

Report on Preliminary Site Investigation

27 Lang Drive, Bolwarra Heights

304000998



Prepared for
SNL Building Constructions Pty Ltd

13 September 2023

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Our report is based on information made available by the client. The validity and comprehensiveness of supplied information has not been independently verified and, for the purposes of this report, it is assumed that the information provided to Stantec is both complete and accurate. Whilst, to the best of our knowledge, the information contained in this report is accurate at the date of issue, changes may occur to the site conditions, the site context or the applicable planning framework. This report should not be used after any such changes without consulting the provider of the report or a suitably qualified person.

Executive Summary

This report presents the findings of a Preliminary Site Investigation (PSI) undertaken by Stantec Australia Pty Ltd (Stantec) for a proposed residential development at 27 Lang Drive, Bolwarra Heights, NSW.

Stantec was commissioned by SNL Building Constructions Pty Ltd (the 'Client'), to prepare a Preliminary Site Investigation for the proposed residential subdivision within Lot 1/DP1156433, located at 27 Lang Drive, Bolwarra Heights, NSW (the 'Site'). The assessment area is shown on Figure 1, attached in Appendix A.

Stantec were provided with a layout plan of the proposed subdivision, prepared by GCA Engineering Solutions Pty Ltd (Project No. 22218LD, Drawing No. 202, Revision 1, Dated 27.03.2023). Based on review of the plans and discussions with the client, it is understood that the proposed subdivision comprises retention of the existing dwelling on Site, demolition of the existing shed structures on Site, creation of fourteen (14) large residential lots (1-14), and one (1) internal road.

The PSI included a Site inspection and desktop study of available historical data, including a review of the Maitland City Council (MCC) Planning Certificate, historical aerial photographs, and the NSW EPA database.

The assessment was undertaken with reference to the following guidelines:

- > 'NSW EPA (2020) guidelines for "Consultants Reporting on Contaminated Land, Contaminated land guidelines' [1]
- > '*National Environment Protection Measure (NEPM) for the Assessment of Site Contamination, 1999*' [2]
- > '*State Environmental Planning Policy (Resilience and Hazards)* [3]

Based on review of the Site history and subsequent Site inspection, Stantec have not identified any indications of gross contaminating activities having been undertaken on or adjacent to the Site. Potential contamination sources that have been identified are considered to be low risk and could be dealt with by following the recommendations outlined below.

The Site can be made suitable for the proposed land use, based on the recommendations below:

- > Implementation of the unexpected finds protocol, attached in Appendix D, to address any potential contamination if encountered during construction phase.
- > Assessment of any fill areas, transpiration beds & access tracks on Site for either potential reuse or offsite disposal. This can be undertaken during construction phase of the development under the unexpected finds protocol.
- > Any soil to be excavated and transported offsite for disposal require classification in accordance with the NSW EPA Waste Classification Guidelines.
- > Geotechnical assessment of the localised potential fill material for onsite reuse, if required.
- > Prior to demolition of any structures, structures should be assessed for hazardous materials. If hazardous materials are identified, the materials are to be managed accordingly.

In accordance with the State Environmental Planning Policy (Resilience and Hazards) [3], which requires the planning authority to consider whether the Site is suitable for the proposed usage prior to approving and determining a development application, Stantec has undertaken a Preliminary Site Investigation (PSI). Based on the findings of the PSI, the contamination status of the site is considered low, and Stantec have not identified gross contamination or potentially contaminating activities at the Site that would render the Site unsuitable for its proposed use as a residential subdivision.

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1 Introduction

This report presents the findings of a Preliminary Site Investigation (PSI) undertaken by Stantec Australia Pty Ltd (Stantec) for a proposed residential development at 27 Lang Drive, Bolwarra Heights, NSW.

1.1 Background

Stantec was commissioned by SNL Building Constructions Pty Ltd (the 'Client'), to prepare a Preliminary Site Investigation for the proposed residential subdivision proposed for Lot 1/DP1156433, located at 27 Lang Drive, Bolwarra Heights, NSW (the 'Site'). The assessment area is shown on Figure 1, attached in Appendix A.

Stantec were provided with a layout plan of the proposed subdivision, prepared by GCA Engineering Solutions Pty Ltd (Project No. 22218LD, Drawing No. 202, Revision 1, Dated 27.03.2023). Based on review of the plans and discussions with the client, it is understood that the proposed subdivision comprises retention of the existing dwelling on Site, demolition of the existing shed structures on Site, the construction of fourteen (14) large residential lots (1-14), and one (1) internal road.

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1.2 Purpose and Objectives

The purpose of this PSI is to provide the Client with preliminary advice on the contamination status of the Site and subsequent implications for the intended use. The PSI has reviewed current and historical activities undertaken at the Site and provides a preliminary environmental assessment of the potential for soil and/or groundwater contamination to be present on the Site.

The objectives of the PSI are:

- > To the extent practicable, identify the potential for past or present activities on; and surrounding the Site, to have impacted soil or groundwater at the Site.
- > Identify potential areas and contaminants of concern at the Site.
- > Identify potential receptors of concern and assess the potential for the protected beneficial uses of the land to be impacted due to contamination.
- > To make a preliminary assessment of whether contamination is likely to affect the future use or development of the Site.
- > Assess the requirement, if any, for further environmental investigation to assess or make the Site suitable for the proposed use.

1.3 Scope

Stantec carried out the following tasks in order to satisfy the purpose and objectives of the PSI assessment.

Defined the Site, Features & Surrounds:

- > Obtained the property title description from a Land-data Property Report.
- > Defined the Site boundaries based on title information, available data and established a Site base plan.
- > Identified the Site features.
- > Defined the topography, surface water drainage of the Site and its proximity to the nearest surface water body.

- > Identified the location of nearby sensitive environments and receptors such as residential, child-care and primary schools, wetlands, streams or rivers.
- > Identified the zoning of the Site under the local Planning Scheme.

Hydrogeology & Groundwater Resource Use

- > Ascertained the potential utilisation of groundwater at and near the Site through a search of the NSW Groundwater Database at NSW Office of Water website (within a radius of 500 m).

Review of Public Records on Site History

Review publicly available documents relevant to the Site (within a radius of 1km) including:

- > Historical and current maps of the area.
- > Selected historical aerial photos available from the Department of Lands.
- > Undertake review of the NSW EPA Contaminated Lands Register to identify nearby contaminated sites reported to the NSW EPA under section 60 of the CLM (1997).

Site Inspection & Surrounds

- > Confirmed the Site features and identified any visible evidence of fuel storage tanks (above or below ground) and other infrastructure with potential to act as a source of soil and/or groundwater.
- > Confirmed the soil type and looked for evidence of Site cutting and filling.
- > Assessed the surrounding area (to a radius of approximately 500 m) for potential sources of contamination of soil or groundwater at the Site.

Reporting

- > Preparation of this Preliminary Site Investigation (PSI) report to document the assessment activities and results to including findings and recommendations relevant to the objectives of the assessment.
- > Developed a Conceptual Site Model (CSM) for the Site, identifying complete and potential pathways between known and potential sources and receptors. This CSM is incorporated in this investigation report.

2 Site Inspection and Surrounding Environment

2.1 Site Identification

The subject Site details are presented in the table below. For Site location, refer to Figure 1 in Appendix A.

Table 2-1 Site Details

Site Address	27 Lang Drive, Bolwarra Heights, NSW, 2320
Lot Number and Deposited Plan	Lot 1/DP1156433
Site Area	Approx. 8.89 ha
Local Government Area	Maitland City Council
Relative Zoning	R5 - Large Lot Residential

2.2 Site Use & Infrastructure

A Site inspection was undertaken by Stantec on the 14th August 2023 to identify and map salient features of the Site and surrounding areas. Site features and observations are detailed in the table below with Site photographs attached in Appendix B.

Table 2-2 Site Features and Observations

Item	Observations
Site use	<ul style="list-style-type: none"> Rural/Residential
Weather condition	<ul style="list-style-type: none"> Sunny/overcast
Site slope and drainage features	<ul style="list-style-type: none"> A ridge line is located in the central portion of the Site, trending north. Slopes fall to the north, east and west of the ridgeline in the order of ~2-10°. Site slopes in the western portion of the Site fall to the north and east, in the order of ~2-5°. Several Drainage channels and / or gullies are present within the Site, generally following the existing landforms of the Site: <ul style="list-style-type: none"> A drainage channel located in the western portion of the Site, traversing southwest to northeast. Drainage channel located in the eastern portion of the Site, traversing south to north.
Nearby water bodies	<ul style="list-style-type: none"> A dam located in the eastern portion of the Site. A flood plain is located north-east of the site.
Site surface coverings	<ul style="list-style-type: none"> Site surface coverings predominately comprise grass pasture with a cluster of mature trees present in the central/eastern portion of the Site.
Surface soils	<ul style="list-style-type: none"> Surface soils on Site appear to comprise natural Sandy Silt / Silty Sand materials.
Site cut and fill	<ul style="list-style-type: none"> Minor cut and fill associated with building pads, under the dwelling and shed on Site. Minor cut and fill associated with the access track on the Site. An area of uncontrolled filling is noted in the form of a pad to the north of the dwelling on Site. No anthropogenic material was noted during the inspection, however the fill comprised grass coverage at the time of assessment.

Item	Observations
Buildings	<ul style="list-style-type: none"> A brick residential dwelling located in the eastern portion of the Site, with fibrous sheeting noted along the eaves. Two (2) Colourbond sheds located in the central portion of the Site.
Potential asbestos in building materials	<ul style="list-style-type: none"> Potential Asbestos Containing Materials (ACM) may be present in the eaves of the dwelling on Site, given the age of the structure
Manufacturing, industrial or chemical processes and infrastructure	<ul style="list-style-type: none"> Not observed. No access to contents of the sheds
Fuel storage tanks (USTs/ASTs)	<ul style="list-style-type: none"> Not observed.
Dangerous goods	<ul style="list-style-type: none"> Not observed. No access to contents of the sheds
Presence of stockpiles, fly tipping or anthropogenic materials	<ul style="list-style-type: none"> Small area of various stockpiled materials located along the southern boundary of the Site. Materials comprised timber, steel, concrete piping and fencing.
Liquid waste disposal features	<ul style="list-style-type: none"> Septic tank located within a cluster of mature trees, north of the dwelling on Site. A transpiration bed may be situated to the east of the dwelling.
Evidence of previous site contamination investigations	<ul style="list-style-type: none"> Not Observed.
Evidence of land contamination (staining or odours)	<ul style="list-style-type: none"> Not Observed.
Evidence of groundwater contamination	<ul style="list-style-type: none"> Not observed.
Groundwater use	<ul style="list-style-type: none"> Not Observed.
Vegetation	<ul style="list-style-type: none"> Predominately grass cover, with a cluster of mature trees surrounding the dwelling and shed.
Site fencing	<ul style="list-style-type: none"> Fencing on Site comprises wire picket and wooden fences.
Additional Notes and Observations	<ul style="list-style-type: none"> Small recreational fire pit located to the south of the large shed on Site.

2.3 Surrounding Environment & Land Uses

The Site is located within a rural residential area with land uses around the Site detailed in the table below.

Table 2-3 Surrounding Land Use

Direction	Land Use or Activity
North	<ul style="list-style-type: none"> Large lot residential subdivision located to the north.
West	<ul style="list-style-type: none"> Large lot residential subdivision located to the west.
East	<ul style="list-style-type: none"> Lang drive immediately bounds the Site, with environmentally managed land and a residential subdivision found further to the east.
South	<ul style="list-style-type: none"> Large residential lots found to the south.

The area is serviced by public roads and access to the Site is via Lang Drive, Bolwarra Heights.

3 Published Data

3.1 Regional Geology

With reference to the online government mapping tool, Minview [4], the Site is underlain by the Branxton Formation (Pmtb). The Branxton Formation is described to comprise of conglomerate, sandstone, siltstone' and residual soils derived from the weathering of these deposits.

3.2 Hydrogeology

A search of the online Australian Government Bureau of Meteorology tool, Australian Groundwater Explorer [5] found two (2) wells within 1 km of the Site. The searches are presented in the table below.

Table 3-1 Groundwater Boreholes within 1.5 km of the Site.

NSW Bore ID	Bore Type	Status	Bore Depth (m)	Height Datum	Salinity	Approximate distance from Site
GW204724	Water Supply	Functioning	72.0	AHD	-	325m west
GW200540	Water Supply	Unknown	22.2	AHD	3500	429m west

3.3 Acid Sulfate Soils

3.3.1 Maitland Local Environmental Plan (LEP) 2011

Review of the Maitland Local Environmental Plan (LEP) 2011 Acid Sulfate Soils Risk Map [6] indicates the Site is situated within Class 5 Acid Sulfate Soils. Class 5 indicates that "works within 500 metres of adjacent Class 1, 2, 3, or 4 land that is below 5 metres AHD and by which the watertable is likely to be lowered below 1 metres AHD on adjacent Class 1, 2, 3 or 4 land, present an environmental risk".

3.3.2 NSW Department of planning, industry and environment

Review of the online Government Website, eSpade [6] indicated that the Site is not mapped within an area of any known acid sulfate soils.

3.4 EPA Records Search

3.4.1 Contaminated Land Record of Notice

The Contaminated Land Record of Notice is maintained by the Office of Environment and Heritage (OEH) in accordance with Part 5 of the Contaminated Land Management (CLM) Act 1997 and contains regulatory notices issued by the Environment Protection Authority (EPA) in relation to contaminated sites.

A search of NSW EPA Record of Notices revealed no notices within 1km of Lot 1/DP DP1156433.

3.4.2 PoEO Public Register

The PoEO Public Register under Section 308 of the Protection of the Environment Operations (PoEO) Act 1997 contains Environment Protection Licences (EPLs), applications and notices issued by the EPA.

The search revealed no current or revoked/surrendered licensed activities within a 1km radius of the Site.

3.4.3 List of NSW Contaminated Sites Notified to the EPA

A search of the List of NSW Contaminated Sites Notified to the EPA didn't identify any contaminated sites within 1 km of the Site.

3.4.4 National Waste Management Site Database

A search of the list of sites that are part of the National Waste Management Site Database didn't identify any sites within 1km of the Site.

3.4.5 Delicensed Activities still regulated by the EPA

A search of the list of sites that are part of the Delicensed Activities still regulated by the EPA Database didn't identify any sites within 1km of the Site.

4 Site History

4.1 General

The Site history comprised review of Section 10.7 planning certificates undertaken for Lot 1/DP1156433 as well as available published data and aerial photography review, all attached in Appendix C. The Site history is detailed herein.

4.1.1 Historical Title Deeds Search

Historical Title Deeds were obtained to aid in determining previous land use of the Site. A summary of the registered proprietors and occupations where available for Lot 1 DP1156433 is attached to the report in Appendix C and summarised in the table below.

Table 4-1 Historical Title Deeds Occupants

Date of Acquisition and Term Held	Registered Proprietor(s) & Occupations where available	Reference to Title at Acquisition and Sale
12.04.1915 (1915 to 1956)	Charles Arthur Vickery (Farmer) (And his deceased estate)	Book 1055 No. 947
08.08.1956 (1956 to 1974)	Roy Francis Farrell (Farmer)	Book 2381 No. 319
25.03.1974 (1974 to 1974)	John Bennetts (Public Accountant) Margaret Ann Bennetts (Married Woman) Roderick Stuart McDonald (Public Accountant) Valerie Merle McDonald (Married Woman)	Book 3147 No. 348 & Book 3147 No. 349 Now Volume 12631 Folio 250
03.12.1974 (1974 to 1981)	Roderick Stuart McDonald (Public Accountant) Valerie Merle McDonald (Married Woman)	Volume 12631 Folio 250
08.01.1981 (1981 to 2022)	Kevin Howard Gale (Engineer) Colleen Joy Gale (Married Woman)	Volume 12631 Folio 250 Then 26/571911 Then 262/1053563 Now 1/1156433
14.10.2022 (2022 to Date)	# Land Drive Investments Pty Ltd	1/1156433

4.1.2 Maitland City Council (MCC) Planning Information

A Section 10.7(2) Planning Certificate search was undertaken for Lot 1/DP1156433. No notations of potential contamination issues were detailed in regard to Lot 1/DP1156433

The complete certificates are attached in Appendix C and summarised in the table below.

Table 4-2 Summary of Section 10.7 Planning Certificate for Lot DP1156433

Matters Pursuant to Section 10.7(2)	Lot 1 DP1156433
Zoning & Land Use	R5 Large Lot Residential
Development Control Plan (DCP)	Maitland DCP 2011 Applies to this land
Critical Habitat	Land is NOT identified as a critical habitat
Conservation Area & Environmental Heritage	Land is NOT identified as having either Conservation or Environmental Heritage value
Coal Mine Subsidence Act 2017	Land is NOT within a proclaimed Mine Subsidence District
Road Widening & Realignment	Land is NOT affected by road realignment or road widening
Flood Related Development Controls	The land or part of the land is within the flood planning area and subject to flood related development controls.
Land Reserved for Acquisition	Land is NOT subjected to Land Reserved for Acquisition.
Biodiversity Certified Land	Land is NOT biodiversity certified land.
Bushfire Prone Land	Land is identified as being bushfire prone land.
Property Vegetation Plans	Land is NOT subject to a property vegetation plan under the Native Vegetation Act 2003
Loose-fill asbestos information	There are no premises on the subject land listed to contain or have contained loose-fill asbestos insulation.
Contaminated Land	<ul style="list-style-type: none"> i) The land to which this certificate relates is NOT significantly contaminated land within the meaning of the Contaminated Land Management Act 1997. ii) The land to which this certificate relates is NOT subject to a management order within the meaning of the Contaminated Land Management Act 1997. iii) The land to which this certificate relates is NOT the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997. iv) The land to which this certificate relates is NOT the subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997. v) Council has NOT been provided with a site audit statement, within the meaning of the Contaminated Land Management Act 1997, for the land to which this Certificate relates.

4.1.3 Review of the Historical Aerial Photos

Stantec has conducted a review of historical aerial photographs or available aerial imagery, current Site inspection, previous investigations, and knowledge of the area. Aerial imagery was sourced from the NSW Government website Spatial Services [7], and Nearmaps [8].

A summary of the interpreted Site features is detailed in the table below, and aerial photographs are attached in Appendix C.

