culture over time. Technologies used for making tools changed, along with preference of raw material. Different types of tools appeared at certain times, for example ground stone hatchets are first observed in the archaeological record around 4,000 BP in the Sydney region (Attenbrow 2010). It is argued that these changes in material culture were an indication of changes in social organisation and behaviour.


After 8,500 BP silcrete was more dominant as a raw material, and bifacial flaking became the most common technique for tool manufacture. From about 4,000 BP to 1,000 BP backed artefacts appear more frequently. Tool manufacture techniques become more varied and bipolar flaking increases (McDonald 2006). It has been argued that from 1,400 to 1,000 years before contact there is evidence of a decline in tool manufacture. This reduction may be the result of decreased tool making, an increase in the use of organic materials, changes in the way tools were made, or changes in what types of tools were preferred (McDonald 2006). The reduction in evidence coincides with the reduction in frequency of backed blades as a percentage of the assemblage.

## 5.1 Aboriginal Heritage Information Management System (AHIMS) search

**NOTE: The location of Aboriginal sites is considered culturally sensitive information. It is advised that this information, including the AHIMS data appearing on mapping below must be removed from this report if it is to enter the public domain.**

The nature and location of the registered sites is a reflection of the past Aboriginal occupation from which they derive, but is also influenced by historical land-use, and the nature and extent of previous archaeological investigations. Although Aboriginal occupation covered the whole of the landscape, the availability of fresh water, and associated resources, was a significant factor in repeated and long-term occupation of specific areas within the landscape. Certain site types, such as culturally modified trees, are particularly vulnerable to destruction through historical occupation, while others, such as stone artefacts, are more resilient.

A search of the Aboriginal Heritage Information Management System (AHIMS) database (Client ID 863842) was completed on 13 February 2024 for a search area measuring approximately 2 kilometres surrounding the study area (Figure 11). The parameters of this search were:

GDA 1994 MGA 56	330146 – 334146 m E 6254504 – 6258504 m N
Buffer	
Number of sites	63
Client Service ID	863842

There were no AHIMS sites found within the study area. Six results were found within 1 kilometre of the study area. The distribution of these is shown in Figure 11.

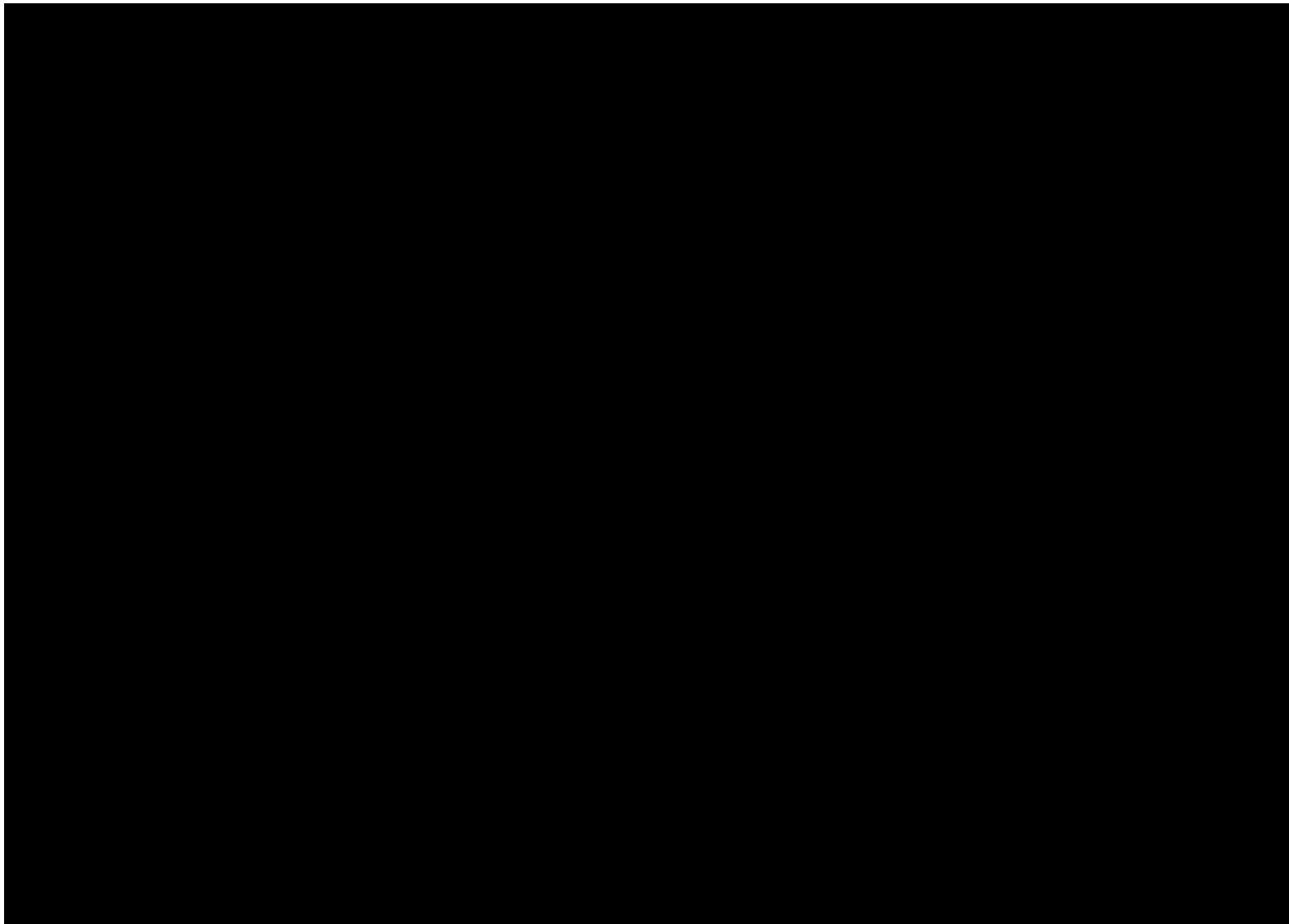
OEH lists 20 standard site features that can be used to describe a site registered with AHIMS, and more than one feature can be used for each site. The three most prevalent site types in the search included: Shell, Artefact 46.03% (n=29); Art (Pigment or Engraved) 17.46% (n=7); Potential Archaeological Deposit (PAD) 11.11% (n=7). A total of 35 sites were classified as “Open site”, and the remaining 28 sites are classified as “Closed site”. Two sites were described as “Partially Destroyed” and one is listed as “Not a Site”.

**Table 6. Frequency of recorded site types**

Site feature	Frequency	Percentage (%)
Shell, Artefact	29	46.03
Art (Pigment or Engraved)	11	17.46
Potential Archaeological Deposit (PAD)	7	11.11
Shell	6	9.52
Artefact	4	6.35
Shell, Artefact, Art (Pigment or Engraved)	2	3.17
Artefact, Art (Pigment or Engraved)	1	1.59
Grinding Groove	1	1.59
Shell, Artefact, Burial	1	1.59

Site feature	Frequency	Percentage (%)
Aboriginal Resource and Gathering, Shell	1	1.59
<b>Total</b>	<b>63</b>	<b>100</b>

**Figure 11. Distribution of AHIMS site in relation to the study area.**





### 5.1.1 Sites within [REDACTED] of the study area

The six sites fall in two general locations at the southwest of the study area and at the northeast of the study area.

#### 5.1.1.1 AHIMS ID [REDACTED] (southwest of the study area).

AHIMS ID [REDACTED] is located within [REDACTED] and is [REDACTED] of the study area.

The site was recorded as a rock shelter-shell midden. The environment of the site was an open forest including steep hills, medium slopes and highly vegetated. The large rock shelter is 2.5m high, with a blackened roof, and trees and ferns were situated above on a rocky ledge. Fern roots overhung the entrance of the shelter which had an uneven sandstone floor with orange sediment. The shelter was dry inside with the drip line located off the overhang; midden shells (predominately oyster and cockle) were located inside. The site is approximately 10m east of water. The condition of the rock shelter was noted to be weathered and demonstrated low disturbance.

#### 5.1.1.2 AHIMS ID [REDACTED] (southwest of the study area)

AHIMS ID [REDACTED] is a PAD located within [REDACTED] approximately [REDACTED] southwest of the study area. This site was recorded on the 5 November 2011 when it was observed during track work and regular monitoring. The site was within a closed forest with hills and low slopes which includes shelter formations (see above) and rock surfaces. The condition of the site was noted to be weathered.

#### 5.1.1.3 AHIMS ID [REDACTED] (m southeast of the study area)

AHIMS ID [REDACTED] is located within [REDACTED] in the suburb Greenwich, on the lower North Shore. The site is approximately [REDACTED] southeast of the study area. It was recorded in 2017 as part of a Due Diligence assessment carried out for the school. The site was mentioned in the Department of Education's 170 register as possibly art. It is a closed site, which includes an art feature, located near the western end of a line of low rock overhangs. The site lies within a landform of undulating plains, urban residential housing, coastal rock platforms and revegetated areas. The condition of the site is disturbed by modern graffiti/painting. It has traces of ochre and charcoal. The site card notes that it is difficult to tell if the site is Aboriginal in origin, because it mostly appears modern -however there is prior mention of a site at this location.

#### 5.1.1.4 AHIMS ID [REDACTED] (west of the study area)

AHIMS ID [REDACTED] is located in [REDACTED] and is approximately [REDACTED] from the study area. It was recorded in 1997 as part of an archaeological survey of metropolitan Sydney. The site is an open campsite on high ground, which includes stone artefacts (materials include, red silcrete, quartz, and indurated mudstone). It was noted that some shells were found on site (Sydney Rock oyster and Sydney cockle, probably for tool use). The environment of the site is known to be a forest zone; however it is close to a built-up area. The site is disturbed by park development.

#### 5.1.1.5 AHIMS ID [REDACTED] & AHIMS ID [REDACTED] ([REDACTED] from the study area)

There are two sites located within [REDACTED] to the west and [REDACTED] to the east. AHIMS site [REDACTED] is named [REDACTED] and AHIMS site [REDACTED] is known as [REDACTED]. AHIMS [REDACTED] is approximately [REDACTED] northeast, while AHIMS [REDACTED] is [REDACTED] northeast from the study area. AHIMS [REDACTED] was recorded on the 27 February 2007, while AHIMS [REDACTED] was originally recorded on the 8 January 2018, then updated on the 12 February 2020.