Table 4-3 Aerial Imagery Review

Date	Reference	Observations
1958	B & W Scale: N/A	<p>Onsite:</p> <ul style="list-style-type: none"> The Site generally comprised undeveloped grass cover, with a cluster of mature trees in the southern portion of the Site. Drainage channel located in the western portion of the Site, travelling north. <p>Offsite:</p> <ul style="list-style-type: none"> Flood plains located to the north of the Site. Lang road is unpaved and found traversing the eastern border of the Site. Multiple structures (likely rural residential) serviceable by Paterson Road to the south of the Site. Residential subdivision to the southeast of the Site. Paterson river located to the east of the Site.
1971	Greyscale Scale: N/A	<p>Onsite:</p> <ul style="list-style-type: none"> Imagery generally consistent with the 1958 photograph. <p>Offsite:</p> <ul style="list-style-type: none"> Hunter River now visible to the west of the Site. Further residential development to the south and southeast of the Site. Total Road now visible to the west of the Site.
1984	Greyscale Scale: N/A	<p>Onsite:</p> <ul style="list-style-type: none"> Generally consistent with the 1971 Photograph. Access tracks visible in the north-eastern portion of the Site. Appears to be a structure (likely residential dwelling) present in the eastern portion of the Site. <p>Offsite:</p> <ul style="list-style-type: none"> Further residential development to the south and west of the Site. Appears to be some form of racing track to the south of the Site. House has been constructed immediately north of the Site.
1998	Greyscale Scale: N/A	<p>Onsite:</p> <ul style="list-style-type: none"> Generally consistent with the 1984 photograph. Access track in the north-eastern portion of the Site now enters from Lang Road, on the eastern border of the Site. Structure on Site confirmed to be a residential dwelling. <p>Offsite:</p> <ul style="list-style-type: none"> Rural residential subdivision surrounding the north-western border of the Site is now apparent. Further residential development to the south and south-east of the Site.
2010	Colour Scale:N/A	<p>Onsite:</p> <ul style="list-style-type: none"> Generally consistent with the 1998 photograph. Additional building (large shed) has been constructed to the west of the dwelling on Site. Dam has been constructed in the eastern portion of the Site. Vehicle track marks evident in the paddock area on Site. Area of disturbance evident to the north of the dwelling. Appears to be a vegetated stockpile in this area. <p>Offsite:</p> <ul style="list-style-type: none"> Property immediately south subject to earthworks. Appears to be the initial stages of construction of a dwelling. Further residential development surrounding the Site.
2014	Colour Scale:N/A	<p>Onsite:</p> <ul style="list-style-type: none"> Generally consistent with the 2010 photograph, Storage of tyres and other household materials apparent on the southern border of the Site.

		Offsite: <ul style="list-style-type: none"> ▪ In addition to dwelling finishing construction to the south, another has been finished and one more under construction. ▪ Further development to the residential development to the east.
2023	Colour Scale:N/A	Onsite: <ul style="list-style-type: none"> ▪ Generally consistent with the 2014 photograph. ▪ Imagery generally consistent with the 2014 photograph. Offsite: <ul style="list-style-type: none"> ▪ Several dwellings constructed immediately south of the Site. ▪ Further residential development to the east.

4.2 Summary of Site History

Based on the available historical data, Stantec Site inspection and public searches, the Site can be described as undeveloped grassland, up until the year 1974. From 1974 to present, the Site was predominately of rural residential land use, with evidence of light cattle grazing in the paddock area since the construction of the dwelling.

The surrounding areas were originally undeveloped grassland. There was an increase in residential development between the years 1971 and 2023, with all surrounding areas experiencing growth.

5 Areas and Contaminates of Potential Concern

The assessment has identified several potential sources of contamination (and related Contaminants of Potential Concerns (COPC), which are summarised in table below. Identified areas of concern can be seen approximately depicted on Figure 1, attached in Appendix A.

Table 5-1 Site Activities and Potential Contaminants of Concern

Potential Area of Environmental Concern (AoEC)	Possible Site Activity / Potential Source	Potential Contaminants of Potential Concern (CoPC)	Comments
<i>Onsite Sources</i>			
Overall Site	Machinery Use <ul style="list-style-type: none"> Light agricultural use Installation of service utilities 	<ul style="list-style-type: none"> Eight (8) Heavy metals: Arsenic, cadmium, chromium, copper, iron, lead, nickel, zinc Polycyclic aromatic Hydrocarbons (PAH), Total Recoverable hydrocarbons (TRH), Benze, Toulene, Ethylene, Xylene and Napthalene (BTEXN) 	<ul style="list-style-type: none"> Potential machinery use on Site
Overall Site	Grass pasture <ul style="list-style-type: none"> Cattle grazing Agricultural activities 	<ul style="list-style-type: none"> Organochlorine Pesticides / Organophosphate Pesticides (OCP/OPP) and 8 heavy metals 	<ul style="list-style-type: none"> Potential use of pesticides
Overall Site	Cut/Fill <ul style="list-style-type: none"> Site levelling activities 	<ul style="list-style-type: none"> 8 Heavy metals PAH, TRH, BTEXN OCP, OPP Foreign materials 	<ul style="list-style-type: none"> Potential for imported fill on Site, to assist with levelling of access tracks, building pads and dams. Localised filling noted north of the dwelling.
A	Dam/ Drainage channel <ul style="list-style-type: none"> Offsite migration of potential contaminants 	<ul style="list-style-type: none"> 8 Heavy metals PAH, TRH, BTEXN OCP, OPP Foreign materials 	<ul style="list-style-type: none"> Dam in the eastern portion of the Site is within a tributary of dams that flow into a drainage channel to the northeast. Low potential for contaminants to migrate onsite. Drainage channel in the western portion of the site has potential for contaminant migration.
B	Garden Areas <ul style="list-style-type: none"> Potential for use of pesticides within the gardens surrounding the dwelling. 	<ul style="list-style-type: none"> OCP/OPP 	<ul style="list-style-type: none"> Minor potential of contamination associated with pesticide use on gardens.

Potential Area of Environmental Concern (AoEC)	Possible Site Activity / Potential Source	Potential Contaminants of Potential Concern (CoPC)	Comments
C	Fire pit <ul style="list-style-type: none"> Small recreational fire pit located to the south of the large shed on Site. 	<ul style="list-style-type: none"> PAH Heavy metals 	<ul style="list-style-type: none"> Minor potential for contaminants to leach into surrounding soils.
D	Transpiration bed <ul style="list-style-type: none"> Discharge to transpiration beds 	<ul style="list-style-type: none"> Metals Nutrients Thermotolerant Coliforms 	<ul style="list-style-type: none"> Potential presence of nutrients, thermotolerant coliforms and metals associated with transpiration beds. Potential imported filling associated with transpiration bed.
E	Buildings / Sheds <ul style="list-style-type: none"> Potential hazardous building materials and storage of chemicals 	<ul style="list-style-type: none"> ACM Potential storage of pesticides, chemicals and fuels 	<ul style="list-style-type: none"> Age of the dwelling indicates that ACM may have been used in construction materials. Potential storage of chemicals, pesticides and fuel in sheds, however no access to sheds
<i>Offsite Sources</i>			
Lang Drive	<ul style="list-style-type: none"> Contaminant run-off from Lang Drive to the west. Fly tipping. 	<ul style="list-style-type: none"> Heavy metals PAH, TRH, BTEXN Anthropogenic Materials 	<ul style="list-style-type: none"> Minor potential for contamination run-off from the road.

6 Conceptual Site Model

6.1 Preliminary Conceptual Site Model

Generally, a conceptual site model (CSM) provides an assessment of the fate and transport of COPCs relative to site-specific subsurface conditions with regard to their potential risk to human health and the environment. The CSM considers site-specific factors including:

- > Source(s) of contamination,
- > Identification of contaminants of potential concern (COPCs) associated with past (and present) source(s),
- > Vertical, lateral and temporal distribution of COPCs,
- > Site specific lithological information including soil type(s), depth to groundwater, effective porosity, and groundwater flow velocity,
- > Actual or potential receptors considering both current and future land use for both the site and adjacent properties, and any sensitive ecological receptors.

Based on the information sourced in this report, a preliminary CSM has been developed and is outlined in the table below. Additional details are included in the sections that follow as necessary.

Table 6-1 Table 6-1 Preliminary Conceptual Site Model

Conceptual Site Model Element	Description
Site History	<ul style="list-style-type: none"> ▪ Undeveloped grassland/ rural residential with potential light agricultural activities – grazing.
Site Current and Future Use	<ul style="list-style-type: none"> ▪ Rural residential property. ▪ Proposed to be developed into a residential development.
Site Geology	<ul style="list-style-type: none"> ▪ Based on Site conditions and published data, the natural subsurface conditions typically comprise of sand and clay materials.
Site Hydrogeology	<ul style="list-style-type: none"> ▪ Site hydrogeology is unknown as an intrusive investigation wasn't undertaken.
Area of Environmental Concern (AoEC) - Onsite	<ul style="list-style-type: none"> ▪ Potential contamination associated with use of pesticides on Site. ▪ Potential contamination associated with uncontrolled fill on Site. ▪ Potential contaminated soils associated with machinery use on Site. ▪ Potential contaminated soils beneath and surrounding structures on Site. ▪ Potential contamination associated with offsite migration via drainage channels, Lang drive and dam tributary. ▪ Potential contaminated soils associated with fire pit on Site. ▪ Potential contamination associated with ACM within the eaves of the dwelling on Site. ▪ Potential contamination associated with the transpiration beds on Site.
Media Potentially Impacted	<ul style="list-style-type: none"> ▪ No impacted media identified.
Potential Human Receptors	<ul style="list-style-type: none"> ▪ Site users / workers / employees (onsite) ▪ Site Construction workers (onsite) ▪ Local rural residents and surrounding properties (offsite)
Potential Environmental Receptors	<ul style="list-style-type: none"> ▪ Flora and fauna. ▪ Surrounding soils. ▪ Nearby waterbodies – floodplain to the northeast.
Potential Exposure Pathways	<ul style="list-style-type: none"> ▪ Air – inhalation of dusts. ▪ Soil – dermal / direct contact. ▪ Lateral migration via surficial runoff

6.2 Data Gaps

Based on the inspection, the potential for contamination at this Site is not considered to present a significant constraint on the proposed redevelopment of subject Site. However, it must be appreciated that assessment was limited to review of historical data and Site observations within the subject Site, with no intrusive sampling undertaken.

- > No intrusive subsurface investigation or sampling spatially and vertically during the current assessment.
- > No laboratory analysis.
- > No groundwater samples collected; however, groundwater contamination is considered unlikely based on Site use.
- > No dangerous goods search was undertaken for the Site; however, it is unlikely to be present.

No access to the contents of the sheds, therefore contents is unknown.

7 Discussions and Comments

Stantec have undertaken a Preliminary Site Investigation (PSI) of Lot 1/DP1156433, located at 27 Lang Road, Bolwarra Heights, NSW. The objectives of the investigation were to assess:

- > The potential for past and present activities undertaken on and adjacent to the Site to have affected soil and groundwater at the Site.
- > To make a preliminary assessment of whether contamination is likely to affect the future use or development of the Site.
- > Assess the requirement, if any, for further environmental investigation to assess or make the Site suitable for the proposed use.

7.1 Summary of Contamination Potential

Based on the review of the Site history and Site inspection, Stantec identified the following potential sources of contamination at or adjacent the Site as detailed in Table 5-1:

- > Based on Site observations, the residential dwelling on Site was noted to contain fibrous sheet cladding. Given the age of the building, there is a potential for ACM; however, was noted to be intact and in good condition at the time of inspection. It is expected that prior to demolition of any structures, structures should be assessed for hazardous materials. If hazardous materials are identified, the materials should be managed accordingly.
- > Contamination associated with pesticide use on the grass pasture and garden areas onsite is unlikely. Cattle grazing was evident in the aerial imagery review, indicating that this practice was utilised in favour of pesticide use to maintain the paddock area.
- > Localised filling is present onsite and generally associated with the building pads, access tracks and a small fill area located north of the dwelling. Potential Contamination associated with the localised fill materials maybe present and not envisaged to pose a constraint to the proposed development. Fill materials should be assessed during construction for onsite reuse or offsite disposal. This can be managed via an Unexpected Finds Protocol (UFP).
- > Potentially contaminated soils associated with the fire pit are unlikely and considered to be localised. If contamination is identified, this should be dealt with in accordance with the UFP.
- > A transpiration bed was identified in the Site inspection and desktop review. The beds and associated infrastructure should be appropriately decommissioned during construction.

During the inspection, no indication of staining or olfactory indication of hydrocarbons, nor fibrous sheeting materials were observed across the surface.

At the time of the Site inspection, the majority of the shed roller doors were closed. One (1) door was open, which revealed a ski boat inside. The contents of the remainder of the shed is unknown.

Prior to the year 1958, information on the Site usage is limited. However, from the 1958 imagery, Stantec inferred that the Site was utilised as undeveloped grassland / pastures. This usage continued until 1974, when review of historical data illustrated rural residential land use with light cattle grazing.

Upon reviewal of the aerial imagery, the surrounding areas were originally undeveloped grassland. There was an increase in residential development between the years 1971 and 2023, with all surrounding areas experiencing growth.

7.2 Conclusions

Based on the desktop review, no significant potential contamination sources have been identified on Site. The potential contamination sources that have been identified are low risk and can be dealt with by following the recommendations outlined in section 8 below. An unexpected finds protocol has been developed to address any potential contamination if encountered during construction phase and can be found attached in Appendix D.

In accordance with the State Environmental Planning Policy (Resilience and Hazards) [3], which requires the planning authority to consider whether the Site is suitable for the proposed usage prior to approving and determining a development application, Stantec has undertaken a Preliminary Site Investigation (PSI).

Based on the findings of the PSI, Stantec did not identify gross contamination or potentially contaminating activities previously undertaken on Site that would render the Site unsuitable for its proposed use as a residential subdivision.

8 Recommendations

Based on the review of the Site history and Site inspection, Stantec did not identify indication of gross contaminating activities on or adjacent to the Site. The Site can be made suitable for the proposed land use, based on the recommendations below:

- > An unexpected finds protocol has been developed (Appendix D) to address any potential contamination if encountered during construction phase. Construction and development should be managed with the unexpected finds protocol in place.
 - If potential contamination is encountered, Site works will be ceased, and a suitable environmental consultant will be engaged for assessment as per the unexpected finds protocol.
- > Assessment of any fill areas, transpiration beds & access tracks on Site for either potential reuse or offsite disposal. This can be undertaken during construction phase of the development and under the unexpected finds protocol.
- > Any soil to be excavated and transported offsite for disposal require classification in accordance with the NSW EPA Waste Classification Guidelines.
- > Geotechnical assessment of the localised potential fill material for onsite reuse, if required.

Prior to demolition of any structures, structures should be assessed for hazardous materials. If hazardous materials are identified, the materials are to be managed accordingly.

9 Standard of Assessment

This investigation has been undertaken in general accordance with the current “industry standards” for a site investigation for the purpose, objectives and scope identified in this report. These standards are set out in:

- > National Environment Protection Council (NEPC) (1999) *National Environment Protection (Assessment of Site Contamination) Measure*, as amended (registered on 15 May 2013) [9]. This is referred to from here on as “the NEPM” or “NEPM”.
- > Standards Australia (2005) *AS4482.1- 2005: Guide to the investigation and sampling of sites with potentially contaminated soil Part 1: Non-volatile and semi-volatile compounds* [10].
- > NSW EPA “*Guidelines for Consultants Reporting on Contaminated Sites*” [11].

The agreed scope of this investigation has been limited for the current purposes of the Client. The investigation may not identify contamination occurring in all areas of the site.

This site investigation report is not any of the following:

- > An Environmental Audit Report as defined under NSW Site Auditor Scheme [12].
- > A detailed site investigation (DSI) report sufficient for an Environmental Auditor to be able to conclude a statutory or non-statutory environmental audit.
- > A geotechnical report.
- > A detailed hydrogeological assessment or an assessment of groundwater contaminants potentially arising from other sites or sources nearby.

A waste classification report of soil analytical results from the Site.

10 Limitations

The conclusions in the Report titled Preliminary Site Investigation are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from SNL Building Constructions Pty Ltd (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

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11 References

- [1] NSW EPA, Consultants reporting on contaminated land guidelines, NSW Environmental Protection Authority, 2020.
- [2] National Environment Protection (Assessment of Site Contamination) Measure 1999, Schedule B1 Guidelines on Investigation Levels for Soil and Groundwater, National Environment Protection Council (NEPC), 16 May 2013.
- [3] NSW Government, Stage of Environmental Planning Policy (Resilience and Hazards), 2021.
- [4] NSW Government, "Minview," 2020. [Online]. Available: <https://minview.geoscience.nsw.gov.au/#/?lon=151.4946&lat=-32.72147&z=18&bm=bm1&l=ge611:n:100,ge610:n:100,ge69:n:100,ge68:n:100,ge67:n:100,ge66:n:100,ge65:n:100,ge64:n:100,ge63:n:100,ge62:n:100,ge61:n:100,ge612:y:100,hi1:n:25,wa1:y:100,ut1:y:50,ad0:y:100>.
- [5] A. G. B. o. Meterology, "Australia Groundwater Explorer," [Online]. Available: <http://www.bom.gov.au/water/groundwater/explorer/map.shtml>. [Accessed 06 06 2023].
- [6] NSW office of Environment and Heritage, "eSPADE v2.1," 2023.
- [7] N. Government, "Spatial Services - Historical Imagery Viewer," 2023. [Online]. Available: <https://portal.spatial.nsw.gov.au/portal/apps/webappviewer/index.html?id=f7c215b873864d44bccdda8075238cb>. [Accessed 23 08 2023].
- [8] Nearthmaps, "Nearthmaps," 2023. [Online]. Available: <https://apps.nearthmap.com/maps/#/@-32.6928615,151.5913016,18.00z,0d/V/20200801>. [Accessed 23 08 2023].
- [9] National Environment Protection (Assessment of Site Contamination) Measure 1999, "Schedule B1 Guidelines on Investigation Levels For Soil and Groundwater," National Environment Protection Council (NEPC), 16 May 2013.
- [10] Standards Australia, "Australian Standard - Guide to the investigation and sampling of sites with potentially contaminated soils - PArt one: Non-volatile and semi-volatile compounds," Standards Australia, 2005.
- [11] NSW EPA, "Consultants reporting on contaminated land guidelines", NSW Environmental Protection Authority, 2020.
- [12] NSW DEC, "Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (3rd Edition)," Department of Environment and Conservation NSW, 2017.

APPENDIX

A

SITE PLANS



now

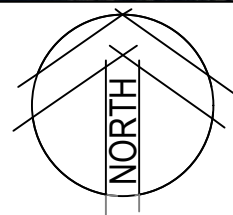
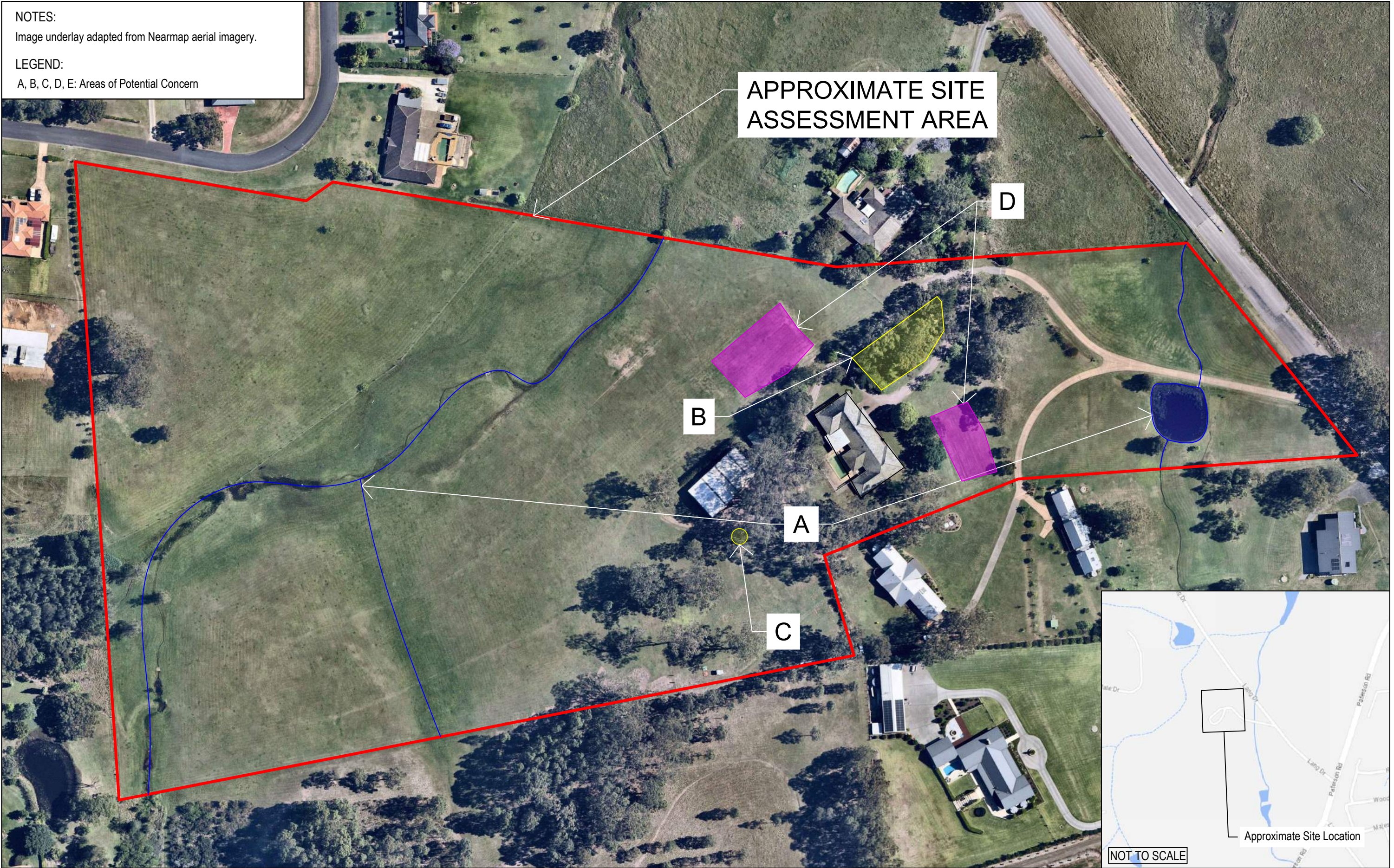


DATE PLOTTED: 31 August 2023 3:06 PM BY: SYKLOTIS, KOSTANDREAS

NOTES:
Image underlay adapted from Nearmap aerial imagery.

LEGEND:
A, B, C, D, E: Areas of Potential Concern

APPROXIMATE SITE ASSESSMENT AREA



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Drawn	BC	Date	17/8/2023
Checked	DS	Date	17/8/2023
Designed		Date	
Verified		Date	
Approved		Date	

Client	SNL Building Constructions Pty Ltd
Project	27 Lang Drive Bolwarra Heights
Title	Preliminary Site Investigation Site Plan Areas of Potential Environmental Concern

Status	PRELIMINARY NOT TO BE USED FOR CONSTRUCTION PURPOSES		
Project Number	304000998	Scale	1:1500
Figure Number	Figure 1	Size	A3
Revision	1		

XREFS:
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PROPOSED RESIDENTIAL SUBDIVISION

27 LANG DRIVE, BOLWARRA HEIGHTS
DEVELOPMENT APPLICATION

CLIENT: LANG DRIVE INVESTMENTS

CONSENT AUTHORITY: MAITLAND CITY COUNCIL

DATE: AUGUST 2023

DRAWING SCHEDULE PROJECT No. 22218

DWG No.	SHEET TITLE	REV
C00	COVER SHEET	4
C01	GENERAL ARRANGEMENT PLAN	4
C02	PLAN SHEET (SHEET 1 OF 2)	4
C03	PLAN SHEET (SHEET 2 OF 2)	4
C04	ROAD 01 LONGITUDINAL SECTION	3
C05	ROAD 01 CROSS SECTIONS (SHEET 1 OF 6)	3
C06	ROAD 01 CROSS SECTIONS (SHEET 2 OF 6)	3
C07	ROAD 01 CROSS SECTIONS (SHEET 3 OF 6)	3
C08	ROAD 01 CROSS SECTIONS (SHEET 4 OF 6)	3
C09	ROAD 01 CROSS SECTIONS (SHEET 5 OF 6)	3
C10	ROAD 01 CROSS SECTIONS (SHEET 6 OF 6)	3
C11	TYPICAL SECTIONS, DETAILS AND NOTES	3
C12	EARTHWORKS PLAN	3
C13	SOIL AND WATER MANAGEMENT PLAN	4
C14	SOIL AND WATER MANAGEMENT DETAILS	3



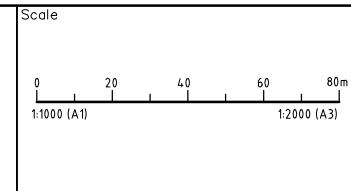
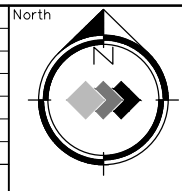
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Amendment	Description	Drawn	App'd	Date
4	STORMWATER AMENDMENTS	A.M	I.H	29.08.23
3	LAYOUT AMENDMENT	A.M	I.H	22.06.23
2	LAYOUT AMENDMENTS	A.M	I.H	23.03.23
1	ORIGINAL ISSUE	R.M	I.H	30.08.22



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Project Approval IAN HILL (B.E) Consulting Civil Engineer	

Client



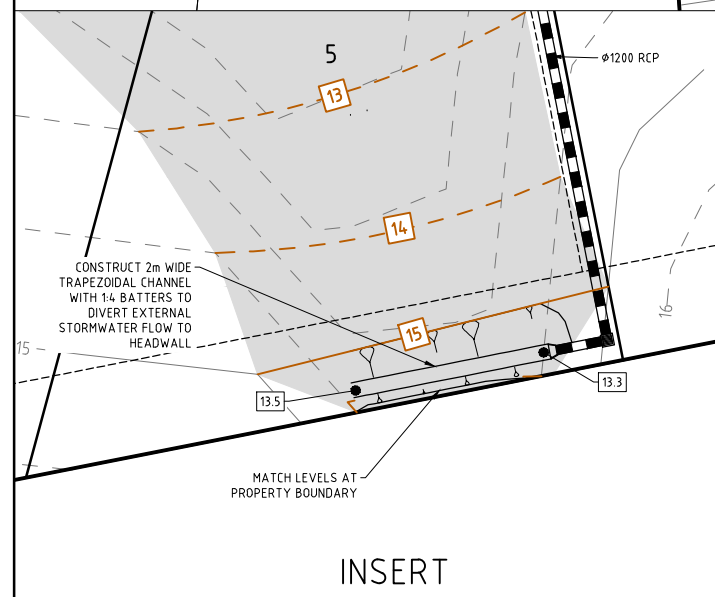
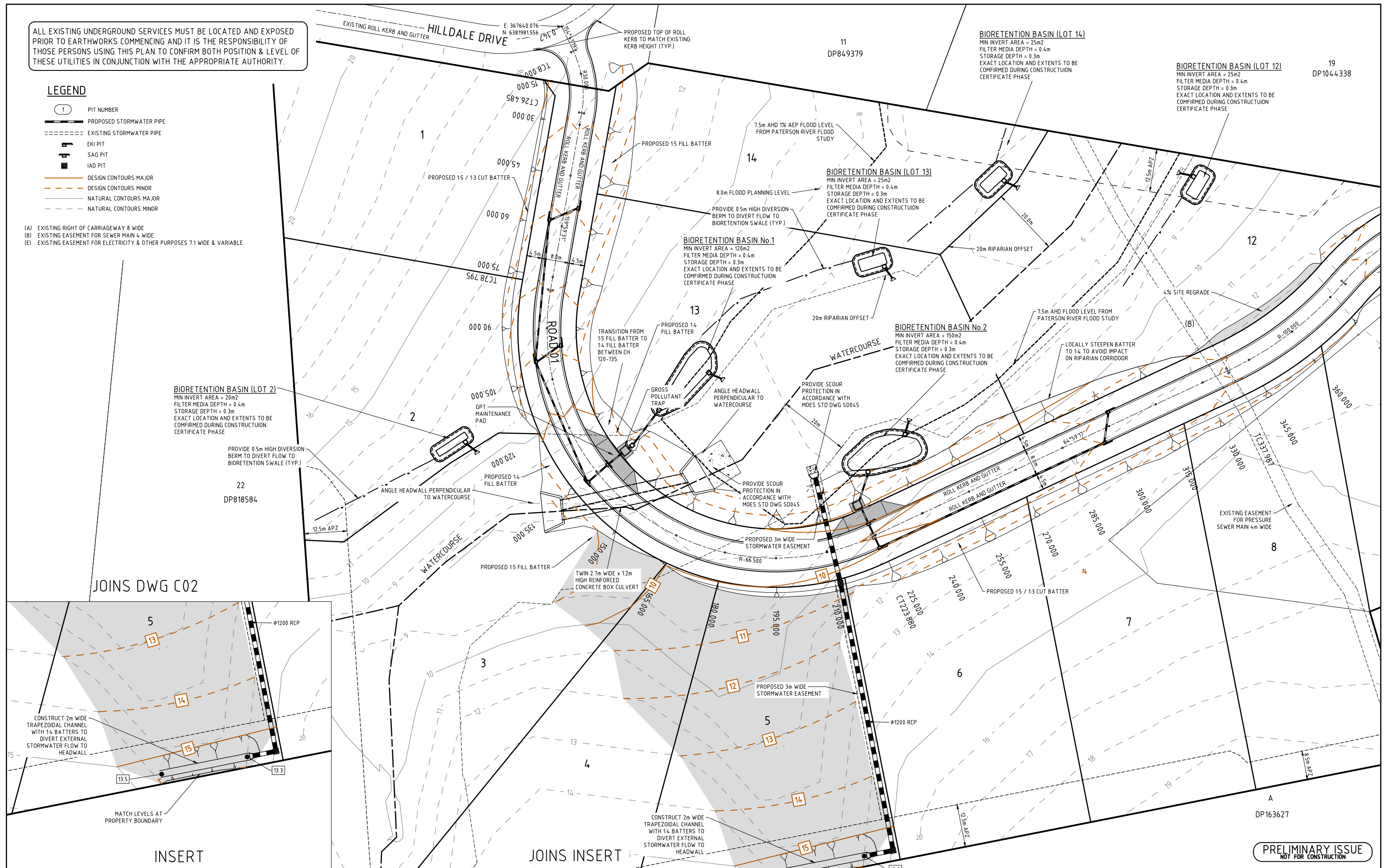
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27 LANG DRIVE
BOLWARRA HEIGHTS
GENERAL ARRANGEMENT PLAN

Project No 22218C	
Drawing No C01	Revision 4

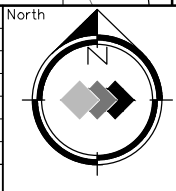
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 - EXISTING STORMWATER PIPE
 - EKI PIT
 - SAG PIT
 - IAD PIT
 - DESIGN CONTOURS MAJOR
 - DESIGN CONTOURS MINOR
 - NATURAL CONTOURS MAJOR
 - NATURAL CONTOURS MINOR

- (A) EXISTING RIGHT OF CARRIAGEWAY 8 WIDE
- (B) EXISTING EASEMENT FOR SEWER MAIN 4 WIDE
- (E) EXISTING EASEMENT FOR ELECTRICITY & OTHER PURPOSES 7.1 WIDE & VARIABLE



Amendment	Description	Drawn	App'd	Date
4	STORMWATER AMENDMENTS	A.M	I.H	29.08.23
3	LAYOUT AMENDMENT	A.M	I.H	22.06.23
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IAN HILL (B.E)
 Consulting Civil Engineer

Cad Reference
22218C dC02 r4
A1 SHEET

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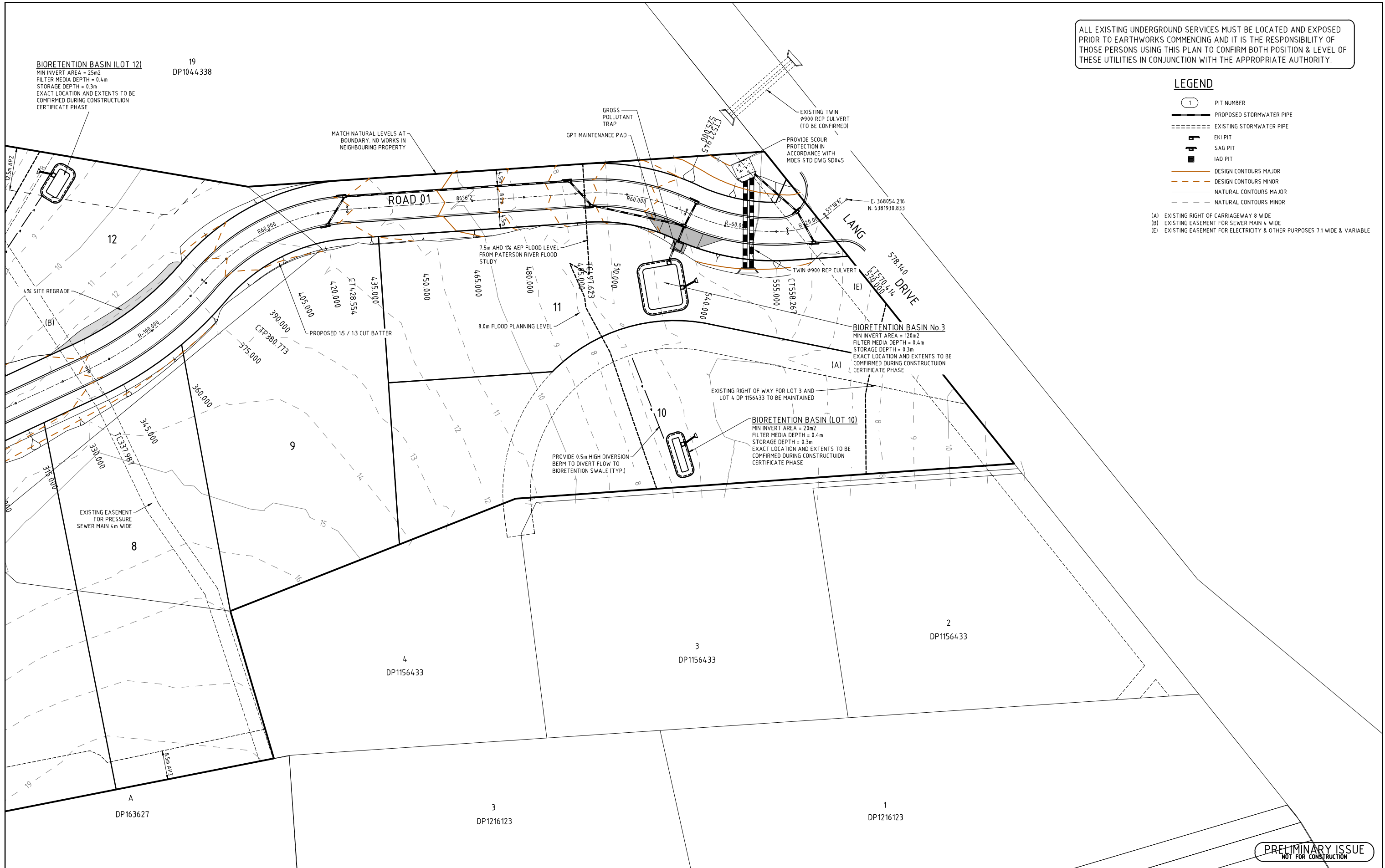
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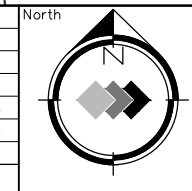
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 (B) EXISTING EASEMENT FOR SEWER MAIN 4 WIDE
 (E) EXISTING EASEMENT FOR ELECTRICITY & OTHER PURPOSES 7.1 WIDE & VARIABLE



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IAN HILL (B.E)
Consulting Civil Engineer

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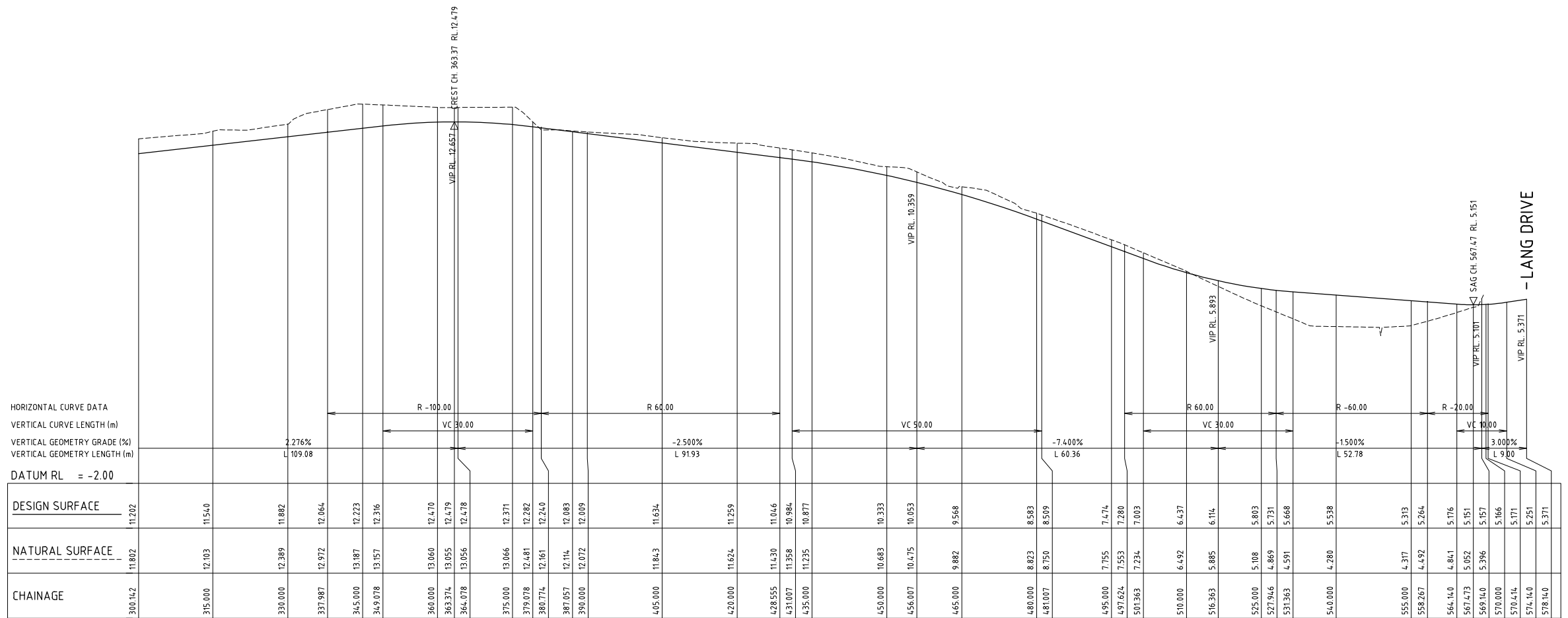
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BOLWARRA HEIGHTS
 PLAN SHEET (SHEET 2 OF 2)