AHIMS [REDACTED] is an open lithic scatter, while AHIMS [REDACTED] was noted as an artefact and PAD site. AHIMS [REDACTED] was positioned in a low order creek bank of an 2nd order tributary, the local rock being Bringelly shale, and amongst shale hill woodlands, vegetated by eucalyptus, olive trees and low shrubs. AHIMS [REDACTED] is situated around rolling hills, open woodlands and established urban area. The conditions of both sites were noted as partially disturbed caused by sewer construction in early 1912 and the construction of M1 Gore Hill Freeway, removing sub-surface archaeological potential. AHIMS [REDACTED] was assessed as having high social/cultural significance at the local level as it provides tangible evidence of the use of the area by Aboriginal people. It also holds moderate scientific significance because of the rarity of artefact scatters, which are uncommon site type in Sydney city region due to development.

## 5.2 Previous archaeological investigations

Several archaeological investigations were completed with [REDACTED] of the study area. Artefact (2016) carried out an Archaeological Assessment for Sydney Metro's proposed line between Chatswood to Sydenham which incorporated construction sites in Artarmon, Crows Nest, Victoria Cross and Blues Point. While the survey included an area up to 8 km from the study area, only selected summaries of reports within closer to the study area are included here. This ACHAR also draws upon an Aboriginal Cultural Heritage Assessment carried out by AMBS (2008) which carried out a survey of works carried out up to [REDACTED] of the study area.

### 5.2.1 1-8 Nield Avenue, Greenwich (AMBS 2008) [REDACTED] southwest of the study area)

A due diligence assessment of a residential area located at 1-8 Nield Avenue was carried out by AMBS in 2008. 1-8 Nield Avenue is approximately [REDACTED] southwest of the study area. The area assessed was proposed for the development of a private hospital. The site was located on a steep slope and assessed as an unlikely area for a camp site; the closest watercourse was 350m away to the northwest.

### 5.2.2 Royal North Shore Hospital (Artefact 2016) ([REDACTED] southeast)

An Aboriginal heritage assessment of the Royal North Shore Hospital site did not identify any Aboriginal objects or areas of archaeological potential (Steele 2006). Survey observations by Steele noted the highly disturbed context of that area, which included 'clearance of original timber and consequent heightened natural erosion, and more significantly by the extensive earthworks and construction works associated with the building of the hospital complex' (Steele 2006: 26)

### 5.2.3 Beaches Link and Gore Hill Freeway Connection (Jacobs 2020) (closest point is [REDACTED] north)

Jacobs prepared an ACHAR for a project located [REDACTED] north of the study area. The Jacobs ACHAR identified 11 locally significant Aboriginal cultural places within their project area. These sites were identified during the archaeological assessment bar one previously registered site which, during the field inspection, was identified as having been damaged. It was assessed that the majority of impacts to these sites would occur during the construction stage of the project, and that damage would range from complete destruction to minor modification of the Aboriginal sites. The ACHAR outlines management recommendations for the Aboriginal sites located in, or within 50m of, the study area. Consultation process was completed as per the legislation.

#### 5.2.4 F2 (now M2) Freeway (Artefact 2016) (closest point is [REDACTED] north)

Artefact (2016) reported that during an archaeological survey in 1989 undertaken along the route of the F2 [now M2]-Castlereagh Freeway, Laila Haglund located two rock shelters with archaeological deposit. Both shelters (AHIMS site [REDACTED] and AHIMS site [REDACTED]) contained middens with oyster and whelk shell, and one also had possible remnants of stencil art along the back wall.

AECOM (2010) carried out further investigations along the route of the proposed M2 upgrade in 2009/2010 between Lane Cove Road in North Ryde, and Windsor Road at Baulkham Hills. AECOM confirmed and discovered a total of fifteen Aboriginal sites within the M2 corridor.

#### 5.2.5 Chatswood West (Total Earth Care 2007) ([REDACTED] northeast of study area)

Total Earth Care (2007) conducted an Aboriginal heritage and archaeological assessment of a property at 126 Greville Street, Chatswood West. The site was located on the western margin of the main Chatswood Ridge and associated with the incised drainage channels draining into Lane Cove River. Although the site was located adjacent to Blue Gum Creek, a tributary of Lane Cove River, Total Earth Care did not identify any Aboriginal objects or areas of archaeological potential. It was noted that there were no suitable areas for occupation within the site (2007: 11) and that the primary focus of occupation was likely to have been located closer to Lane Cove River (2007: 10).

The results suggest a close association of more frequent evidence of Aboriginal occupation in the area with estuarine resources of Lane Cove River and its major tributaries.

#### 5.2.6 Lane Cove National Park (Artefact 2016) (approximately [REDACTED] north)

Artefact (2016) note that in 1990 Conyers conducted a comprehensive survey of the Lane Cove River State Recreation Area (SRA), now known as Lane Cove National Park. Approximately one third of the SRA was surveyed and seven previously unrecorded Aboriginal sites were located - two engraving sites, two middens, and three rock shelters with deposit. Five potential habitation sites were also recorded along with three engraving sites which had previously been recorded.

In 2000 Bobbie Oakley (Artefact 2016) completed a survey for a proposed sewerage upgrade within Lane Cove National Park. Two new Aboriginal sites were located in the southern portion of the National Park. Both new sites ([REDACTED]) were shell midden scatters and associated areas of potential archaeological deposit (PAD). It was recommended that the sewer line should be redirected to avoid these sites, or if this was not possible, that further archaeological work, such as a test excavation, should be conducted.

In 2011 Artefact Heritage conducted a survey of an area along the northern edge of Stringybark Creek in Lane Cove West, approximately 4 km west from the study area. A previously recorded rock shelter with a charcoal drawing of two fish was relocated. Although the shelter had been disturbed by construction of a sewer pipe, the art remained in good condition. No new Aboriginal sites were located during the study.

### 5.3 Predictive model

Previous archaeological investigations of the greater Sydney area in general demonstrate the distribution of recorded Aboriginal sites as reflecting the use of the landscape by Aboriginal people, including movement between resources and activity areas. The distribution of recorded Aboriginal sites in particularly built-up environments, such as the Sydney CBD area, is largely limited to areas that have been subject to archaeological excavation and/ or not impacted by development.

The distribution of overlapping and higher concentrations of stone artefacts in the Sydney area tended to be associated with high order watercourses and creek confluences, whilst lower density and more isolated activity areas in other parts of the landscape represented different and varying activities important to the understanding of overall landscape use (White & McDonald 2010: 29-38).

The distribution of Aboriginal sites also demonstrates the association of recorded Aboriginal sites with sandstone outcrops, including sandstone platforms where engravings are typically identified, and sandstone overhangs that were utilised for art, subsistence activities and artefact manufacture.

The predictive statements for the broader area in which the study area lies are as follows:

- The survivability of Aboriginal objects would be largely dependent on the extent and nature of subsequent phases of historical construction activities
- Sub-surface artefact sites tend to consist of lower density isolated occurrences in areas away from major watercourses, including freshwater, marine and estuarine areas
- More frequent and higher concentrations of sub-surface artefact sites are likely to occur in the vicinity of major watercourses
- Sites such as engravings, art and middens are associated with sandstone outcrops and platforms.
- Shell midden sites are more likely to be identified near marine and estuarine areas.
- Sandstone shelters suitable for archaeological deposit and outcrops suitable for engravings may be preserved in ridge crest and ridge slope landform contexts.

### 5.3.1 A local model

AMBS (2008) also suggested a predictive model for the area surrounding Nield Avenue, Greenwich. They undertook a survey of AHIMS site within a [REDACTED] area which resulted in 57 sites (Figure 12). These were predominantly shelters with middens, or open middens; shelters with art and midden deposits; rock engravings, shelters with burial and midden deposits, stone scatters, middens with stone artefacts, open burial and midden sites, and axe grinding grooves. Of these, those sites within 1km of the Nield Avenue site, consisted of shelters with midden deposits (44%); middens (31%) and shelter with art & midden (9%).

AMBS (2008) concluded:

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*Most of the registered sites are located around the bays and peninsulas of Lane Cove River, apart from an axe grinding groove site and a midden near Flat Rock Creek, in the Naremburn area, c. 2km north east of the study area... This may reflect the early urban development of the inland area of North Sydney (including Greenwich), which would have precluded the preservation of sites and the necessity for archaeological assessment. Further development of these inland areas is likely to have destroyed many open sites, and previous investigations indicate that many sites in the North Sydney area have been subject to a high degree of disturbance...*

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Their predictions for the local area, which are pertinent for the study area, include the following:

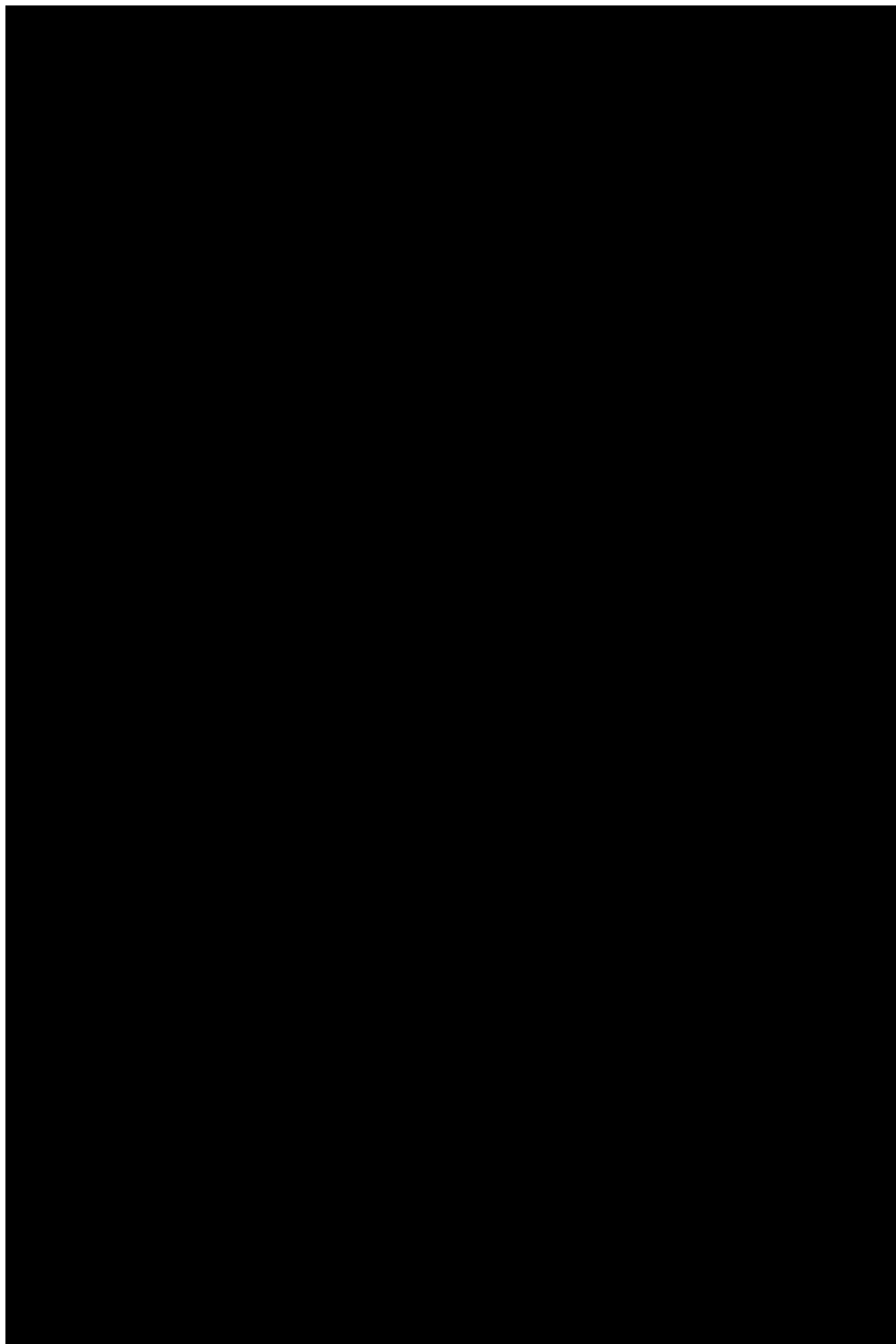
- While stone artefacts are most likely to be present in the landform, locations which have been significantly disturbed are unlikely to retain artefacts.
- While rock engravings or art sites may have been present on rocky outcrops, they are unlikely to have been preserved
- The presence of mature trees may indicate the presence of scarred trees or carved trees
- The presence of ground exposure may facilitate visibility and therefore the discovery of artefacts
- Quarry sites, axe grinding grooves, shelters and middens are associated with stony outcrops
- Burials and ceremonial sites are unlikely to be found in disturbed area.

The study area lies in the Glenorie soilscape, as does the Nield Street study area, for which the local predictive model was generated.

For the study area, the low rolling and steep hills which characterised the Glenorie landscape have been massively disturbed through decades of mining for the brick works in which the study area is located. While the Glenorie landscape may support the local predictive model, the evidence of disturbance suggested by the historical imagery does not support potential to find unrecorded Aboriginal sites. In addition, the demolition of the brickworks and rebuilding of commercial buildings on top of the study area suggests that there would be no remnant soil in which Aboriginal artefacts may be retained and that soils found on site are likely to be fill. This accords with the classification of the area as “Disturbed Terrain” by eSpade which describes areas longer displaying naturally occurring soil.

It seems highly unlikely that Aboriginal sites or potential will be found in the study area.

Figure 12. Location of AHIMS sites within [REDACTED] of Nield Avenue site (which is approximately [REDACTED] southwest of the study area) (AMBS 2008: Figure 3).



## 6.0 SITE SURVEY METHODOLOGY

### 6.1 Methodology

#### 6.1.1 Aims

The aims of the archaeological survey were to:

- Inspect the ground surface of the site
- Record any surface or potential subsurface Aboriginal sites that have not been recorded in AHIMS
- Identify areas of PAD that may be present in areas that have had no or minimal disturbance
- Engage with Metropolitan LALC regarding the proposed works and the archaeological potential of the study area
- Collect information to ascertain whether further archaeological investigation is required.

#### 6.1.2 Personnel

A site inspection was carried out on 16 August 2022 by Elizabeth Bonshek (Senior Heritage Consultant, Artefact) and Kelly Barton (Aboriginal Heritage Officer, Artefact) and Rowena Walsh-Jarrett (Site Officer, Metropolitan LALC).

#### 6.1.3 Constraints and limitations

Archaeological potential is closely related to levels of ground disturbance in the area. Other factors are also taken into account, such as whether artefacts were located on the surface, and whether the area is within a sensitive landform unit according to the predictive statements for the area. The potential for discovering artefacts lies in landforms which have been subject to a light to moderate disturbance.

#### 6.1.4 Aboriginal site definition

An Aboriginal site is generally defined as an Aboriginal object or place. An Aboriginal object refers to any deposit, object or material evidence (not being a handicraft) relating to Aboriginal habitation of the area that comprises New South Wales (DECCW 2010). Aboriginal objects may include stone tools, scarred trees or rock art. Some sites, or Aboriginal places, can also be intangible and although they might not be visible, these places have cultural significance to Aboriginal people.

The Code of Practice states, in regard to the definition of a site and its boundary, that one or more of the following criteria must be used when recording material traces of Aboriginal land use:

- The spatial extent of any visible Aboriginal objects, or direct evidence of their location
- Obvious physical boundaries where present, for example mound site and middens (if visibility is good), a ceremonial ground
- Identification by the Aboriginal community on the basis of cultural information



## 6.2 Results

### 6.2.1 Description of area surveyed

The study area is approximately 14,000 m<sup>2</sup> in size and mostly covered by buildings, including a five-story carpark, open air car parking and truck loading docks.

The study area sits on a surface sloping from southeast to northwest and from northeast to southwest. However, large cuts have been made in the ground surface along the western boundary of the study area (Figure 13 and Figure 14). Located beyond the south side of the study area, at the end of Lanceley Place, a further cut into the rock, some 5 stories high, transects the terminus of Lanceley Place (Figure 15). Therefore, it is impossible to visually assess the original soilscape prior to the excavation of the study area.

Only a small proportion (approximately 1,000m<sup>2</sup>) of the study area comprises ground surface free of buildings or infrastructure. These areas are landscaped with grass lawn and located on the parts of the frontage on Lanceley Place where underground fire security systems were installed and large drainage outlets (Figure 18 and Figure 19). Young native trees were growing along parts of the frontage of Campbell Street (Figure 16). The soil in this area was covered with wood chips and leaf matter and visibility was poor (Figure 17).

A narrow strip of open ground was located on the southern boundary of the study area, between numbers 8 and 10 Lanceley Place. This area was not accessible safely and was photographed from the first floor of the multistorey carpark (Figure 22). The ground was covered by weeds, through which dead grass, branches and debris were visible. The concrete cladding on the cut wall was eroding and falling off into the corner of the space.

The study area had sealed (Figure 20) and unsealed carparking (Figure 21) consisting of blue metal.

No Aboriginal objects were identified within the study area, and no areas of archaeological potential were identified.

Visibility was close to zero and ground exposure was poor. These were assessed at 10%

**Figure 13.** View to north from multi-story car park at number 8 Lanceley Road. Original sandstone has been cut and covered with formed and poured in-situ concrete (left) and shotcrete (at centre).



**Figure 14.** View of same looking southwards towards the multi-story car park at number 8 Lanceley Road. Shotcrete at foreground eroding.



**Figure 15.** Ramp at rear of image rises and turns right directly in front of 5 storey high cut transecting the terminus of Lanceley Place.



**Figure 16.** Landscaped area along Campbell Street frontage.



**Figure 17.** Ground surface with leaves and bark debris covering surface of dirt and small stones and gravel.



**Figure 18.** Drainage located along Lanceley frontage





**Figure 19. Fire security system installed in landscaped area along Lanceley Place frontage.**



**Figure 20. Sealed parking areas between buildings.**



**Figure 21. Unsealed parking area along Campbell Street.**



**Figure 22. Open area on southern boundary of the study area located between numbers 8 and 10 Lanceley Road.**



### 6.2.2 Archaeological survey coverage

The study area was covered in 1 survey unit.

The study area comprises 14,000 m<sup>2</sup>. Approximately 93% of the study area was built over with carparks, offices, studios and parking or loading areas. The small amount of land that was visible had been landscaped and contained fill. Visibility was very poor to zero.

Table 7 presents a summary of the level of visibility and exposure at the site to determine the effective coverage of the study area and takes into consideration the effective coverage of the landform. Effective coverage was 10%. Ground surface visibility was less than 10%.

The Landform survey coverage is presented in (Table 8): the effective coverage of the landform was 1%.

**Table 7. Effective survey coverage**

Survey unit	Landform	Survey unit area (sq. m)	Visibility (%)	Exposure (%)	Effective coverage area (sq. m)	Effective coverage (%)
1	Slope	14000	10	10	140	1

**Table 8. Landform survey coverage**

Landform	Landform area (sq. m)	Area effectively surveyed (sq. m)	% of landform effectively surveyed	Number of sites identified
Slope	14000	140	1	0

## 7.0 DISCUSSION

Archaeological potential is closely related to levels of ground disturbance in the area. Other factors are also taken into account, such as whether artefacts were located on the surface, and whether the area is within a sensitive landform unit according to the predictive statements for the area. The potential for discovering artefacts lies in landforms which have been subject to a light to moderate disturbance.

In summary, the study area was assessed as having nil to low archaeological potential based on the following:

- no artefacts have been registered in the study area
- no artefacts were found across the study area during the site visit
- historical images show that the study area has been disturbed through prior excavation for brickworks which were undertaken from at least the 1930s up to the 1960s
- the construction of several office buildings and studios and associated infrastructure including truck loading docks and carparks and landscaping would have further impacted a previously disturbed area with compromised soil integrity
- the predictive model for the area suggests that Aboriginal artefacts and areas of potential might be found in areas close to water and rocky outcrops or areas with exposed soil. The study area lies more than 200 m from watercourses: Gore Creek is 447m away and Flat Rock Creek is 927m away and there is no remnant soil in the study area
- the predictive model for the area suggests that Aboriginal artefacts and areas of potential might be found in areas which have not been disturbed. The study area is disturbed
- The site officer of the Metropolitan LALC was in agreement that the study area was disturbed.

In summary, there is nil to low archaeological potential in the study area due to previous disturbance through quarrying activities and subsequent construction.



## 8.0 SIGNIFICANCE ASSESSMENT

### 8.1 Significance assessment methodology

An assessment of the cultural heritage significance of an item or place is required in order to form the basis of its management. *The Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH 2011) provides guidelines for heritage assessment with reference to the *Burra Charter* (Australia ICOMOS 2013). The assessment is made in relation to four values or criteria (Table 9). In relation to each of the criteria, the significance of the subject area should be ranked as high, moderate, or low.

Cultural heritage consists of places or objects, that are of significance to Aboriginal people. Cultural heritage values are the attributes of these places or objects that allow the assessment of levels of cultural significance.

Assessing the cultural significance of a place or object means defining why a place or object is culturally important. It is only when these reasons are defined that measures can be taken to appropriately manage possible impacts on this significance. Assessing cultural significance involves two main steps, identifying the range of values present across the study area and assessing why they are important.

Social/cultural heritage significance should be addressed by the Aboriginal people who have a connection to, or interest in, the site. As part of the consultation process the Aboriginal stakeholders were asked to provide information on the cultural significance of the study area. Information on consultation with Aboriginal stakeholders for the project is provided in Section 3.1.

**Table 9. Burra Charter Heritage significance criteria**

Criterion	Description
Social	The spiritual, traditional, historical or contemporary associations and attachments the place or area has for Aboriginal people. Social or cultural value is how people express their connection with a place and the meaning that place has for them. Does the subject area have strong or special association with the Aboriginal community for social, cultural or spiritual reasons?
Historic	Historic value refers to the associations of a place with a historically important person, event, phase or activity in an Aboriginal community. Is the subject area important to the cultural or natural history of the local area and/or region and/or state?
Scientific	This refers 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 values will be gathered through any archaeological investigation carried out. 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?
Aesthetic	This refers to the sensory, scenic, architectural and creative aspects of the place. It is often linked with the social values. It may consider form, scale, colour, texture and material of the fabric or landscape, and the smell and sounds associated with the place and its use. Is the subject area important in demonstrating aesthetic characteristics in the local area and/or region and/or state?

In addition to the four criteria, Heritage NSW (OEH 2011; 10) requires consideration of the following:

- 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?

## 8.2 Socio/cultural significance

Socio/cultural heritage values should be addressed by Aboriginal people who have a connection to, or interest in, the area.

The RAPs did not share any specific socio/cultural heritage values attached to the study area.

## 8.3 Historic significance

Historic values refer to the association of place with aspect of Aboriginal history. Historic values are not necessarily reflected in physical objects, but may be intangible and relate to memories, stories, or experiences.

The RAPs did not share any specific historical significance attached to the study area.

## 8.4 Scientific significance

Scientific values refer to a site's potential to contribute to our current understanding and information.

As there are no archaeological values in the site, there is no scientific significance.

**Table 10: Scientific significance assessment**

Site Name (AHIMS ID)	Research potential	Representativeness	Rarity	Education potential	Overall significance assessment
No AHIMS sites	None	None	None	None	None

## 8.5 Aesthetic significance

Aesthetic values refer to the sensory, scenic, architectural, and creative aspects of the place. These values may be related to the landscape and are often closely associated with social/cultural values.

The RAPs did not share any specific aesthetic significance attached to the study area.

## 8.6 Statement of significance

As there are no archaeological values in the site, there is no scientific significance. The study was assessed as having no specific socio/cultural, historic or aesthetic significance.

## 9.0 AVOIDING AND MINIMISING HARM

### 9.1 Proposed works

Key components of the proposed development include:

- Site preparation works including demolition, bulk excavation and removal of existing structures on the site, tree and vegetation clearing, and bulk earthworks;
- Construction, fit out and operation of a ten-storey, 80MVA data centre tower with a maximum building height of 52m and total gross floor area of 26,820sqm comprising:
  - At-grade parking for 39 car parking spaces and 2 accessible car parking spaces
  - Two (2) 12.5m loading dock spaces
  - Five (5) levels of technical data hall floor space with four (4) data halls per floor
  - Ancillary office space on each level
  - A lobby, offices and amenities located on the ground floor
  - Acoustic screen parapet
- Provision of required utilities, including:
  - Six (6) 100,000L above-ground diesel storage tanks
  - Eight (8) 414kL above-ground water tanks
  - Three (3) 33kV switch-rooms on site.
- Vehicle access provided via Campbell Street and Lanceley Place
- Pedestrian access provided via Lanceley Place
- Associated landscaping and site servicing
- Installation of services and drainage infrastructure

### 9.2 Impact assessment methodology

The definition of harm to an object or place under the NPW Act includes any act or omission that 'destroys, defaces or damages the object or place or in relation to an object –moves the object from land on which it had been situated.'

Direct harm may occur as a result of activities which disturb the ground surface including site preparation activities, earthworks and ground excavation, and the installation of services and infrastructure.

Indirect harm for Aboriginal heritage refers to impacts that may affect sites or features located immediately beyond or within the area of the proposed works. Indirect harm may include impacts from vibration, increased visitation, or increased erosion, including ancillary project activities (construction and/or operation) and water run-off that are not located within the study area.

### 9.3 Aboriginal heritage impact assessment

There were no Aboriginal objects or areas of potential identified in the study area.

The study area was assessed as having nil – low potential to contain Aboriginal objects because the original ground surface had been removed and subsurface excavation has been carried out over a number of decades which would have impacted any existing archaeological deposit.

Therefore, the proposal is unlikely to impact Aboriginal objects.

## 9.4 Ecological Sustainable Development principles

In accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales*<sup>1</sup>, the principles of ecologically sustainable development have been considered in preparation of this Aboriginal heritage assessment, including options to avoid impacts to Aboriginal cultural heritage, assessment of unavoidable impacts, identification of mitigation and management measures, and taking account of Aboriginal community views. The principles of ecologically sustainable development are detailed in the NSW *Protection of the Environment Administration Act 1991*. Principles of ecologically sustainable development relevant to the assessment of the project as it relates to Aboriginal cultural heritage are considered below.

### 9.4.1 The integration principle

Decision making processes should effectively integrate both long term and short term economic, environmental, social and equitable considerations (the ‘integration principle’). The preparation of this ACHAR demonstrates regard for the integration principle by considering Aboriginal heritage values and impacts to these from the proposal during the planning phase. The nature of the proposal is in itself one that contributes to the long term economic and social needs of current and future residents of the area.

### 9.4.2 The precautionary principle

If there are threats of serious or irreversible environmental damage, lack of full scientific confidence should not be used as a reason for postponing measures to prevent environmental degradation (the ‘precautionary principle’). Archaeological assessment of the study area has been completed in accordance with the Code of Practice which resulted in the conclusion that no Aboriginal objects are present or likely to be present within the study area. In accordance with the requirements of the SEARs and the *National Parks and Wildlife Regulations (2019)*, full scientific investigation has been completed to inform this report. As such, further archaeological investigation is not required.

### 9.4.3 The principle of intergenerational equity

The proposed works would adhere, as close as possible, to the principle of intergenerational equity by collating scientific and cultural information on former Aboriginal occupation of the study area through the previous investigations and this ACHAR.

## 9.5 Cumulative impacts

A cumulative impact is an impact on Aboriginal cultural heritage resulting from the incremental impact of the action/s of a development when added to other past, present and reasonably foreseeable future actions. All archaeological material is a non-renewable resource and any impact to archaeological material constitutes a cumulative impact. As there are no Aboriginal objects of places

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<sup>1</sup> Office of Environment and Heritage 2011



within the study area, the proposed works will not generate cumulative impacts to Aboriginal archaeological material.

## 10.0 MANAGEMENT AND MITIGATION MEASURES

### 10.1 Guiding principles and proposed mitigation measures

The overall guiding principle for cultural heritage management is that Aboriginal heritage should be conserved. If conservation is not practical, measures should be taken to mitigate against negative impacts to Aboriginal sites. The nature of the mitigation measures recommended in this instance is primarily based on an assessment of archaeological potential and significance.

Archaeological mitigation measures vary depending on the assessment of archaeological significance of a particular Aboriginal site and are based on its research potential, rarity, representative and educational value. In general, the significance of a site would influence the choice of preferred conservation outcomes and appropriate mitigation measures, usually on the following basis:

- **No archaeological significance** - No further assessment or mitigation required
- **Low archaeological significance** – Conservation where possible, but usually no mitigation required if impacts are unavoidable.
- **Moderate archaeological significance** – Conservation where possible. If conservation is not practicable, excavations or similar mechanisms determined in consultation with the Aboriginal community may be necessary.
- **High archaeological significance** – Conservation as a priority. Only if all practicable alternatives have been exhausted would impacts be considered justified. Comprehensive excavations may be necessary.
- **Unknown archaeological significance** – further investigation required to determine significance. It is not possible to appropriate mitigation measures without adequate assessment of significance. Further investigations, such as test excavations, are not mitigation measures.

Archaeological assessment has confirmed that the study area is of no archaeological significance. Consequently, no further assessment or mitigation is required.

### 10.2 Ongoing consultation with registered Aboriginal parties

Consultation with RAPs would continue throughout the life of the project, if necessary. For instance, ongoing consultation with RAPs would take place in the event of any unexpected Aboriginal objects being identified during works (see Unexpected Finds Policy below).

### 10.3 Changes to the proposed works

This ACHAR is based upon the project information available. Any significant changes to the design that extends outside the current project site will be assessed by an archaeologist in consultation with the RAPs. Any changes that may impact on Aboriginal sites not assessed during the current study may warrant further investigation and result in changes to the recommended management and mitigation measures.