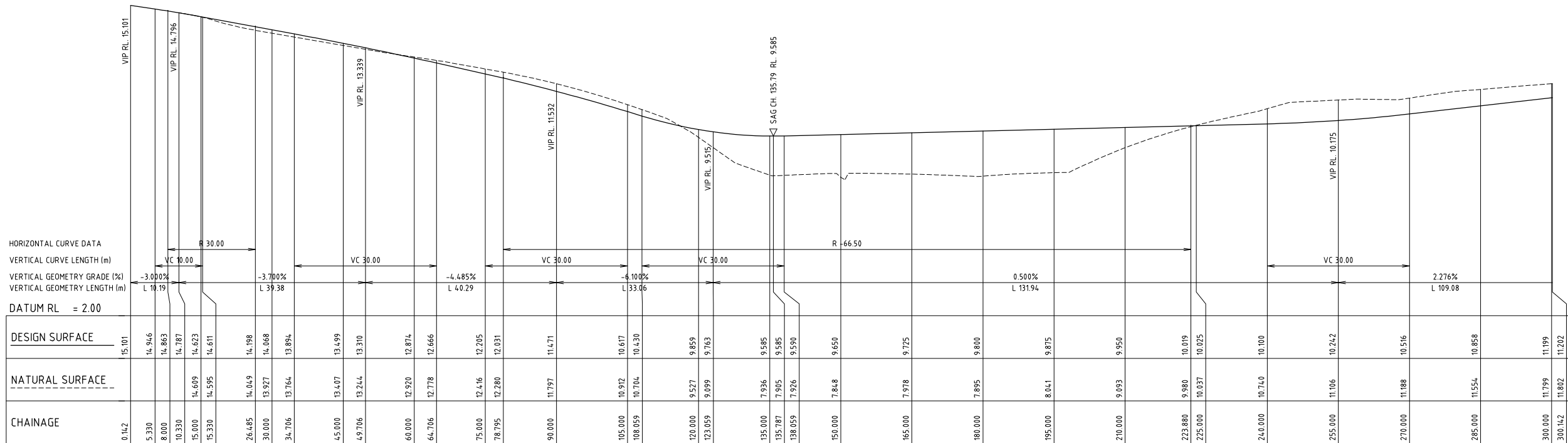
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 Revision
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HILLDALE DRIVE



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HILLDALE DRIVE

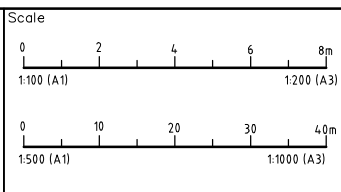


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1	ORIGINAL ISSUE	R.M	I.H	30.08.22

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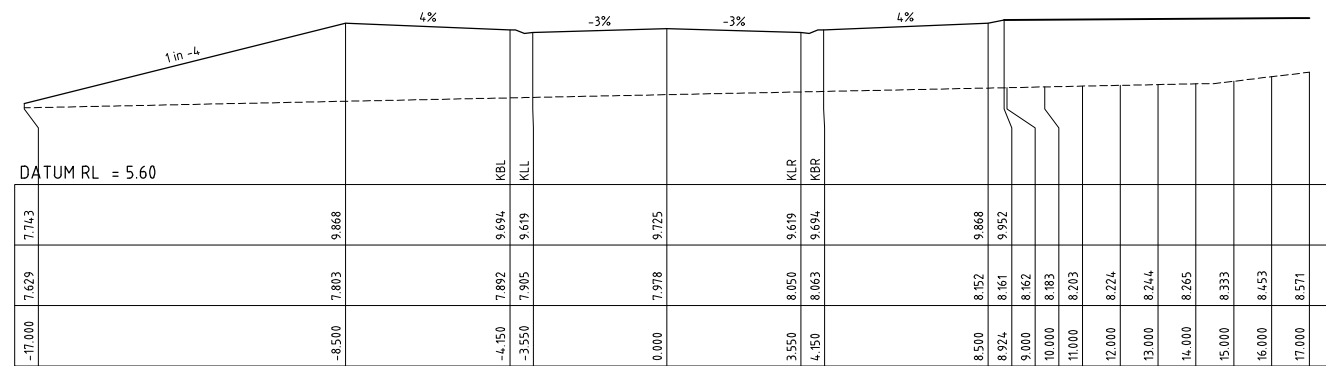
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Client

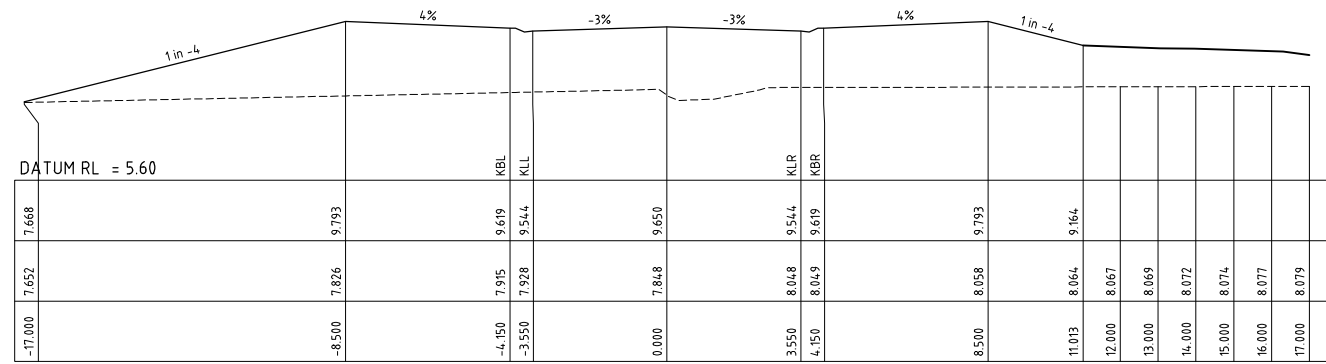
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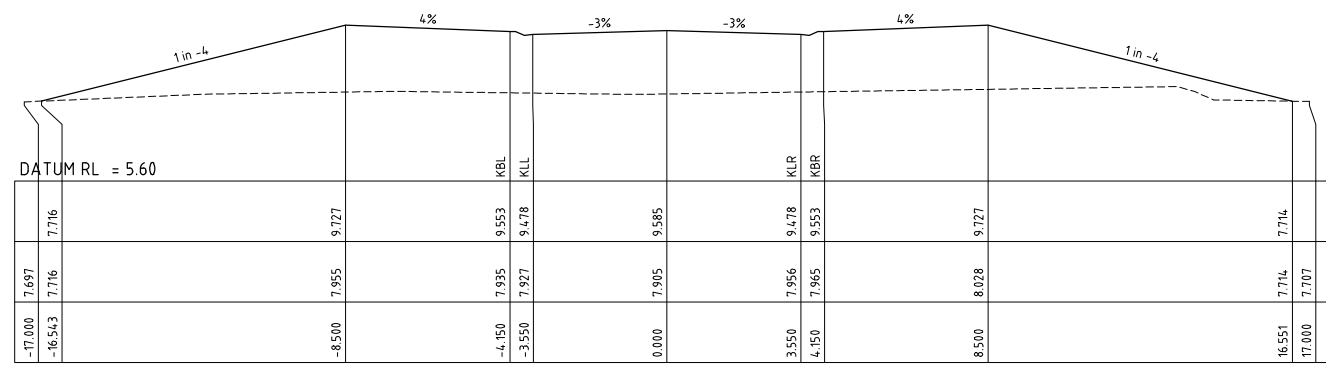
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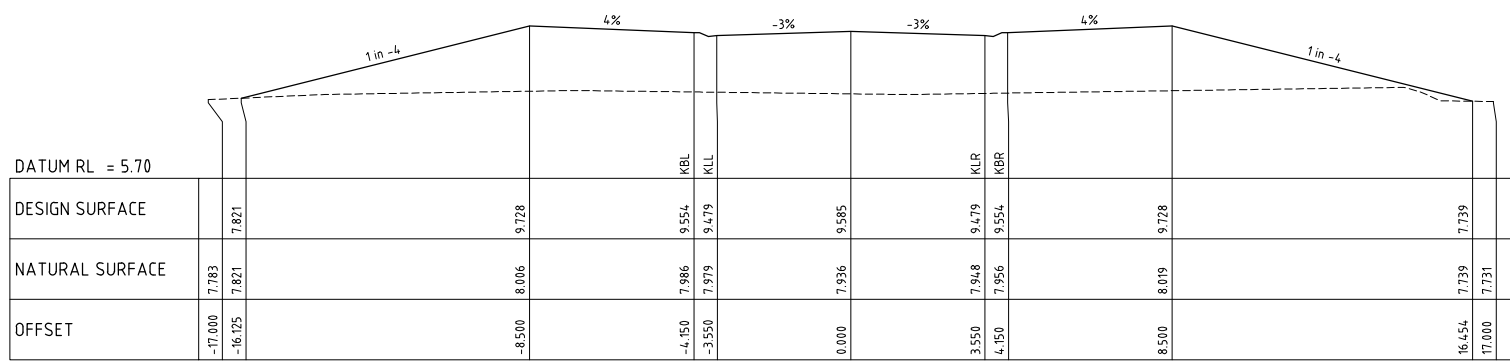
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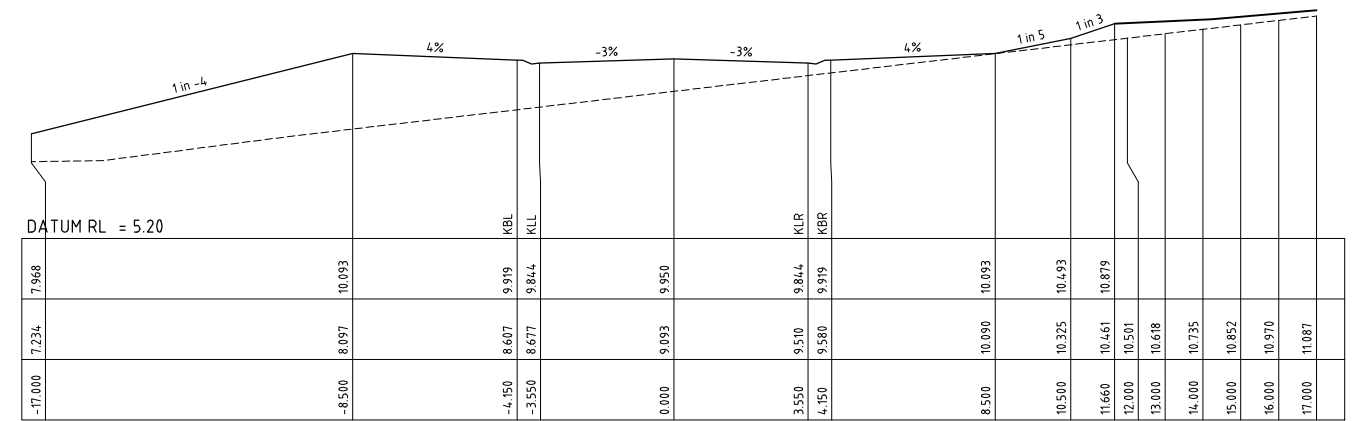
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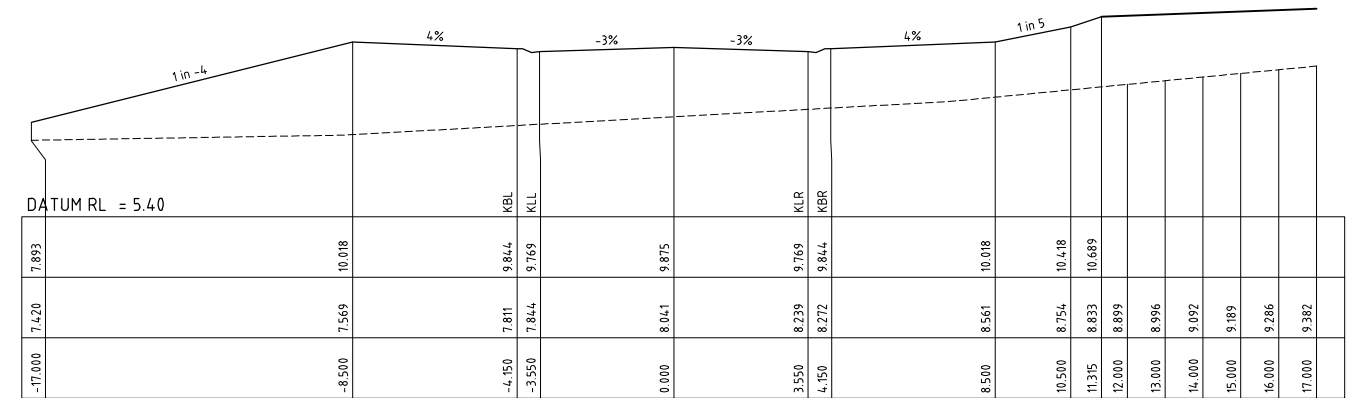
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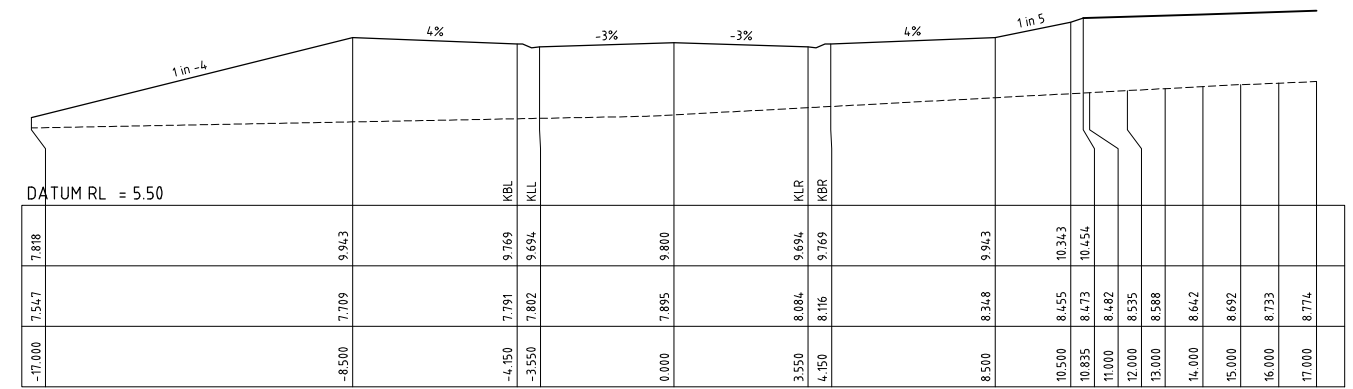
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2	LAYOUT AMENDMENTS	A.M	I.H	23.03.23
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Amendment	Description	Drawn	App'd	Date

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Project Approval IAN HILL (B.E)
Consulting Civil Engineer

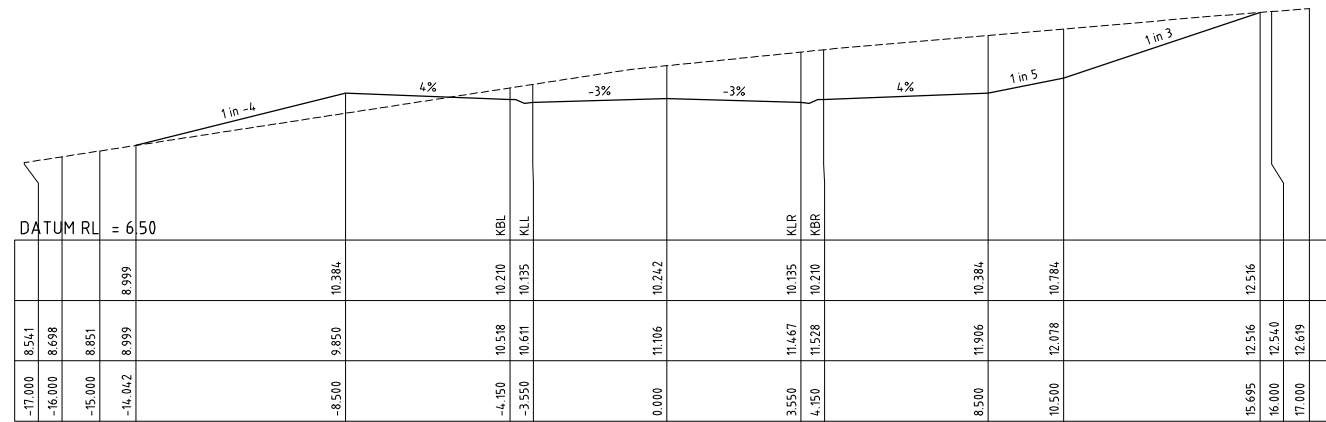
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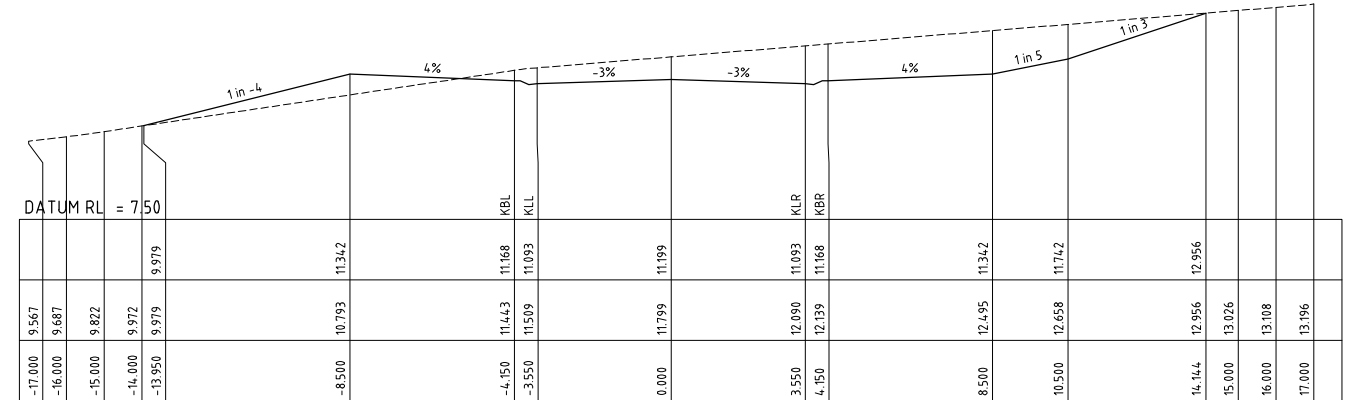


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BOLWARRA HEIGHTS
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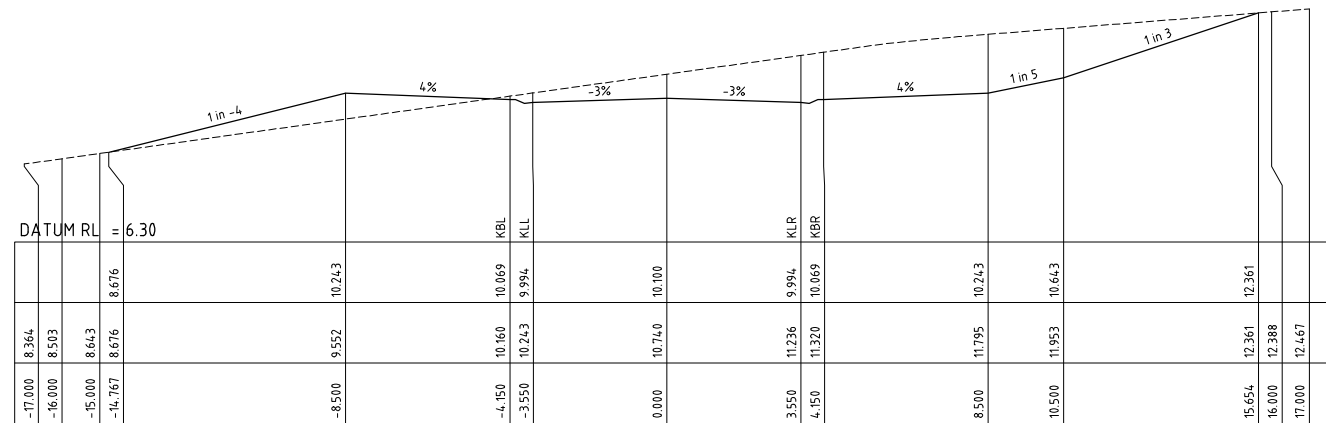
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Drawing No C06
Revision 3