## 10.4 Unexpected finds

An unexpected finds policy would be implemented in the event of any unexpected finds of Aboriginal sites, objects, or archaeological deposits being identified during construction.

An unexpected archaeological finds policy would involve the following actions:

- Stop work within the affected area, protect the potential archaeological find, and inform environment staff or supervisor
- Contact a suitably qualified archaeologist to assess the potential archaeological find
- If Aboriginal archaeological material is identified, works in the area should cease, and NSW Heritage should be informed. Further archaeological mitigation may be required prior to works recommencing
- If human remains are found:
  - Immediately cease all work at the particular location
  - Notify site manager and project archaeologist
  - Notify NSW Police
  - Notify Heritage NSW on the Environment Line 131555 as soon as practicable and provide details of the remains and their locations
  - Notify the Metropolitan LALC
  - Do not recommence any work at the location until cleared.

## 11.0 CONCLUSIONS AND RECOMMENDATIONS

The following results and recommendations are based on consideration of the requirements of Aboriginal heritage guidelines including:

- The Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010a) – known as The Code of Practice
- Guide to investigating and assessing and reporting on Aboriginal Cultural Heritage in New South Wales (OEH 2011) – known as ACHAR guidelines.
- The Aboriginal Cultural Heritage consultation requirements for proponents 2010 (OEH 2010b)- known as Consultation Guidelines)
- The SEARs

This ACHAR assessed the study area as having nil-low potential to retain intact archaeological deposits that may contain Aboriginal artefacts based on the following:

- an extensive search of the Aboriginal Heritage Information Management System (AHIMS) which did not identify any sites listed in the study area
- no previously unrecorded Aboriginal sites or objects were identified within the study area during the site inspection
- in depth background research and assessment following an archaeological survey
- historical images support a history of extensive disturbance in the study area as a result of its location within a brick works and quarry which operated since at least the 1930s to the 1960s
- since the 1960s buildings have been demolished and replacements built over the study area, and new roads constructed around it, all of which would have further impacted the ground surface.
- the detrimental effects to soil integrity due to continued quarrying and later construction works has augmented already high levels of disturbance of the soil profile such that the study area and its surrounds are classified as “disturbed terrain”
- the predictive model for the study area does not support the likelihood of archaeological sensitivity being present because of extensive disturbance
- the site officer of the Metropolitan LALC was in agreement that the study area was highly disturbed
- as there are no archaeological values in the site, there is no scientific significance
- the completion of the consultation process with RAPs who were supportive of the project.

### Recommendations

Based on the results of this assessment and in accordance with Aboriginal heritage guidelines mandated in the SEARs for the proposal, the following recommendations are made:

- as the study area was found to be disturbed and to have a nil-low potential for Aboriginal objects to be located within it, it is recommended that further assessment is not required.
- as neither Metropolitan LALC site officer nor the RAPs identified any socio/cultural, historic or aesthetic significance associated with the study area, further assessment is not required.
- if changes are made to the proposal that may result in impacts to areas not assessed by this ACHAR further assessment would be required
- unexpected Aboriginal objects remain protected by the *National Parks and Wildlife Act 1974*. If any such objects, or potential objects, are uncovered in the course of the activity, all work in the vicinity should cease immediately. A qualified archaeologist should be contacted to assess the find and Heritage NSW and Metropolitan LALC must be notified.
- if human remains, or suspected human remains, are found in the course of the activity, all work in the vicinity should cease, the site should be secured, and the NSW Police and Heritage NSW should be notified.



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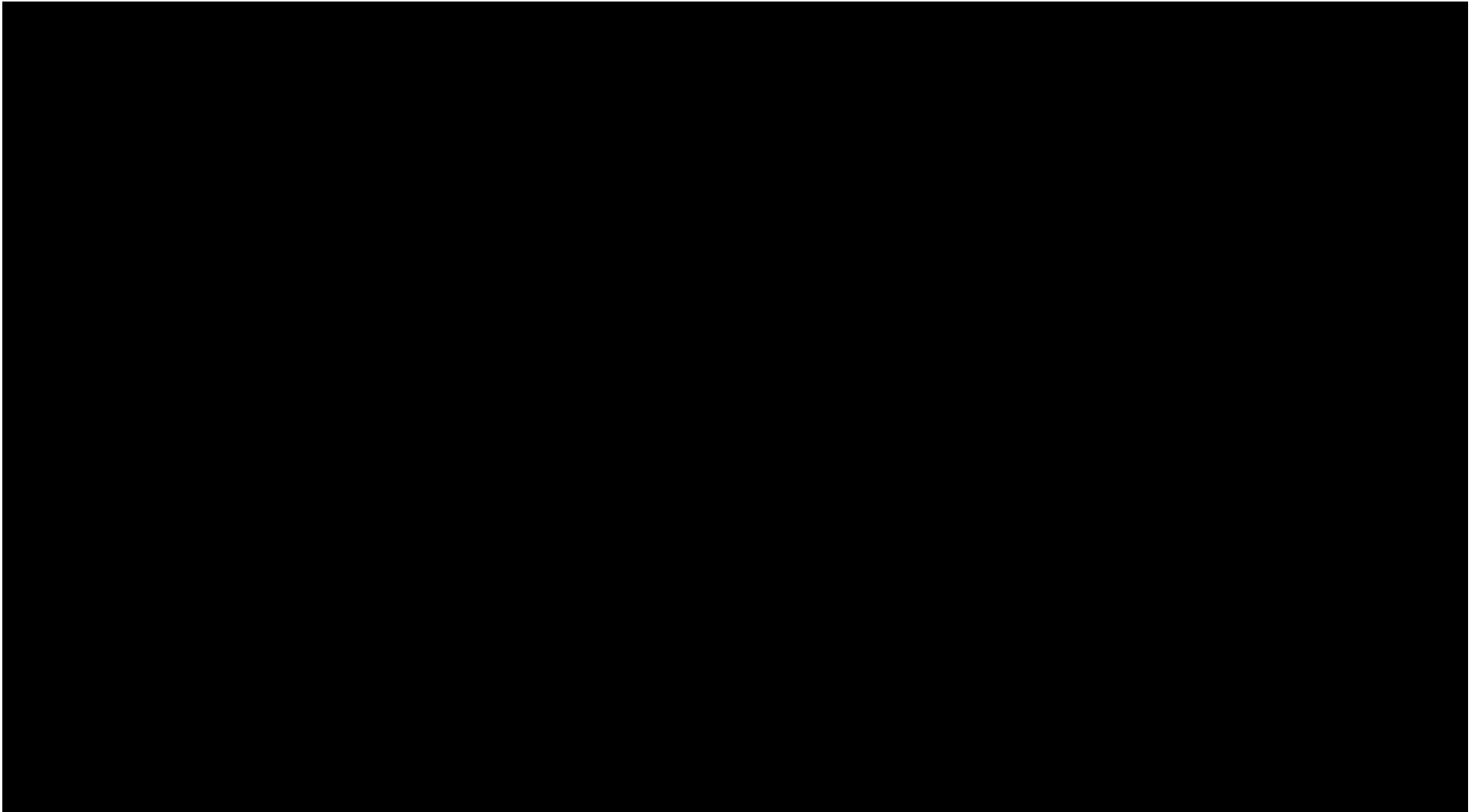
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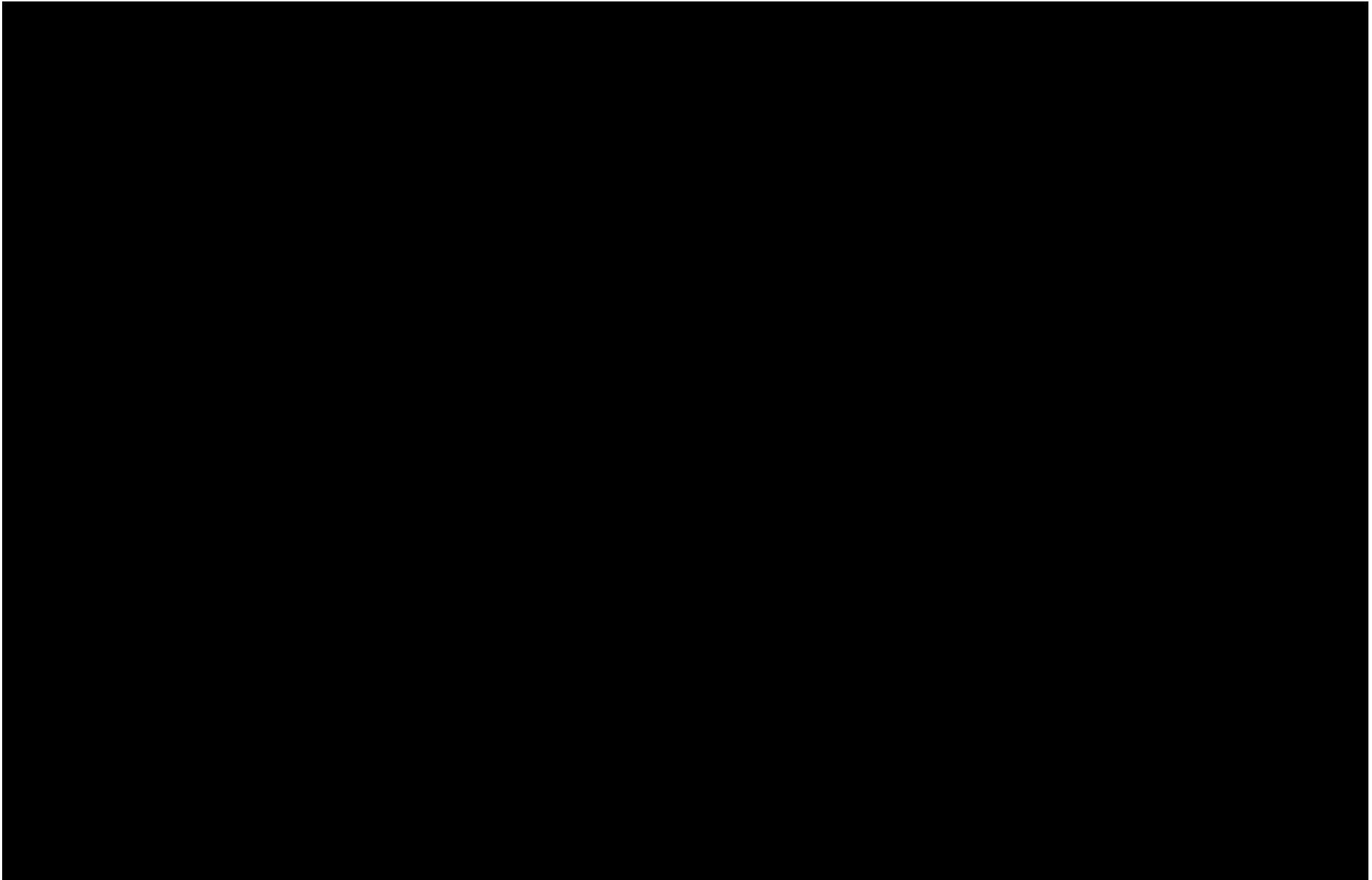
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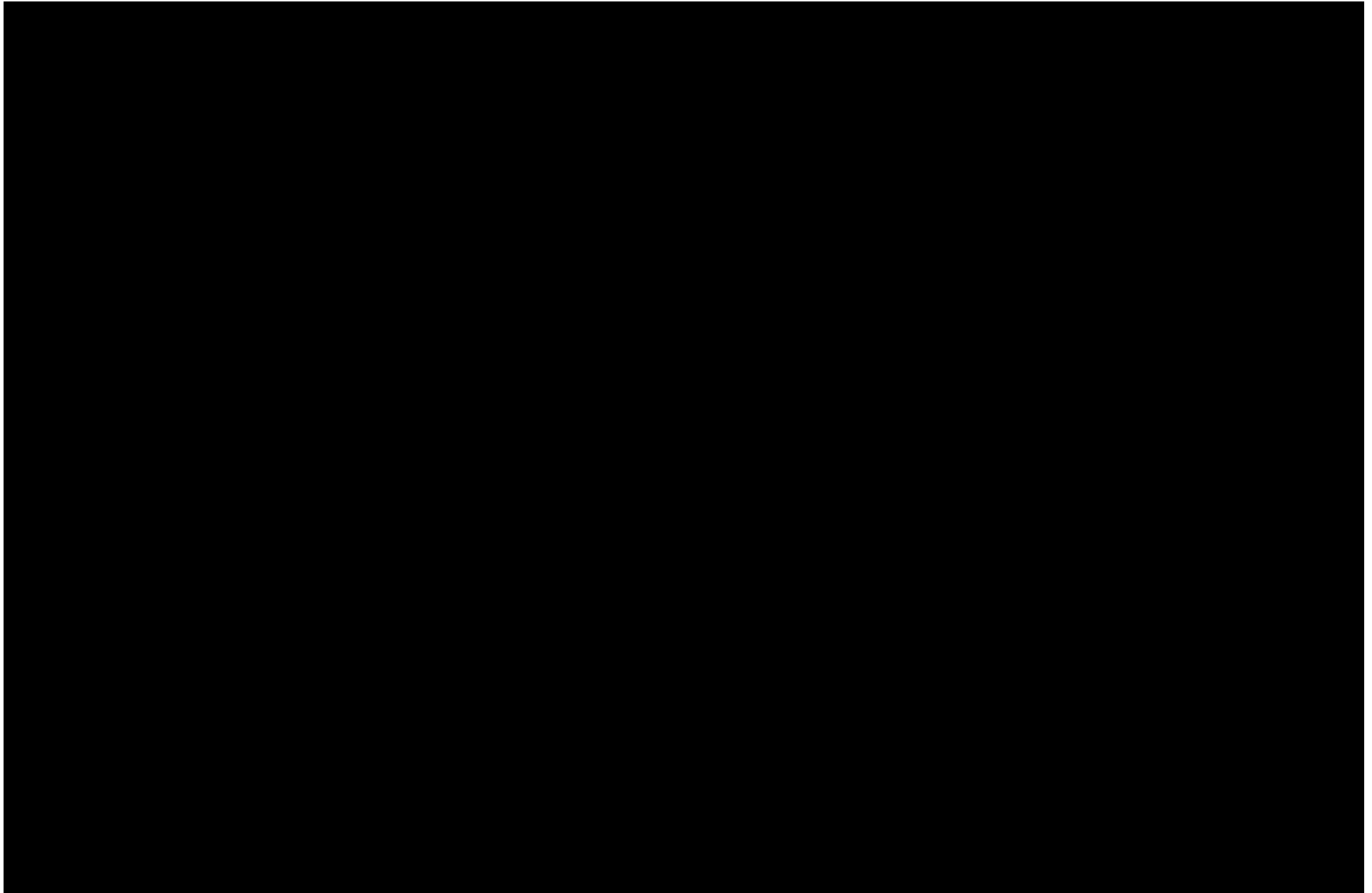
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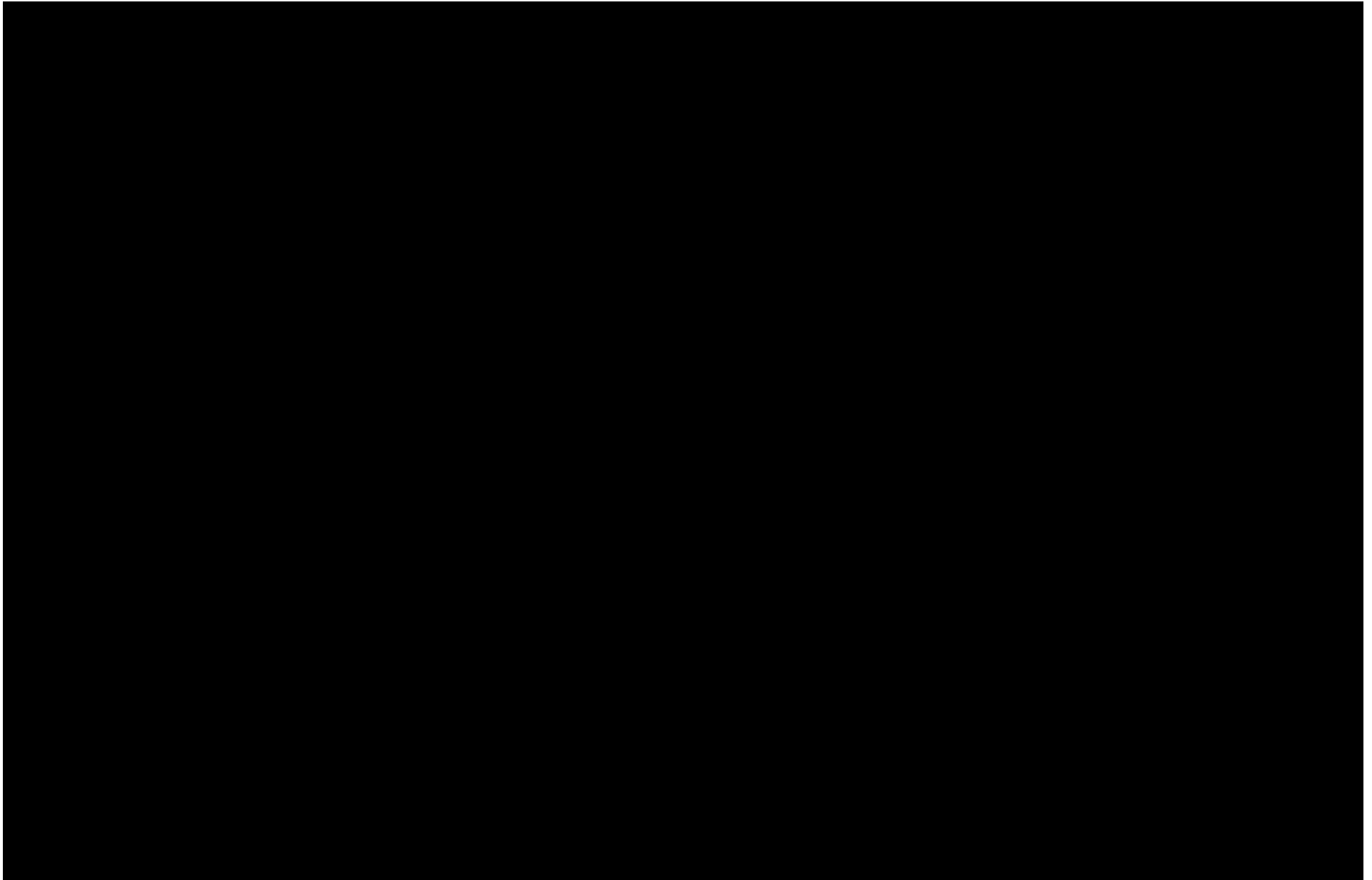
## 13.0 APPENDICES