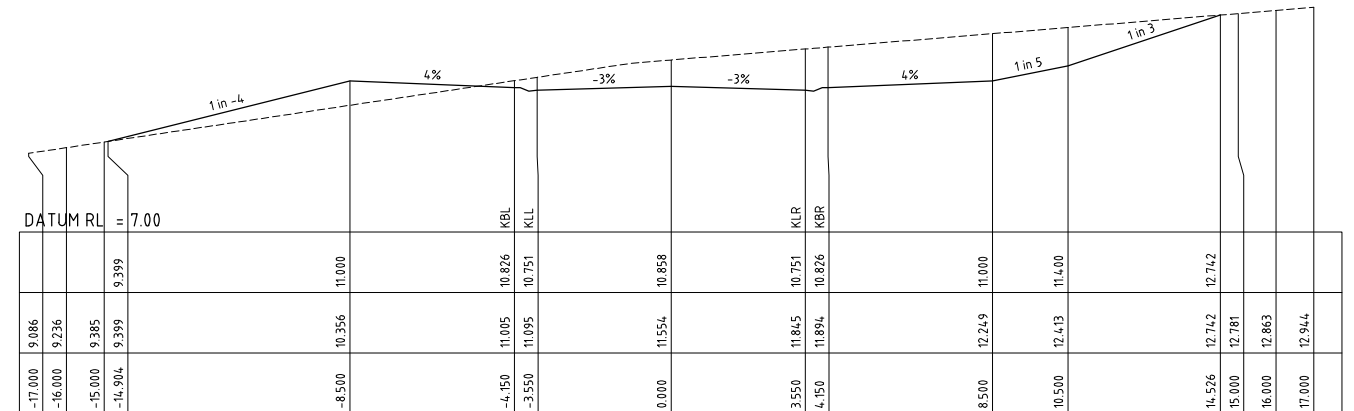
CH 255.000



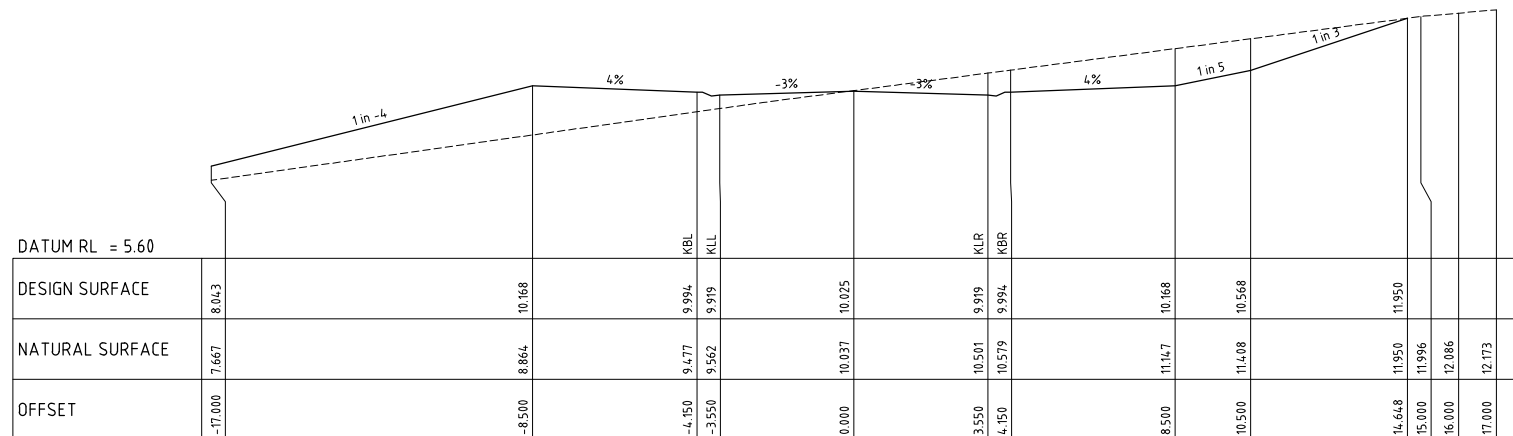
CH 300.000



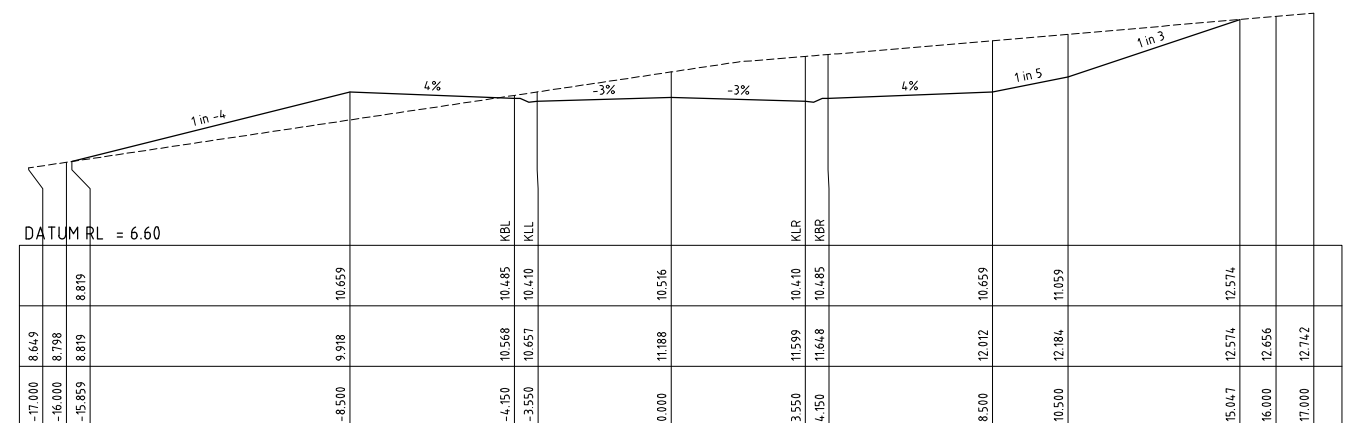
CH 240.000



CH 285.000



CH 225.000

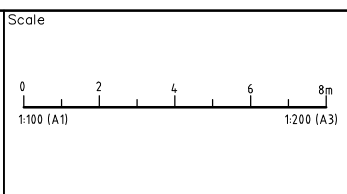


CH 270.000

PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

Amendment	Description	Drawn	App'd	Date
3	LAYOUT AMENDMENT	A.M	I.H	22.06.23
2	LAYOUT AMENDMENTS	A.M	I.H	23.03.23
1	ORIGINAL ISSUE	R.M	I.H	30.08.22

North



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Designed R.M
Scale 1:100 H/V
Project Approval IAN HILL (B.E)
Consulting Civil Engineer

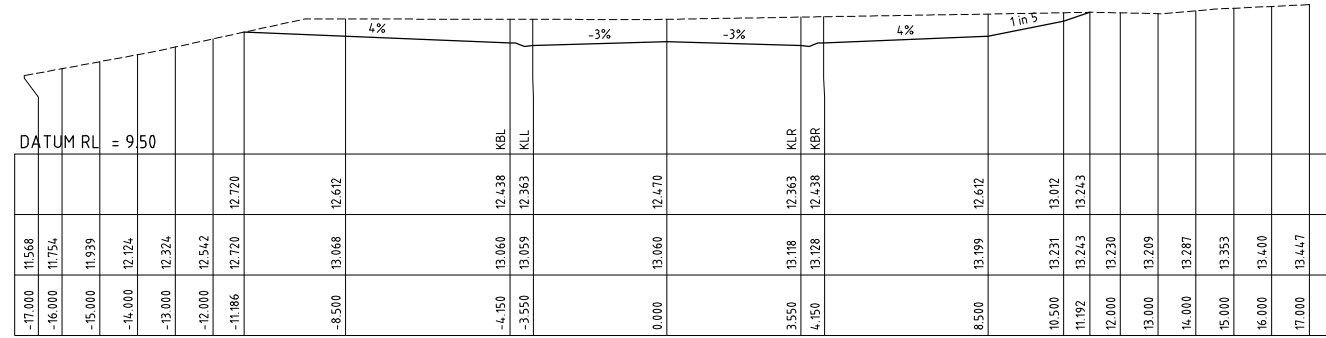
Cad Reference 22218C dC07 r3
A1 SHEET

Client

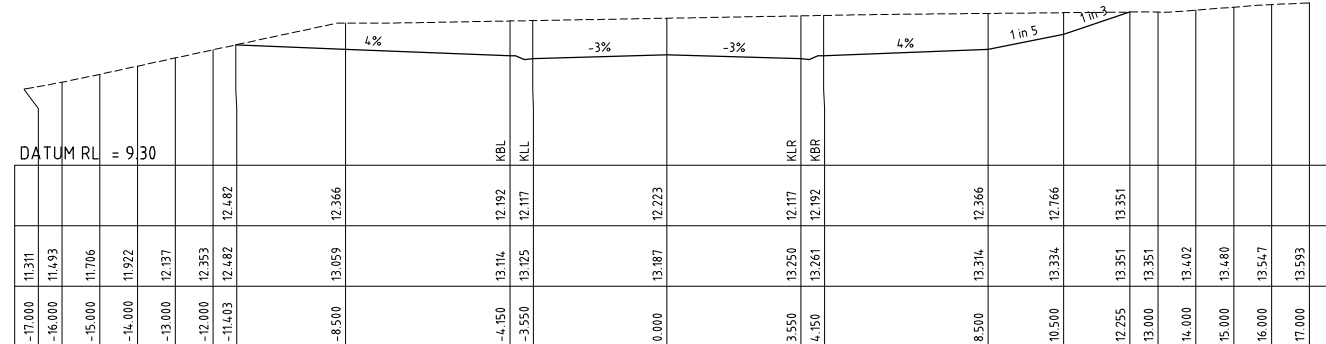


PROPOSED SUBDIVISION
27 LANG DRIVE
BOLWARRA HEIGHTS
ROAD 01 CROSS SECTIONS (SHEET 3 OF 6)

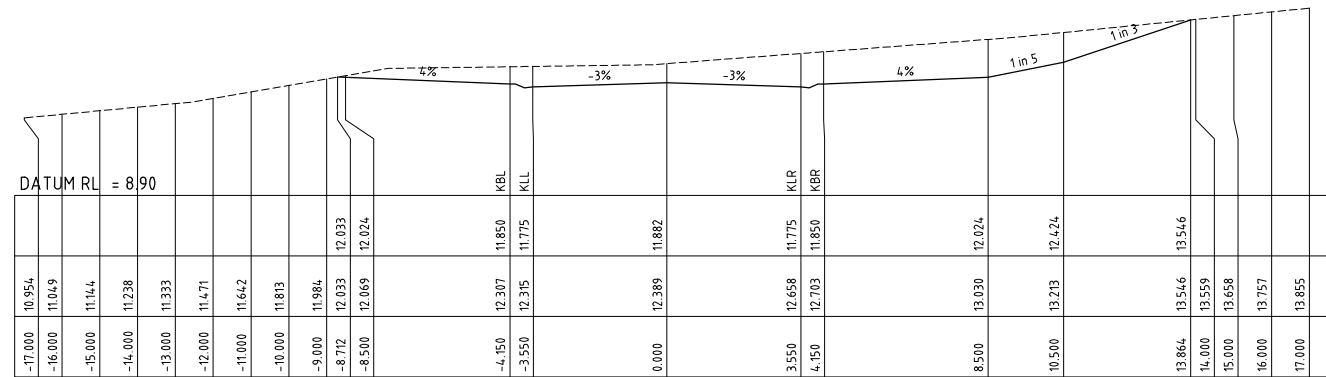
Project No	22218C
Drawing No	C07
Revision	3



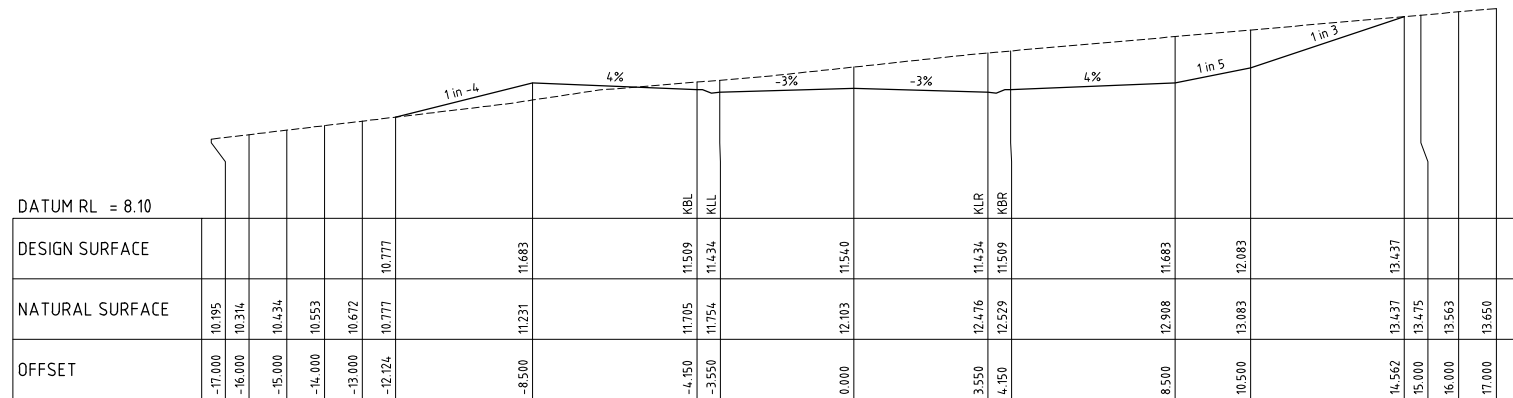
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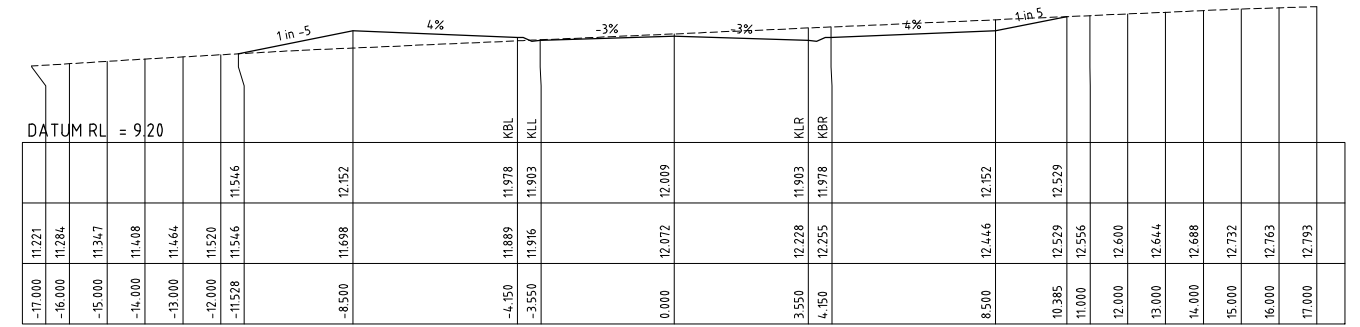
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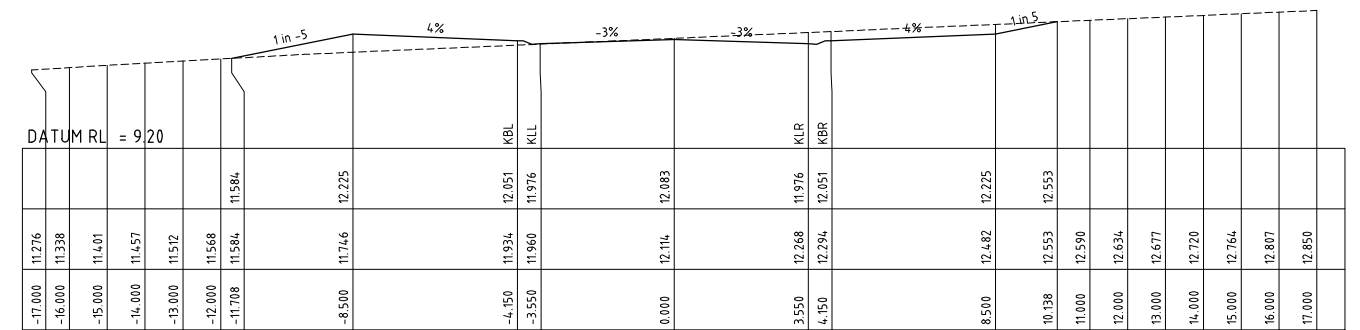
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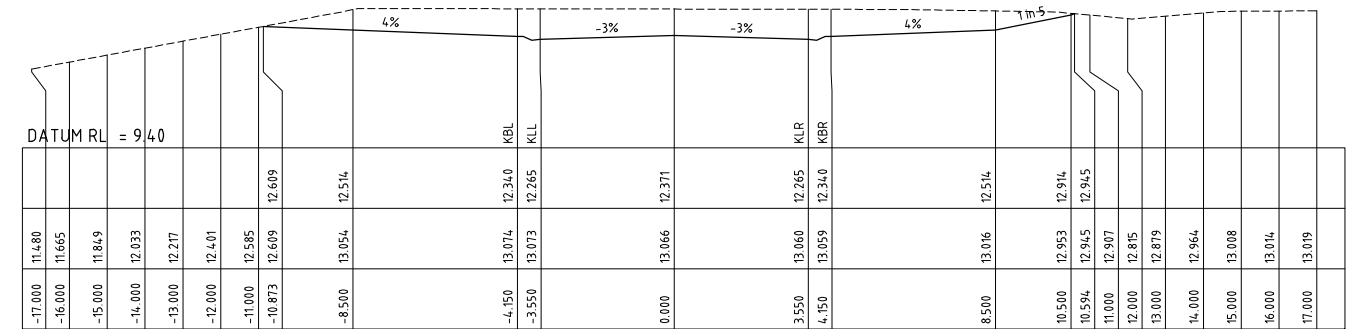
CH 315.000



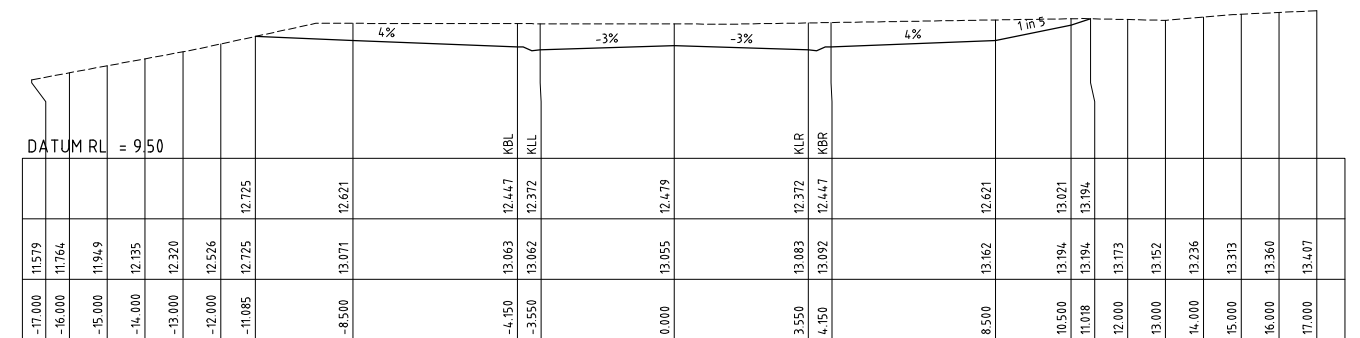
CH 390.000



CH 387.057



CH 375.000



CH 363.374

PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

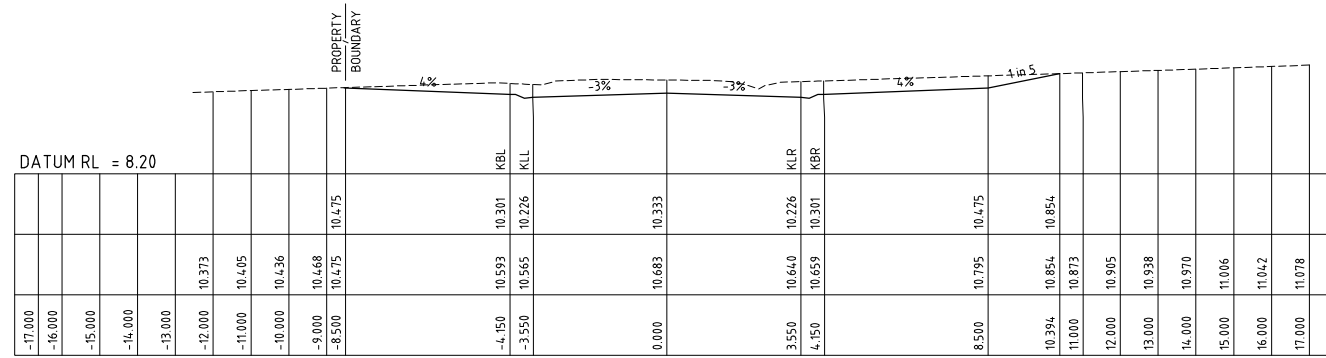
North				
Scale				
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1:100 (A1) 1:200 (A3)				
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Designed R.M				
Cad Reference 22218C dC08 r3				
Client				
Scale 1:100 H/V				
Project Approval IAN HILL (B.E) Consulting Civil Engineer				
Amendment				
Description				
Drawn				
App'd				
Date				
3	GENERAL REVISION	A.M	I.H	23.06.23
2	LAYOUT AMENDMENTS	A.M	I.H	23.03.23
1	ORIGINAL ISSUE	R.M	I.H	30.08.22

Designed R.M
Cad Reference 22218C dC08 r3
Scale 1:100 H/V
Project Approval IAN HILL (B.E) Consulting Civil Engineer

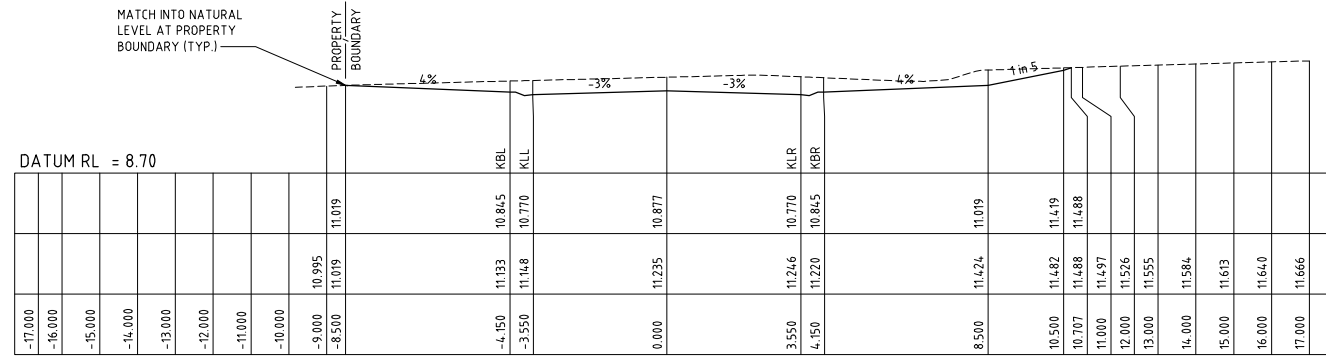
GCA
ENGINEERING SOLUTIONS
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1 HARTLEY DRIVE, THORNTON NSW 2322
PO BOX 3337, THORNTON NSW 2322
PHONE: (02) 4964 1811

PROPOSED SUBDIVISION
27 LANG DRIVE
BOLWARRA HEIGHTS
ROAD 01 CROSS SECTIONS (SHEET 4 OF 6)

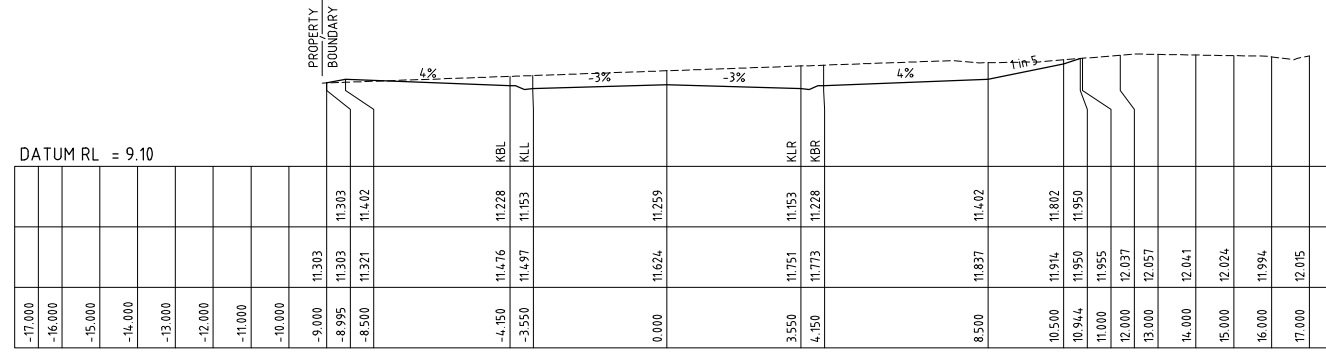
Project No
22218C
Drawing No
C08
Revision
3



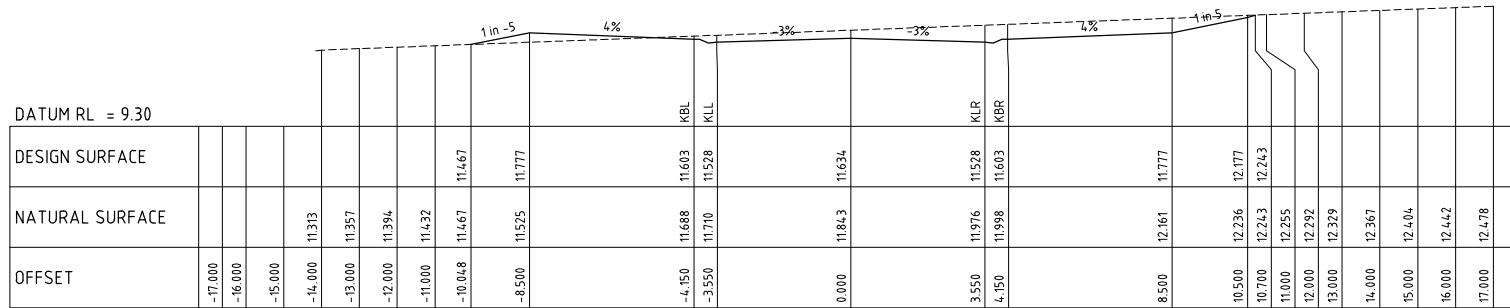
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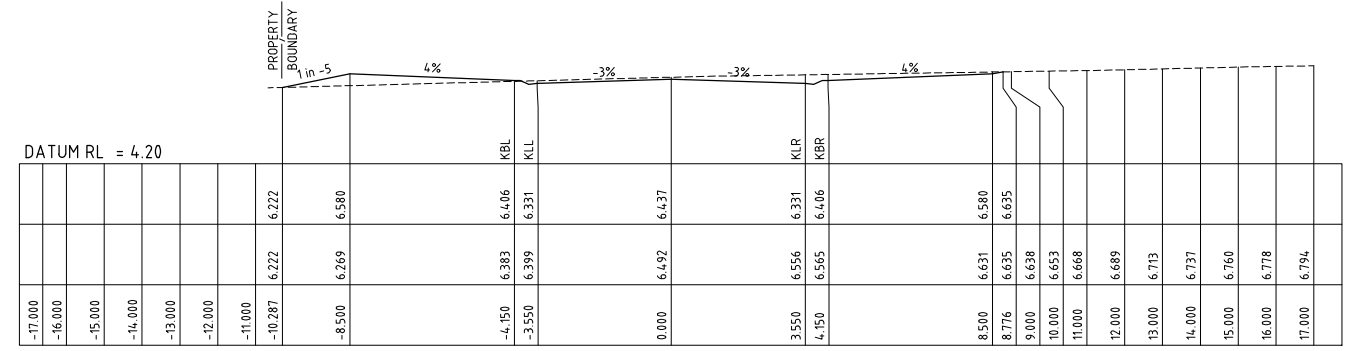
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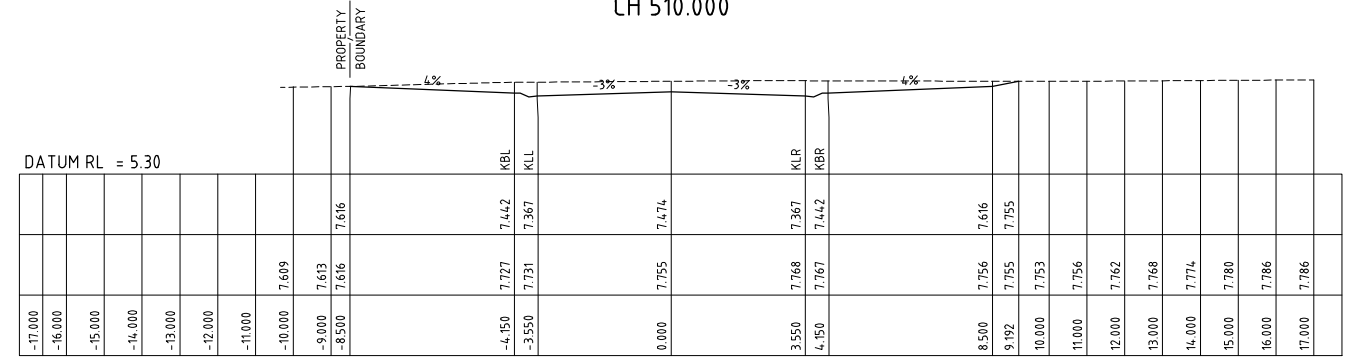
CH 420.000



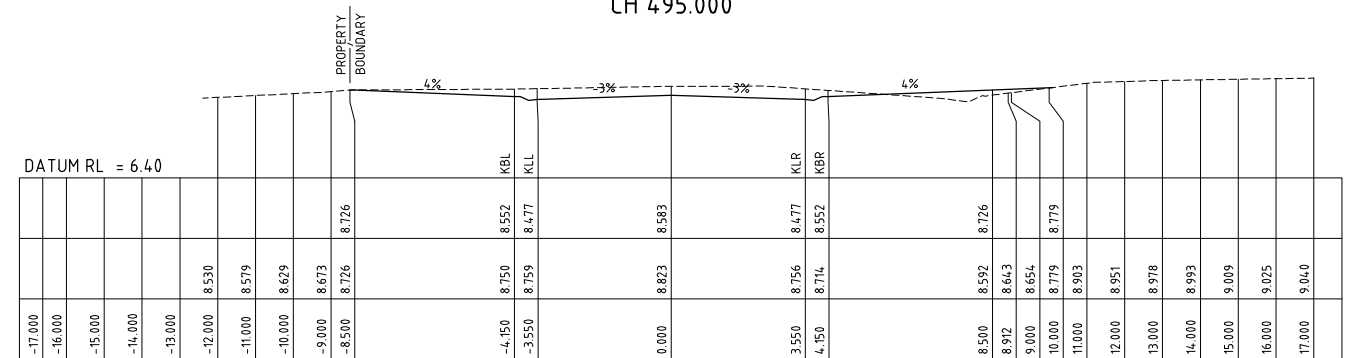
CH 405.000



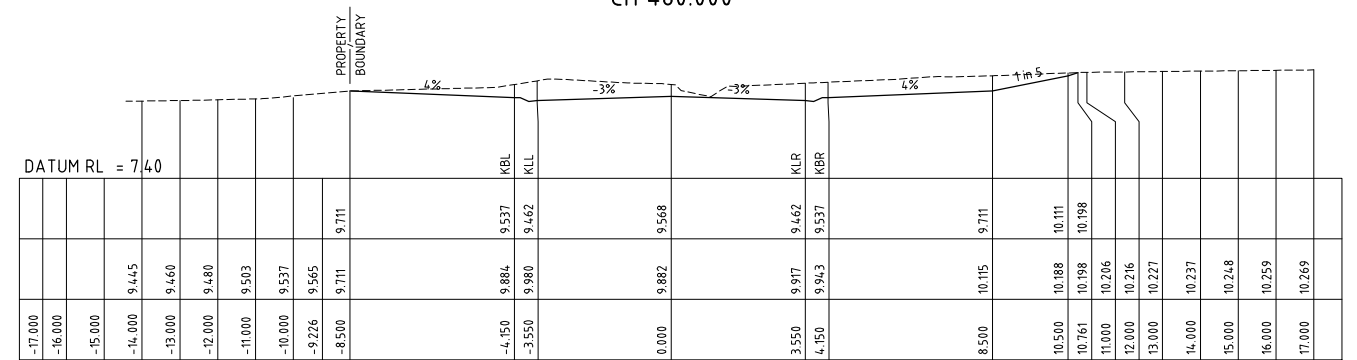
CH 510.000



CH 495.000



CH 480.000



CH 465.000

PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

					North
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					1:100 (A1) 1:200 (A3)
3	GENERAL REVISION		A.M	I.H	23.06.23
2	ORIGINAL ISSUE		A.M	I.H	23.03.23
Amendment	Description	Drawn	App'd	Date	

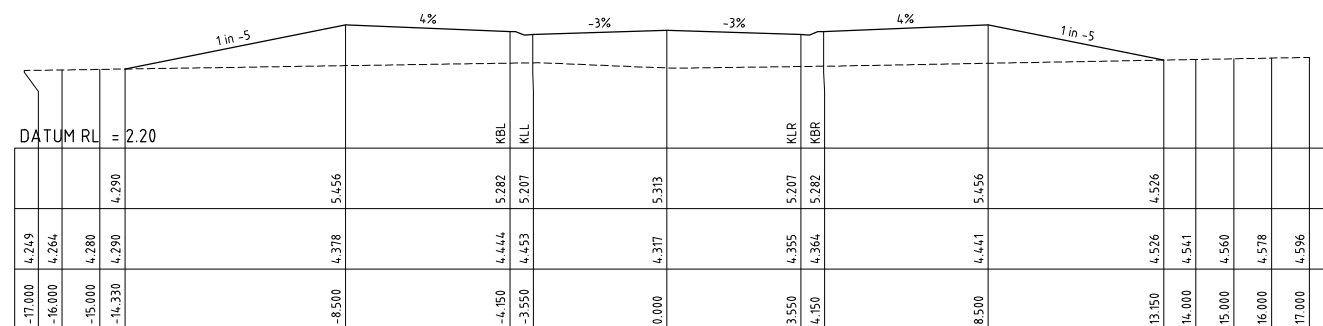
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Designed	A.M	Cad Reference	22218C dC09 r3	Client	
Scale	1:100 H/V	A1 SHEET			
Project Approval		IAN HILL (B.E)		Consulting Civil Engineer	

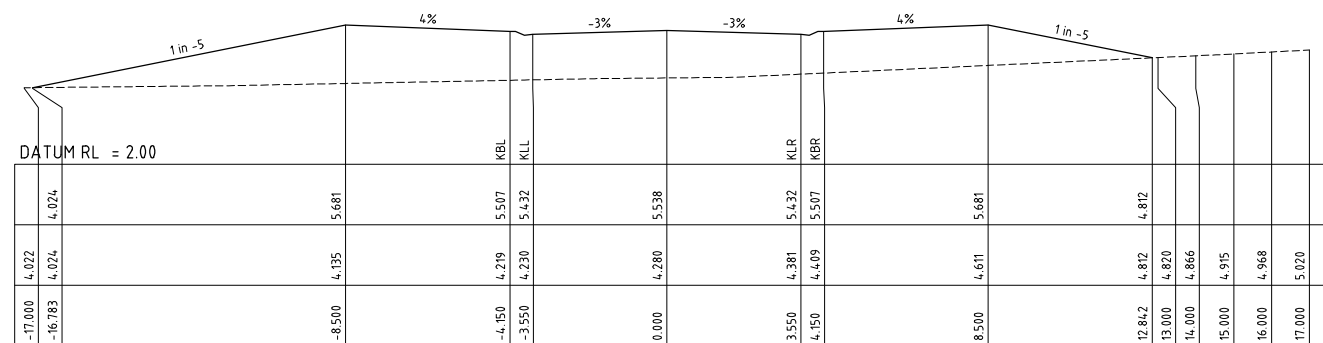
GCA	
ENGINEERING SOLUTIONS	
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PO BOX 3337, THORNTON NSW 2322	
PHONE: (02) 4964 1811	

PROPOSED SUBDIVISION	
27 LANG DRIVE	
BOLWARRA HEIGHTS	
ROAD 01 CROSS SECTIONS (SHEET 5 OF 6)	

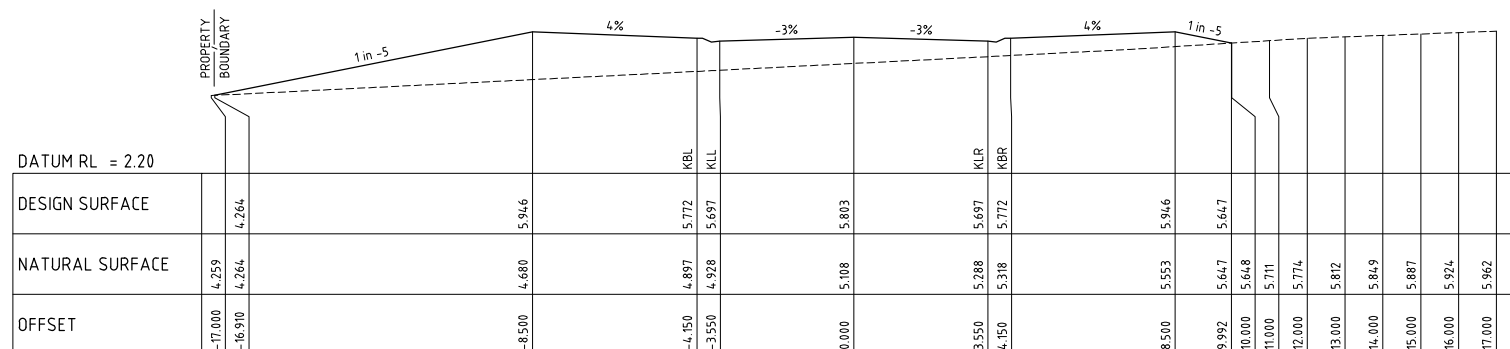
Project No		22218C	
Drawing No		C09	
Revision		3	