### Consultation Log

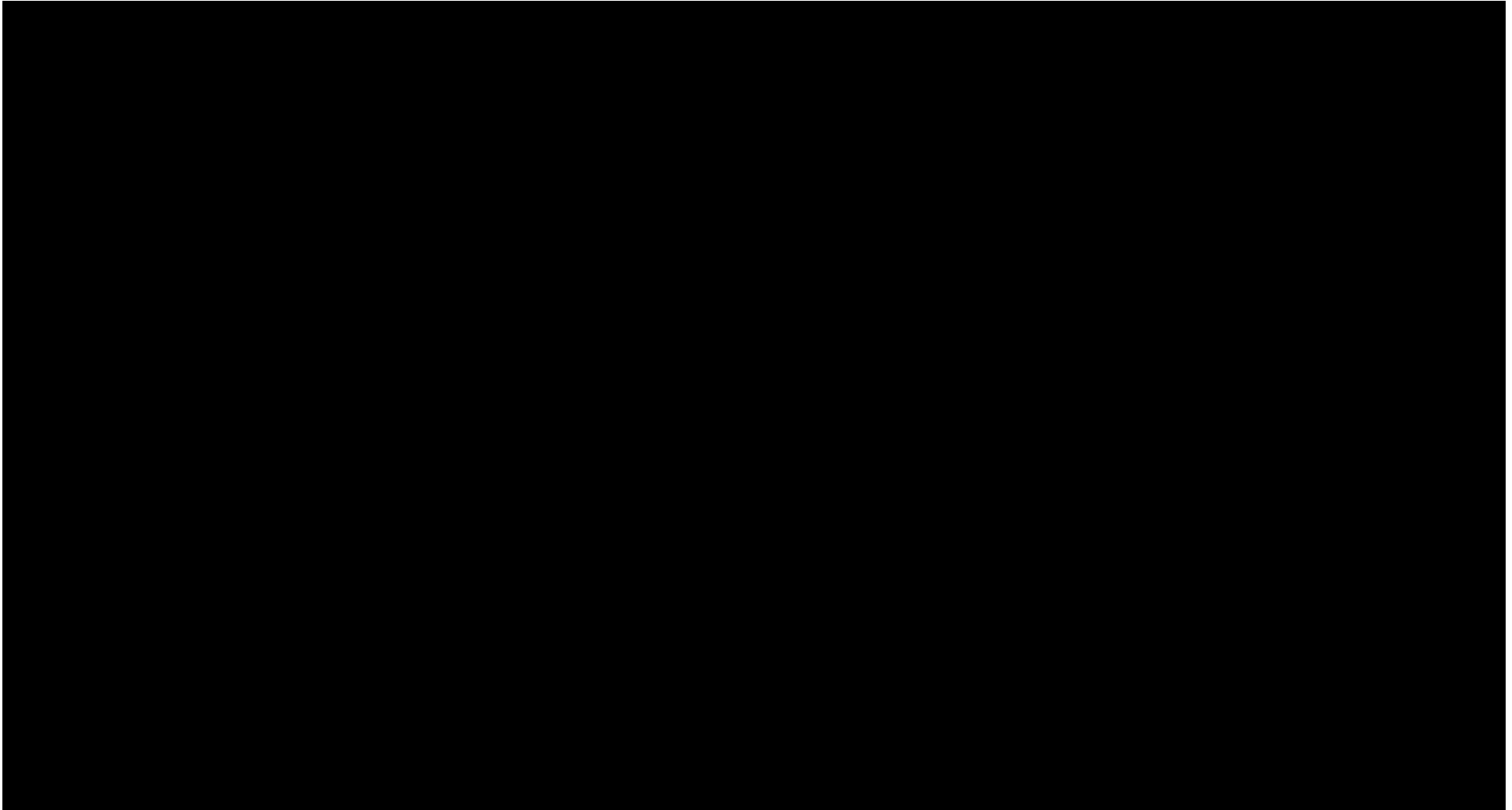


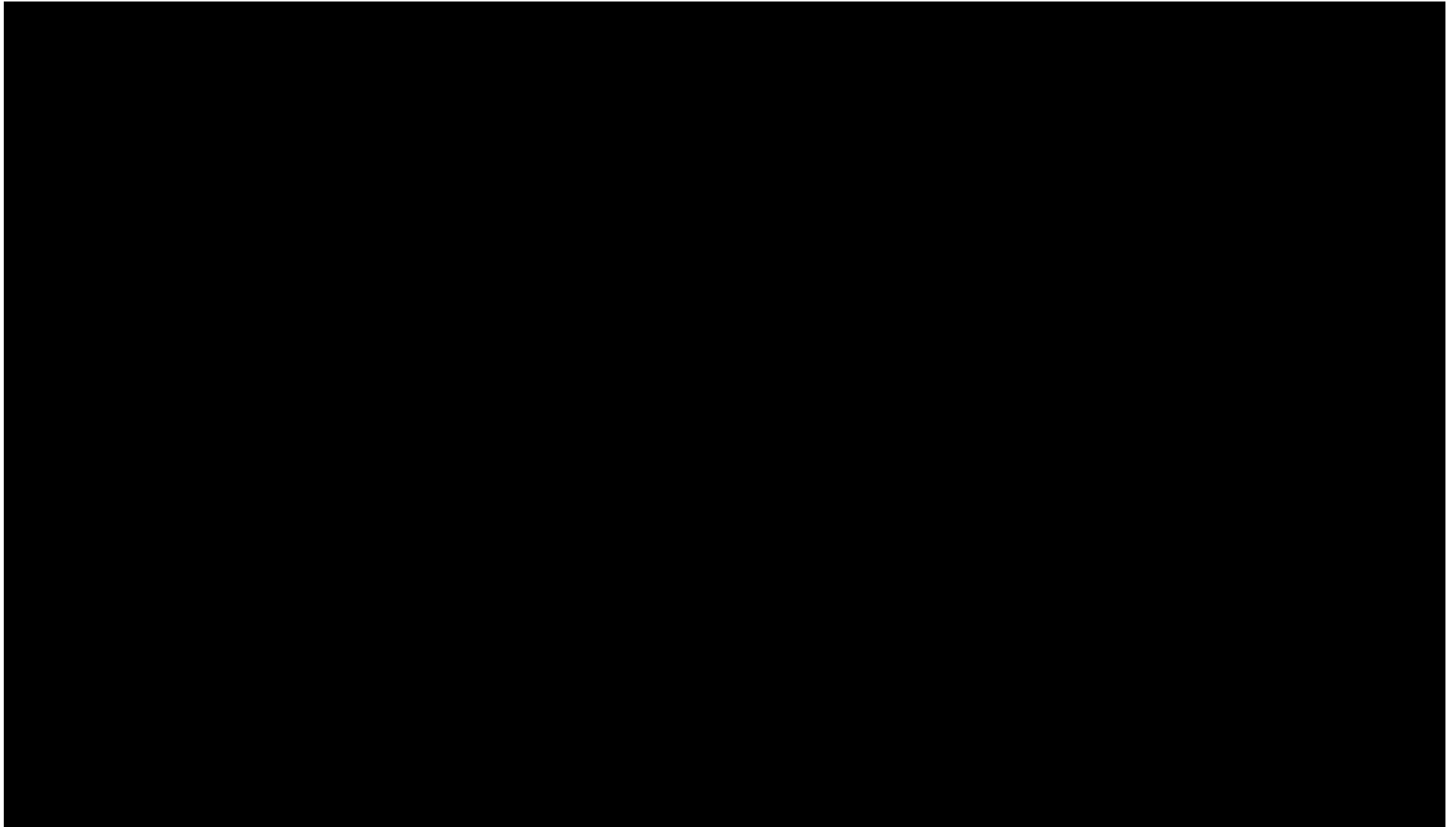


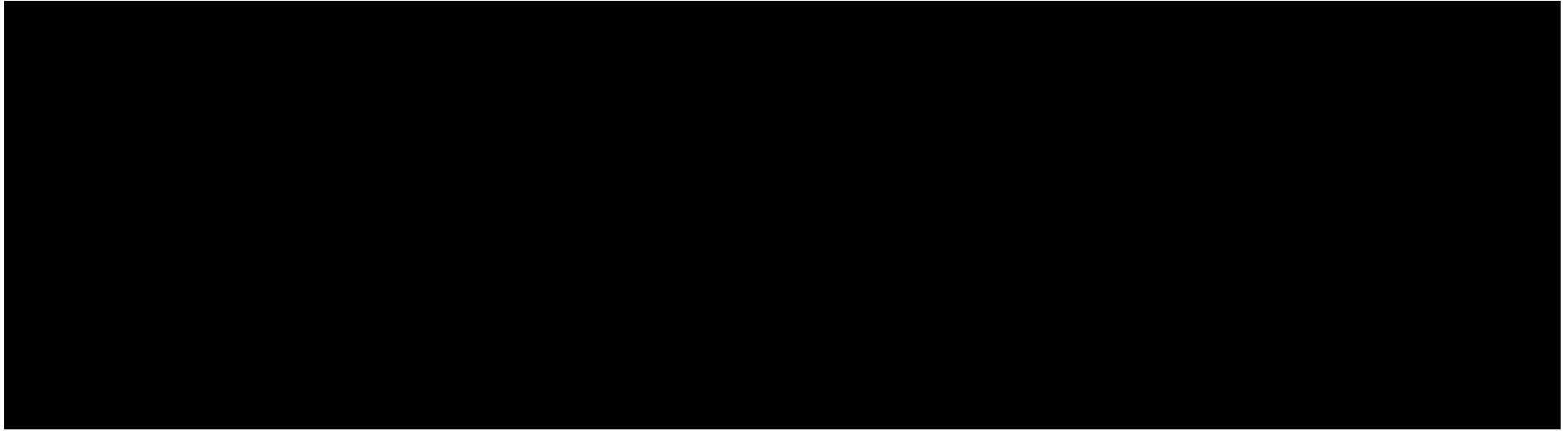


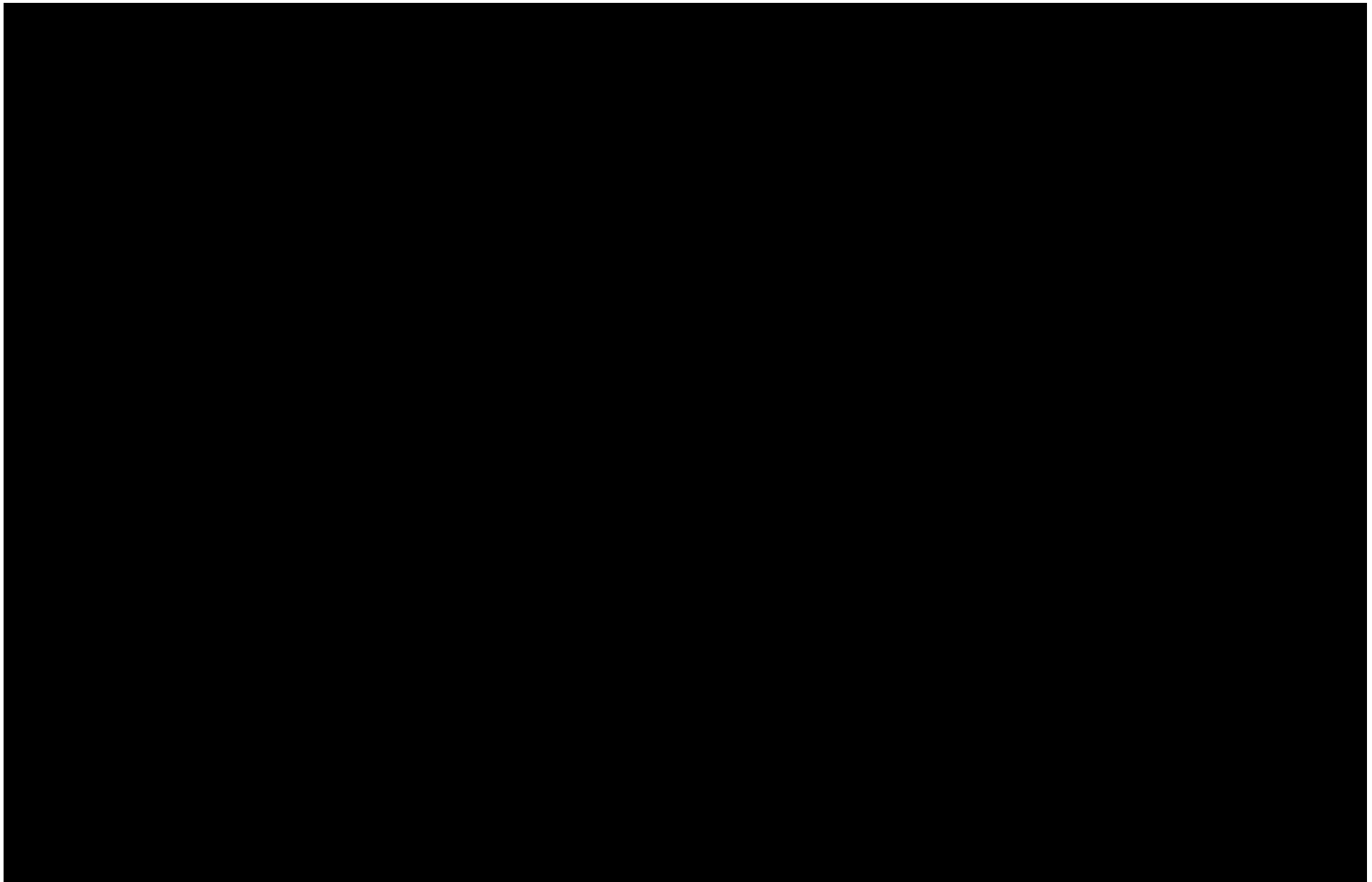