CH 555.000



CH 540.000



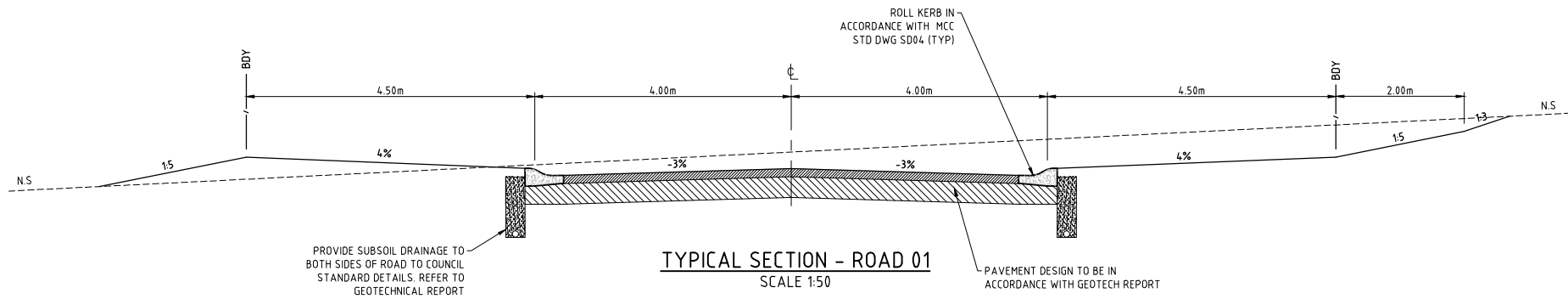
CH 525.000

PRELIMINARY ISSUE
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					North	Scale	COPYRIGHT Copyright in the drawings, information and data recorded hereon is the property of Geoff Craig & Associates Pty Ltd and may not be used, copied or reproduced in whole or part for any purpose other than that for which it is supplied without the prior consent of Geoff Craig & Associates Pty Ltd.		Designed A.M	Cad Reference 22218C dC10 r3	Client	<p>A.B.N. 92 086 017 745 1 HARTLEY DRIVE, THORNTON NSW 2322 PO BOX 3337, THORNTON NSW 2322 PHONE: (02) 4964 1811</p>	PROPOSED SUBDIVISION 27 LANG DRIVE BOLWARRA HEIGHTS ROAD 01 CROSS SECTIONS (SHEET 6 OF 6)		Project No 22218C
								Scale 1:100 H/V	A1 SHEET				Drawing No C10	Revision 3	
3	GENERAL REVISION	A.M	I.H	23.06.23				Project Approval IAN HILL (B.E) Consulting Civil Engineer							
2	ORIGINAL ISSUE	A.M	I.H	23.03.23											
Amendment	Description	Drawn	App'd	Date											

NOTES:

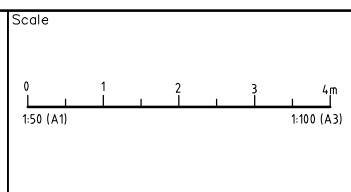
1. ALL DIMENSIONS OF EASEMENTS AND LOTS ARE SUBJECT TO REGISTRATION OF DEPOSITED PLAN.
2. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE APPROVED PLANS SUBJECT TO MAITLAND CITY COUNCIL'S MANUAL OF ENGINEERING STANDARDS.
3. EROSION CONTROL DEVICES AND SILTATION TRAPS TO BE INSTALLED BEFORE SITE IS DISTURBED IN ACCORDANCE WITH THE ATTACHED EROSION AND SEDIMENTATION CONTROL PLAN. COUNCIL IS TO INSPECT ALL EROSION AND SEDIMENT CONTROLS PRIOR TO ANY WORK COMMENCING.
4. DENUDED AREAS TO BE SEEDED IMMEDIATELY UPON COMPLETION OF TOP SOIL SPREADING.
5. ALL REINFORCED CONC. STORMWATER DRAINAGE PIPES ARE TO BE RUBBER RING JOINTED.
6. ALL EKI PIT GRATES TO BE SADDINGTONS GGLCD OR SIMILAR WITH RHS FRONT AND BACK.
7. ALL PITS DEEPER THAN 1.2m ARE TO BE CONSTRUCTED WITH STEP IRONS IN ACCORDANCE WITH MCC MANUAL OF ENGINEERING STANDARDS STD DWG SD039, SD043 AND ARE TO HAVE INCREASED INTERNAL DIMENSIONS TO ALLOW ACCESS IN ACCORDANCE WITH CONFINED SPACE REGULATIONS.
8. ALL STREET DRAINAGE PITS TO BE CONSTRUCTED IN ACCORDANCE WITH SD039.
9. ALL INTERALLOTMENT DRAINAGE PIPES TO BE SEWER GRADE uPVC (UNLESS OTHERWISE SHOWN) OR AN APPROVED EQUIVALENT. THE MINIMUM SLOPE OF INTERALLOTMENT DRAINAGE LINES SHALL BE 1%, THE INTERALLOTMENT DRAINAGE LINE SHALL BE A MINIMUM OF 0.5m FROM THE BOUNDARY AND LOCATED IN AN EASEMENT 1.5m WIDE.
10. JUNCTION PITS SHALL BE PROVIDED WHERE AN INTERALLOTMENT PIT IS NOT CONSTRUCTED. THEY SHALL BE 1.0m FROM THE ADJOINING DOWNSTREAM ALLOTMENT BOUNDARY.
11. ALL EXISTING UNDERGROUND SERVICES MUST BE LOCATED AND EXPOSED PRIOR TO EARTHWORKS COMMENCING AND IT IS THE RESPONSIBILITY OF THOSE PERSONS USING THIS PLAN TO CONFIRM BOTH POSITION & LEVEL OF THESE UTILITIES IN CONJUNCTION WITH THE APPROPRIATE AUTHORITY.
12. SUBSOIL DRAINS ARE TO BE PROVIDED IN ACCORDANCE WITH COUNCIL'S STD DWG SD035 AND SD032, AND WHERE NECESSARY, AS DIRECTED BY COUNCIL DURING WORKS.
13. PAVEMENT THICKNESS TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE APPROVED GEOTECHNICAL REPORT.
14. EASEMENT FOR BATTER TO BE CREATED WHERE FILL BATTERS ARE 3(H):1(V) OR STEEPER OR WHERE DEPTH OF FILL AT BOUNDARY EXCEEDS 600mm.
15. WORKING HOURS ON SITE SHALL BE IN ACCORDANCE WITH EPA & COUNCIL REQUIREMENTS.
16. VEHICULAR ACCESS AND ALL SERVICES ARE TO BE MAINTAINED AT ALL TIMES TO ADJOINING PROPERTIES AFFECTED BY CONSTRUCTION WORKS.
17. MAINTENANCE ON THE SEEDED AND TURFED AREAS SHALL BE OVER A 3 MONTH PERIOD. TURF THE FULL WIDTH OF ALL EARTH DISH DRAINS. LAY 600mm WIDE TURF STRIPS TO EACH SIDE OF CONCRETE ACCESSWAYS, PATHWAYS, AT THE REAR OF ALL KERB AND GUTTERING AND AT THE TOP OF CUT BATTERS. MULCH (IF AVAILABLE FROM SITE CLEARING) AND SEED ALL OTHER DISTURBED AREAS, INCLUDING TRENCHES. NO PERMANENT MULCH/WOODCHIP IS PERMITTED WITHIN FLOWPATHS AND PUBLIC AREAS.
18. ALL PERAMBULATOR RAMPS TO BE CONSTRUCTED AS SHOWN ON PLANS AND IN ACCORDANCE WITH MAITLAND CITY COUNCIL'S MANUAL OF ENGINEERING STANDARDS STD DWG SD019.
19. TRAFFIC CONTROL MEASURES TO BE IN ACCORDANCE WITH AS 1742.3-1996.
20. ALL LEVELS MUST BE OBTAINED FROM ESTABLISHED BENCH MARKS AS DIRECTED BY THE SUPERVISOR.
21. THE CONTRACTOR IS TO ENSURE THAT ALL THE NECESSARY SERVICE PIPE CONDUITS AND FITTINGS ARE IN PLACE PRIOR TO THE FINAL WEARING COURSE BEING LAID.
22. PROVIDE STREET NAME SIGNS AT ALL INTERSECTIONS, DOUBLE BLADED WHERE NECESSARY IN ACCORDANCE WITH MCC MANUAL OF ENGINEERING STANDARDS STD DWG SD029.
23. ALL SITE FILLING TO BE CONTROLLED FILL WITH INSPECTION TESTING TO BE CARRIED OUT BY A NATA REGISTERED LABORATORY TO LEVEL 1 IN ACCORDANCE WITH AS3798.
24. PAVEMENT PROOF ROLLING AND LEVEL CHECKS, DENSITY AND BENKELMAN BEAM TESTING TO BE IN ACCORDANCE WITH COUNCIL'S MANUAL OF ENGINEERING STANDARDS.
25. WHERE APPROVED CONSTRUCTION WORK REQUIRES THE REMOVAL OF TREES, THE CONTRACTOR IS TO ENGAGE THE SERVICES OF A SUITABLY QUALIFIED ECOLOGIST TO INSPECT THE SITE AND IDENTIFY ANY TREE WHICH IS LIKELY TO BE A HABITAT TREE. THE ECOLOGIST IS ALSO TO BE ON SITE DURING THE FELLING OF ANY IDENTIFIED TREE AND ENSURE THAT ANY DISPLACED OR INJURED WILDLIFE IS COLLECTED AND FORWARDED TO AN APPROPRIATE WILDLIFE RESCUE SERVICE. THE ECOLOGIST IS TO REPORT TO COUNCIL ON ACTION TAKEN AS PART OF TREE CLEARING OPERATIONS.



PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

Amendment	Description	Drawn	App'd	Date
3	GENERAL REVISION	A.M	I.H	23.06.23
2	DRAWING NUMBER CHANGE	A.M	I.H	23.03.23
1	ORIGINAL ISSUE	R.M	I.H	30.08.22

North



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Scale 1:50	A1 SHEET
Project Approval IAN HILL (B.E) Consulting Civil Engineer	

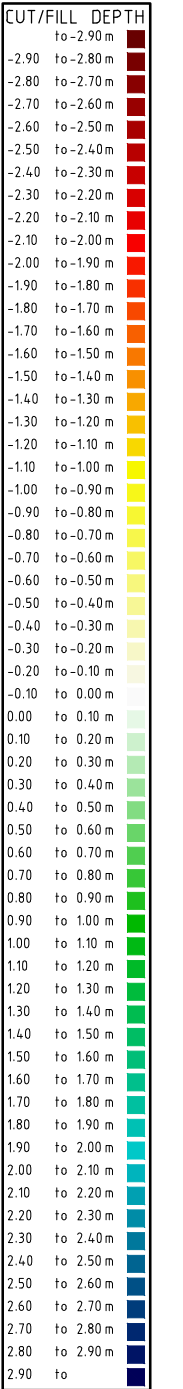
Client

A.B.N. 92 086 017 745
1 HARTLEY DRIVE, THORNTON NSW 2322
PO BOX 3337, THORNTON NSW 2322
PHONE: (02) 4964 1811

PROPOSED SUBDIVISION
27 LANG DRIVE
BOLWARRA HEIGHTS
TYPICAL SECTION, SECTIONS AND NOTES

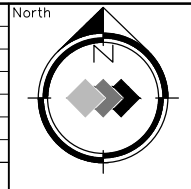
Project No 22218C	
Drawing No C11	Revision 3

VOLUMES
 TOTAL CUT = 3830m³
 TOTAL FILL = 11870m³
 (VOLUMES ABOVE DO NOT INCLUDE STRIPPING OR PAVEMENT VOLUMES)
 ESTIMATED PAVEMENT VOLUME = 3805m³ (750mm DEPTH)



PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

Amendment	Description	Drawn	App'd	Date
3	LAYOUT AMENDMENT	A.M	I.H	22.06.23
2	LAYOUT AMENDMENTS - DRAWING NUMBER CHANGE	A.M	I.H	23.03.23
1	ORIGINAL ISSUE	R.M	I.H	30.08.22



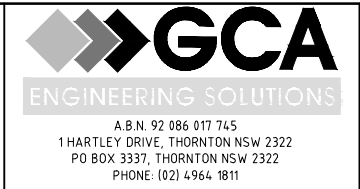
Scale
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1:750 (A1) 1500 (A3)

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Designed
A.M
Scale
1:750
Project Approval
IAN HILL (B.E)
Consulting Civil Engineer

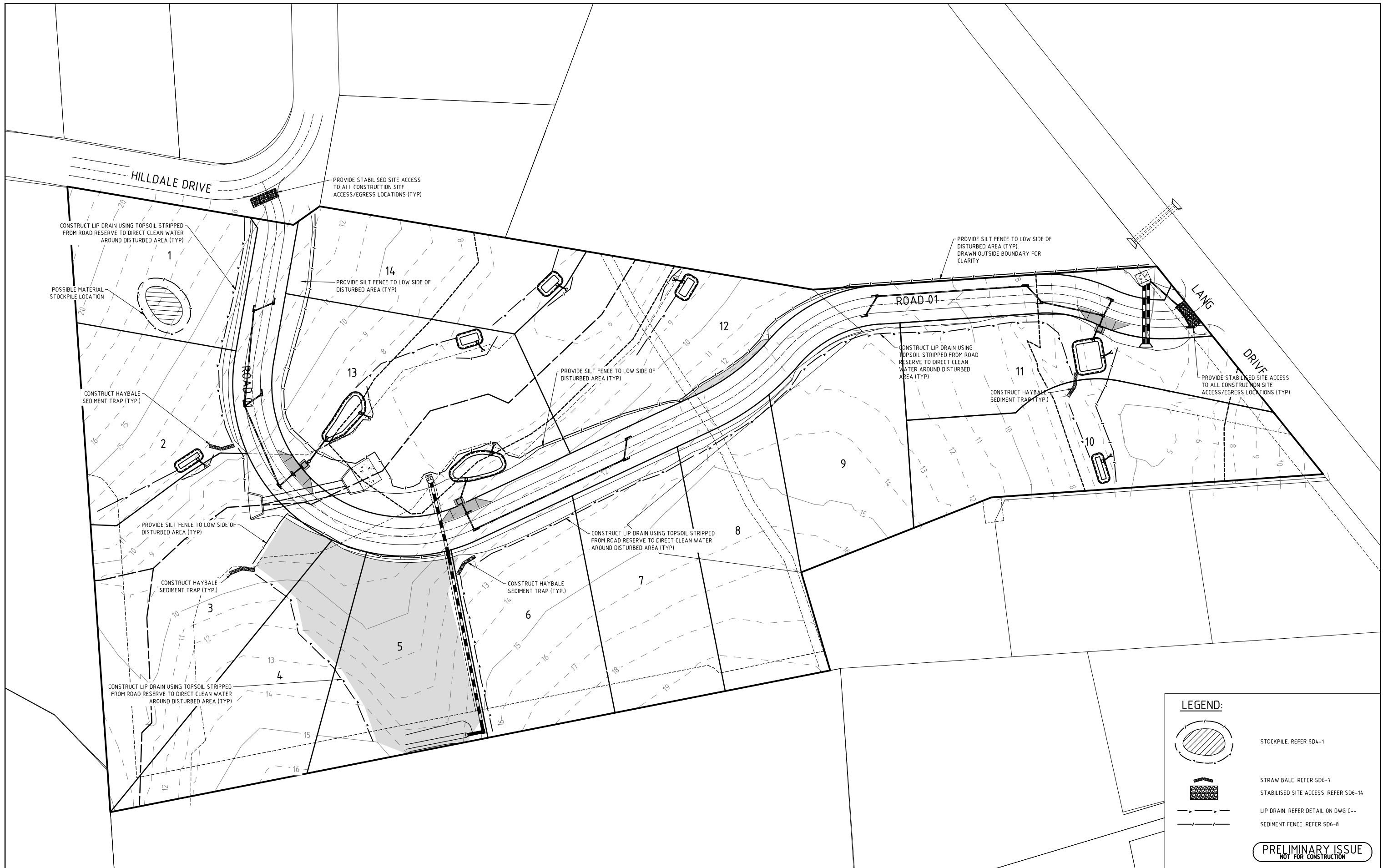
Cad Reference
22218C dC12 r3
A1 SHEET

Client

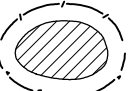



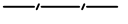


PROPOSED SUBDIVISION
27 LANG DRIVE
BOLWARRA HEIGHTS
 EARTHWORKS PLAN

Project No 22218C	Drawing No C12	Revision 3
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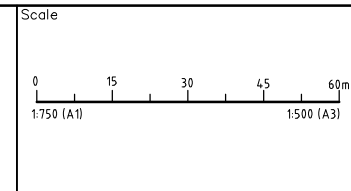
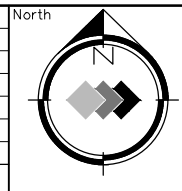


LEGEND:

-  STOCKPILE. REFER SD4-1
-  STRAW BALE. REFER SD6-7
-  STABILISED SITE ACCESS. REFER SD6-14
-  LIP DRAIN. REFER DETAIL ON DWG C--
-  SEDIMENT FENCE. REFER SD6-8

PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

Amendment	Description	Drawn	App'd	Date
4	STORMWATER AMENDMENTS	A.M	I.H	29.08.23
3	LAYOUT AMENDMENT	A.M	I.H	23.06.23
2	LAYOUT AMENDMENTS - DRAWING NUMBER CHANGE	A.M	I.H	23.03.23
1	ORIGINAL ISSUE	R.M	I.H	30.08.22



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Designed
A.M

Scale
1:750

Project Approval
IAN HILL (B.E)
Consulting Civil Engineer

Cad Reference
22218C dC13 r4

A1 SHEET

Client



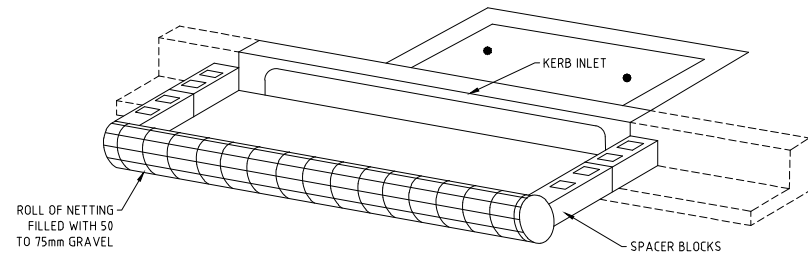
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ENGINEERING SOLUTIONS

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1 HARTLEY DRIVE, THORNTON NSW 2322
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PHONE: (02) 4964 1811

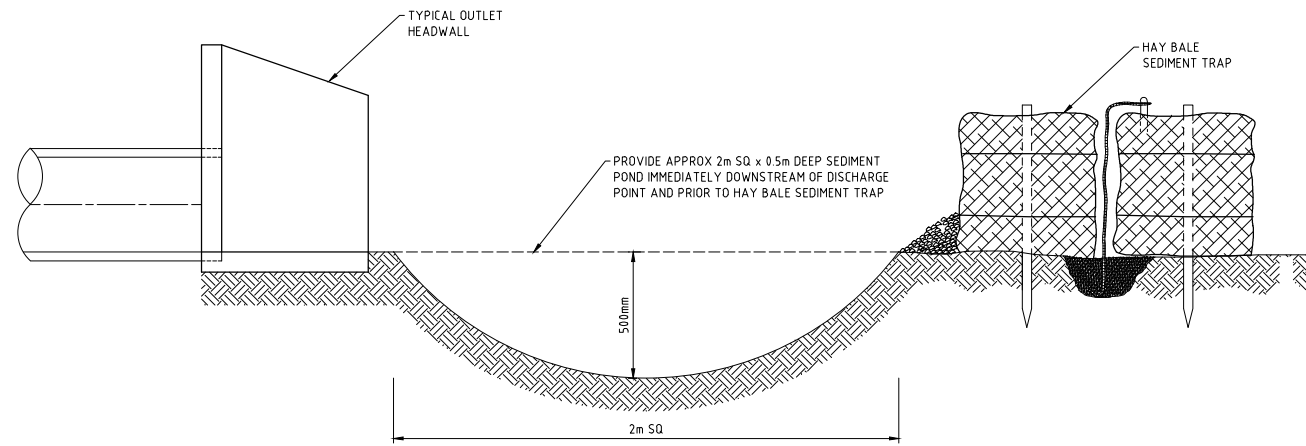
PROPOSED SUBDIVISION
27 LANG DRIVE
BOLWARRA HEIGHTS

SOIL AND WATER MANAGEMENT PLAN

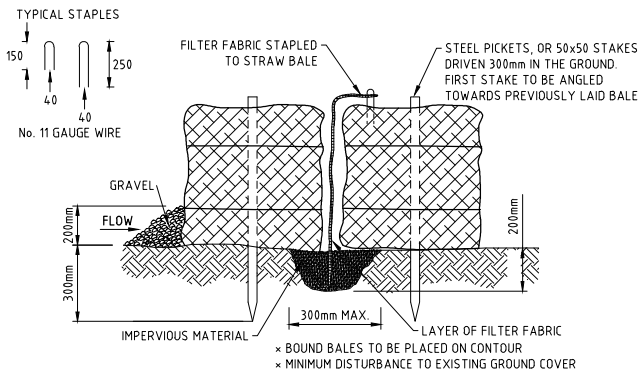
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Drawing No C13	Revision 4



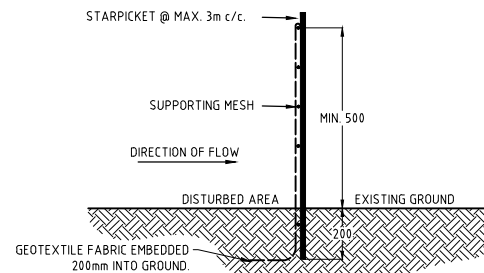
SEDIMENT BARRIER OF STORMWATER PITS
N.T.S



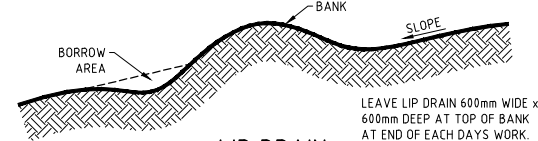
TYPICAL SEDIMENT TREATMENT AT DISCHARGE LOCATION
N.T.S



HAY BALE DETAIL
N.T.S



SEDIMENT FENCE.