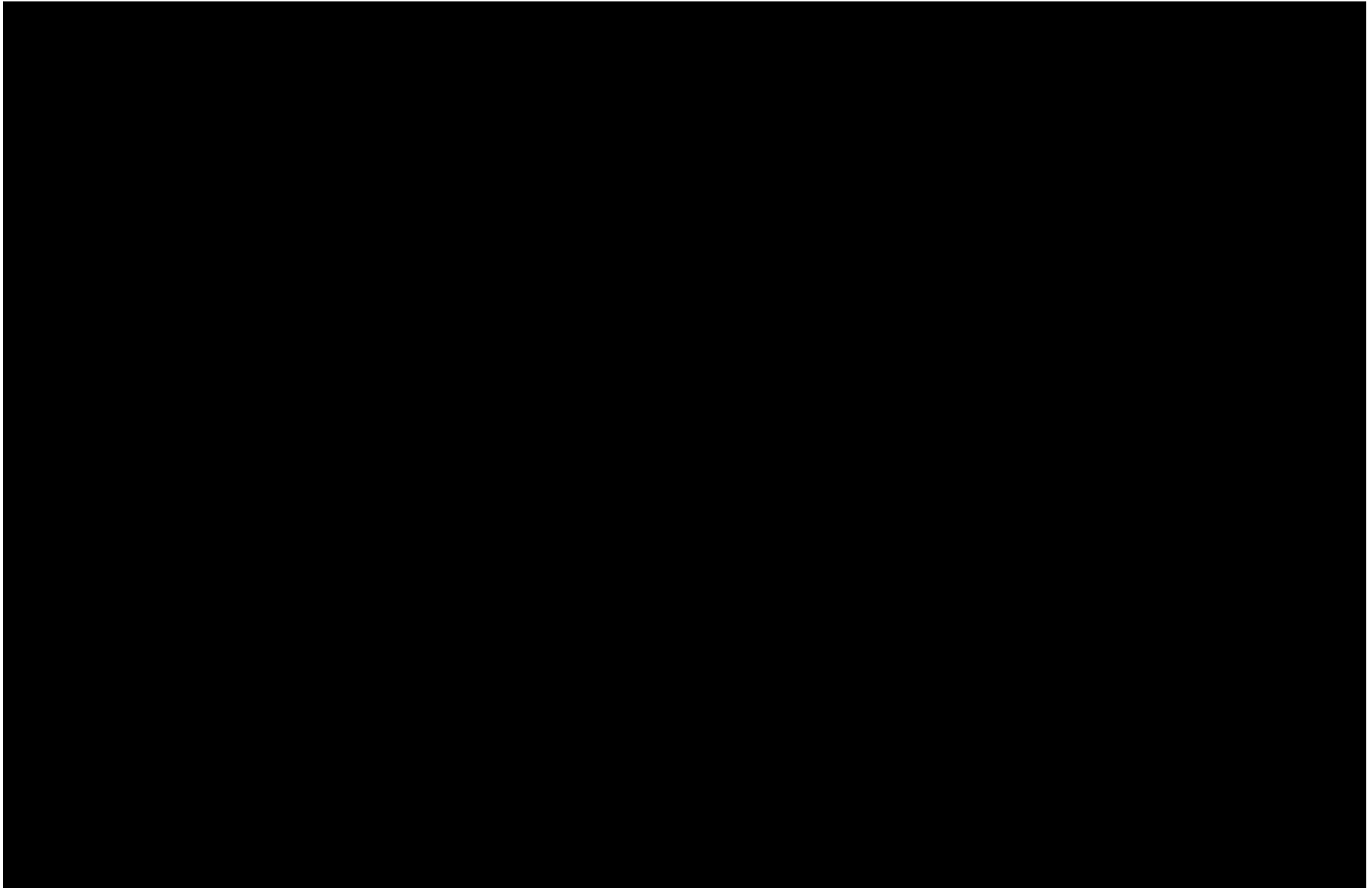




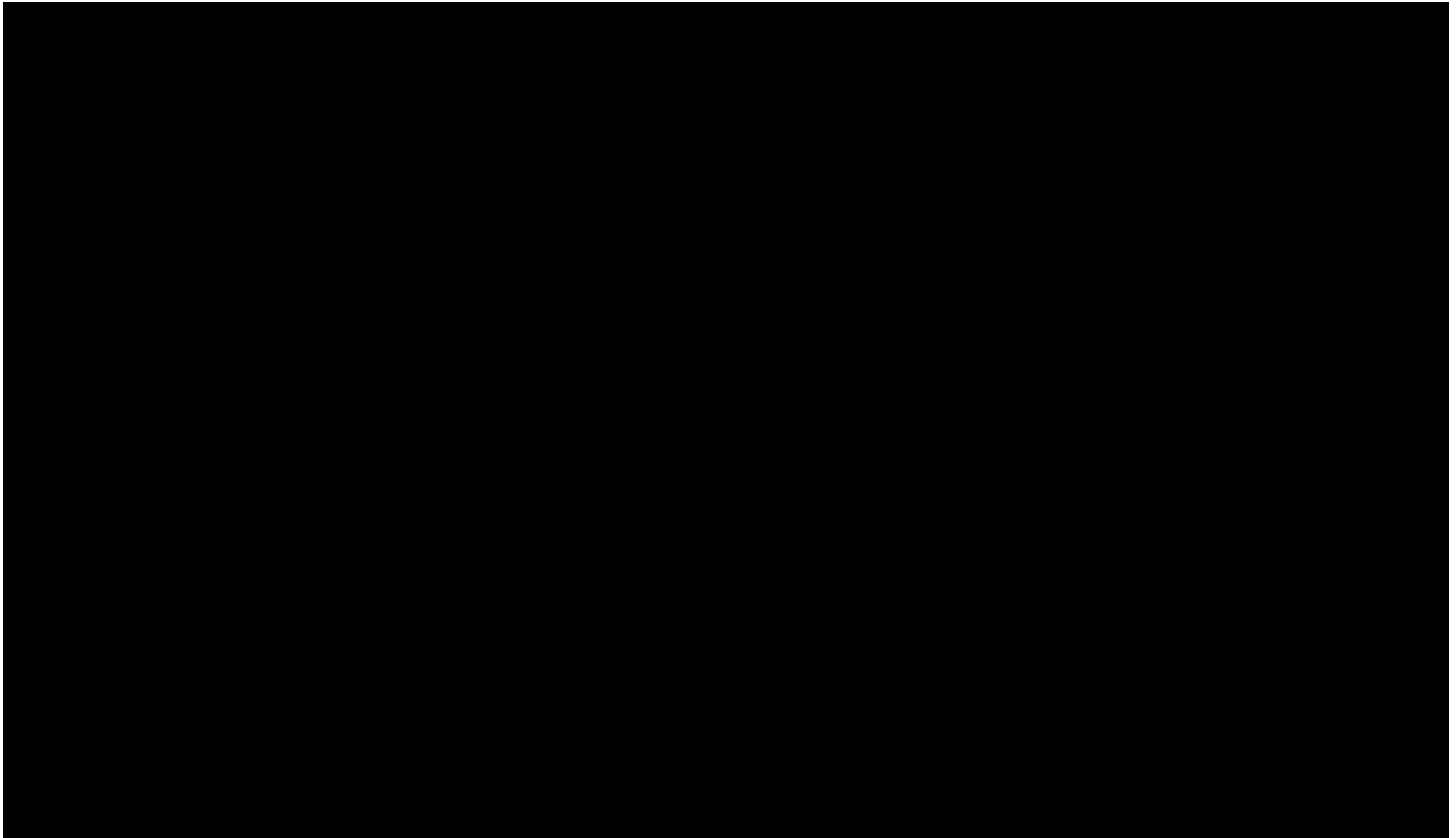














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