LIP DRAIN
N.T.S

TYPICAL CONSTRUCTION SCHEDULE

	WEEK							
	1	2	3	4	5	6	7	8
CONSTRUCT ALL TEMPORARY SEDIMENT BASINS	█							
PLACE SILT FENCE ALONG ROAD BOUNDARIES AS SHOWN	█							
PLACE SILT FENCE BELOW AREAS TO BE REGRADED	█							
CONSTRUCT ALL DIVERSION BANKS CATCHING CLEAN WATER	█							
ROAD CONSTRUCTION AND REGRADE		█	█	█	█	█	█	█
PLACE SILT FENCE AROUND TOPSOIL STOCKPILES			█	█				
PLACE SEDIMENT BARRIERS AROUND STORMWATER PITS AT COMPLETION OF DRAINAGE				█	█			
PLACE STRIP TURF PARALLEL TO DESIGN CONTOURS ALONG ROAD AS SHOWN								█

EROSION CONTROL

- EROSION CONTROL DEVICES AND SILTATION TRAPS TO BE INSTALLED BEFORE SITE IS DISTURBED IN ACCORDANCE WITH N.S.W. DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT GUIDELINES AND APPROVED BY COUNCIL INSPECTOR.
- ALL PERIMETER AND CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN EARTHWORKS AND/OR CLEARING.
- SILT TO BE REMOVED FROM TEMPORARY SEDIMENT CONTROL BASINS AS DIRECTED BY COUNCIL INSPECTOR OR DEPARTMENT OF LAND AND WATER CONSERVATION REPRESENTATIVE TO MAINTAIN SILTATION STORAGE CAPACITY IN TEMPORARY BASINS.
- FILTRATION BUFFER ZONES ARE TO BE FENCED OFF AND ACCESS PROHIBITED TO ALL PLANT AND MACHINERY.
- HAY BALE BARRIERS AND GEOTEXTILE FENCES ARE TO BE CONSTRUCTED TO TOE OF BATTER PRIOR TO COMMENCEMENT OF EARTHWORKS IMMEDIATELY AFTER CLEARING OF VEGETATION BEFORE REMOVAL OF TOPSOIL.
- SANDBAGS TO BE USED DURING ROAD CONSTRUCTION TO DIVERT STORMWATER INTO PITS WHEN SUBGRADE IS UP TO KERB LEVEL.
- ALL TEMPORARY EARTH BERMS, DIVERSION AND SILT DAM EMBANKMENTS ARE TO BE MACHINE COMPACTED, SEEDED & MULCHED FOR TEMPORARY VEGETATION COVER AS SOON AS THEY HAVE BEEN FORMED.
- CLEAN WATER IS TO BE DIVERTED AWAY FROM DISTURBED GROUND AND INTO DRAINAGE SYSTEM.
- ALL SEDIMENT TRAPPING STRUCTURES AND DEVICES ARE TO BE INSPECTED AFTER STORMS FOR STRUCTURAL DAMAGE OR CLOGGING. TRAPPED MATERIAL IS TO BE REMOVED TO A SAFE APPROVED LOCATION.
- ALL TOPSOIL IS TO BE STOCKPILED ON SITE FOR RE-USE (AWAY FROM TREES AND DRAINAGE LINES). MEASURES SHALL BE APPLIED TO PREVENT EROSION OF THE STOCKPILES.
- ALL FILLS ARE TO BE LEFT WITH A LIP AT THE TOP OF THE SLOPE AT THE END OF EACH DAY'S EARTHWORKS. THE HEIGHT OF THE LIP SHALL BE A MINIMUM OF 200mm.
- ALL CUT AND FILL SLOPES ARE TO BE SEEDED AND MULCHED WITHIN 10 DAYS OF COMPLETION OF FORMATION.
- UNDERSCRUBBING OF VEGETATION TO BE RESTRICTED TO SLASHING TO MINIMISE SOIL DISTURBANCE.
- UPON COMPLETION OF ALL EARTHWORKS OR AS DIRECTED BY COUNCIL, SOIL CONSERVATION TREATMENTS SHALL BE APPLIED TO RENDER AREAS THAT HAVE BEEN DISTURBED. EROSION PROOF WITHIN 14 DAYS.
- DENUDED AREAS TO BE STRIP TURF OR HYDROMULCH SEEDED WITH THE SEED MIX BELOW OR APPROVED BY DEPARTMENT OF LAND AND WATER CONSERVATION REPRESENTATIVE. WITHIN 14 DAYS OF PRACTICAL COMPLETION OF EARTHWORKS. STRIPS ARE TO BE PLACED ACROSS THE CONTOUR AT RIGHT ANGLES TO THE DIRECTION OF SLOPE.

HYDROMULCH SEED MIXES

SUMMER MIX		AUTUMN MIX	
MATERIAL	APPLICATION RATE	MATERIAL	APPLICATION RATE
JAPANESE MILLET	30 Kg/Ha	OATS	20 Kg/Ha
COUCH	10 Kg/Ha	RYE GRASS	10 Kg/Ha
CARPET GRASS	10 Kg/Ha	RED CLOVER	5 Kg/Ha
HAIFA WHITE CLOVER	5 Kg/Ha	WHITE CLOVER	5 Kg/Ha
BINDER	200 l/Ha	COUCH	10 Kg/Ha
PULP	1000 Kg/Ha	FERTILISER ENRICHER	300 Kg/Ha
FERTILISER	300 Kg/Ha	OR	
		DYNAMIC LIFTER	1000Kg/Ha

- THE AREA OVER ALL STORMWATER AND SEWER LINES NOT WITHIN ROAD RESERVES IS TO BE MULCHED AND SEEDED WITHIN 14 DAYS AFTER BACKFILL.
- NO MORE THAN 15m OF TRENCH IS TO BE OPEN AT ANY ONE TIME.
- AREAS OVER ELECTRICITY, TELEPHONE AND GAS SUPPLY TRENCHES ARE TO BE SEEDED AND MULCHED BY THE RELEVANT AUTHORITY WITHIN 14 DAYS AFTER BACKFILL.
- ALL FOOTPATHS, BERMS AND BATTERS AND SITE REGRADE AREAS ARE TO BE TOPSOILED WITH MINIMUM 75mm OF SELECTED SITE TOPSOIL AND GRASSED.
- STRIPS OF TURF ARE TO BE PLACED IMMEDIATELY BEHIND THE KERB AND GUTTER ON ALL NEW ROADS AND AT LOCATIONS AS DETERMINED BY COUNCIL'S SUPERVISING OFFICER.
- ALL FINAL EROSION PREVENTION MEASURES INCLUDING THE ESTABLISHMENT OF GRASSING ARE TO BE COMPLETED PRIOR TO THE SUBDIVISION FINAL INSPECTION. ALL EROSION DEVICES ARE TO BE MAINTAINED UNTIL THE END OF THE MAINTENANCE PERIOD.

PRELIMINARY ISSUE
NOT FOR CONSTRUCTION

Amendment	Description	Drawn	App'd	Date
3	GENERAL REVISION	A.M	I.H	23.06.23
2	DRAWING NUMBER CHANGE	A.M	I.H	23.03.23
1	ORIGINAL ISSUE	R.M	I.H	30.08.22

North	Scale
-------	-------

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Designed R.M	Cad Reference 22218C dC14 r3
Scale A1 SHEET	
Project Approval IAN HILL (B.E) Consulting Civil Engineer	

Client

GCA
ENGINEERING SOLUTIONS
A.B.N. 92 086 017 745
1 HARTLEY DRIVE, THORNTON NSW 2322
PO BOX 3337, THORNTON NSW 2322
PHONE: (02) 4964 1811

PROPOSED SUBDIVISION
27 LANG DRIVE
BOLWARRA HEIGHTS
SOIL AND WATER MANAGEMENT DETAILS

Project No 22218C
Drawing No C14
Revision 3

APPENDIX

B

SITE PHOTOS



now





Photograph 1: View of the transpiration bed east of the dwelling, facing south. 14/08/2023.



Photograph 2: View of the front portion of the access track entering the Site, facing east. 14/08/2023.



Photograph 3: View of the back of the residential dwelling, facing northeast. 14/08/2023.



Photograph 4: View of the fire pit, facing south. 14/08/2023.



Photograph 5: View of the shed contents, facing north. 14/08/2023.



Photograph 6: View of fill pad adjacent to the shed, facing east. 14/08/2023.



Photograph 7: View of suspected transpiration bed, facing east. 14/08/2023.



Photograph 8: View of septic tank north of the dwelling, facing north. 14/08/2023.



Photograph 9: View of the eaves of the residential dwelling, facing south. 14/08/2023.



Photograph 10: View of the drainage channel in the paddock area, facing southwest. 14/08/2023.

APPENDIX

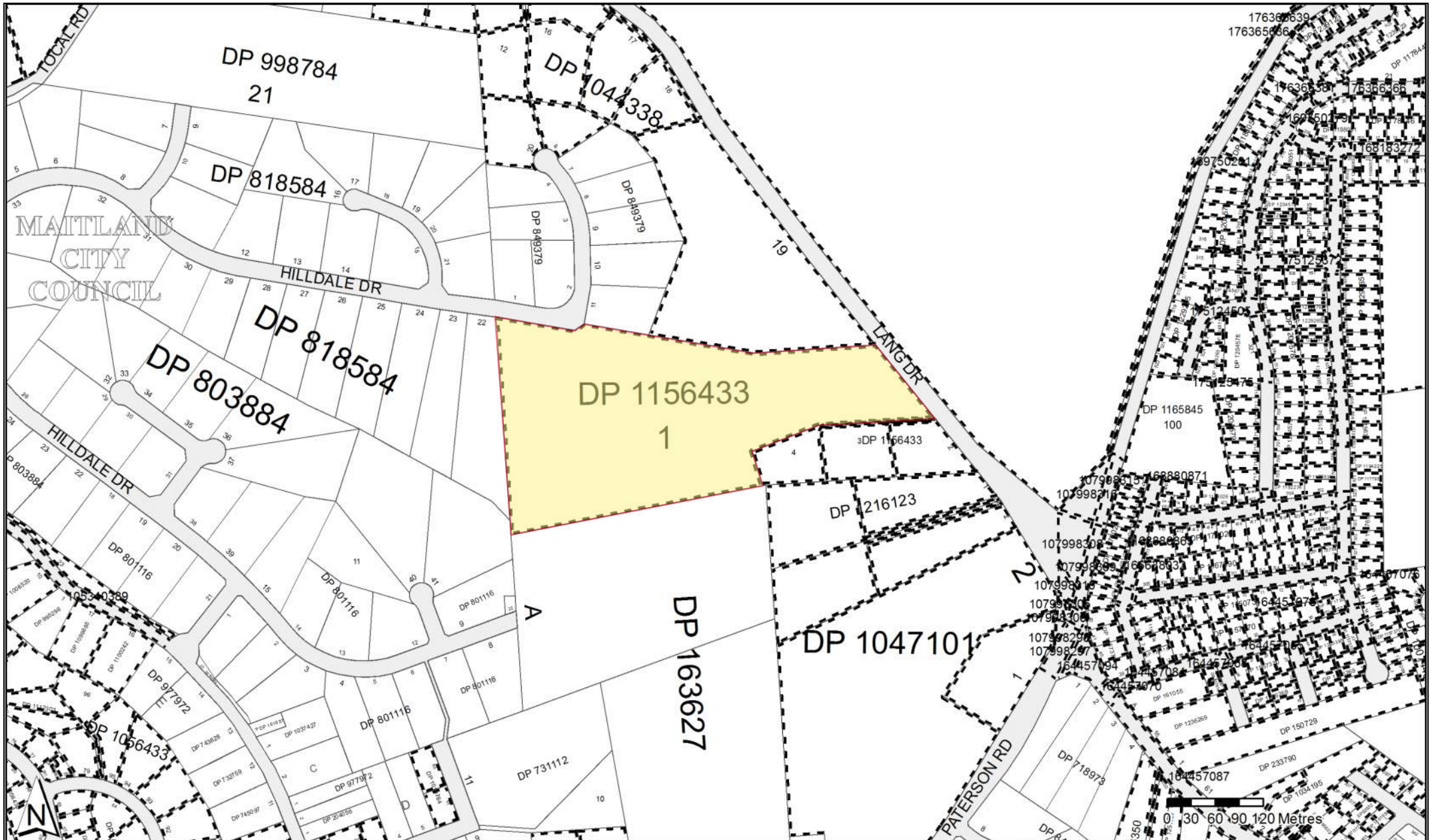
C

DATA REVIEW



now



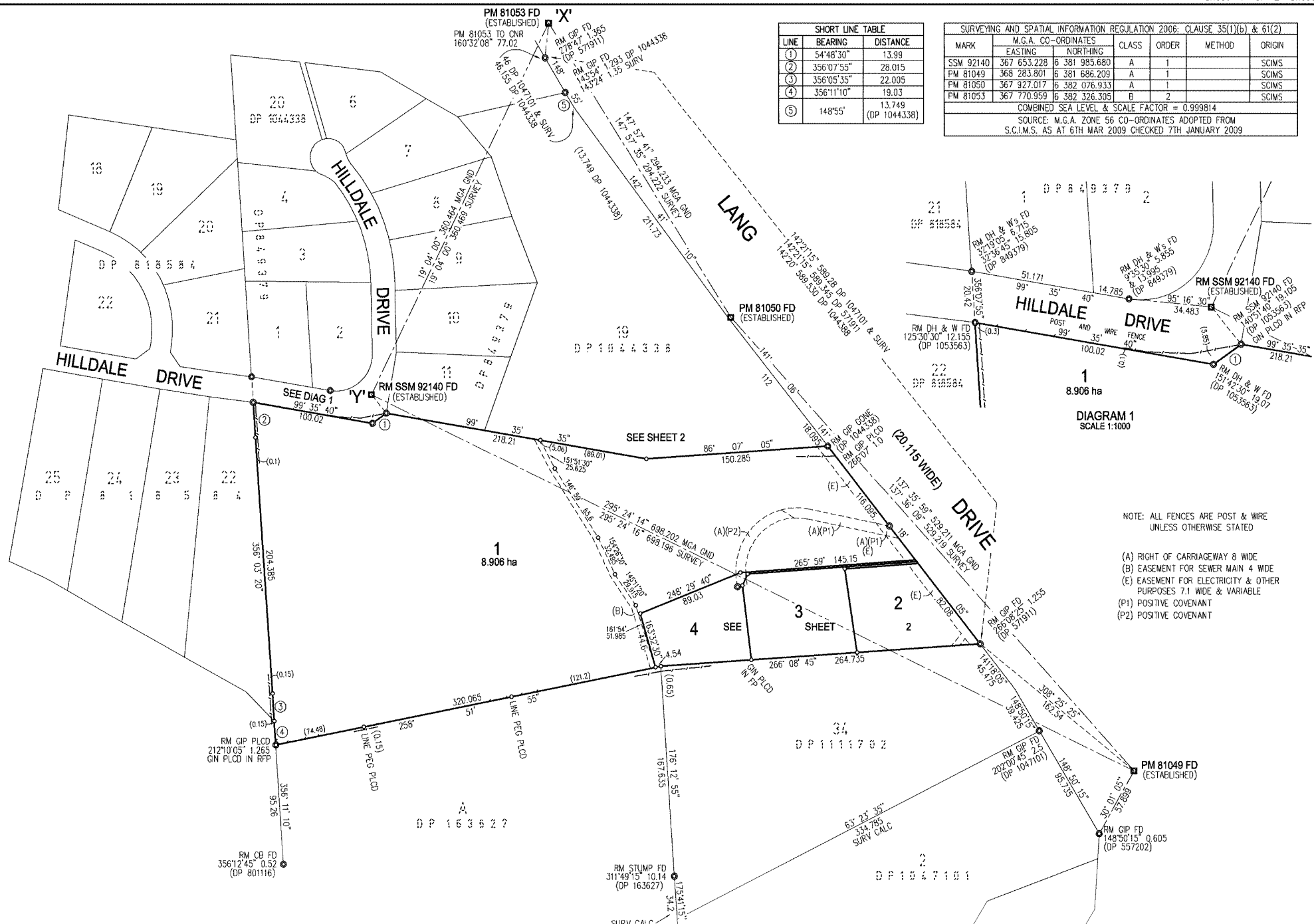




DP1156433

Seq: 1 of 6

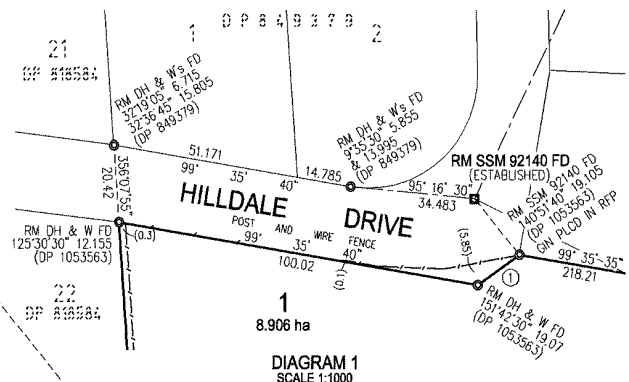
Req: R713209 /Doc: DP 1156433 P /Rev: 20-sep-2010 /NSW IRS /Pgs: ALL /Prt: 13-Jun-2023 16:19 /Src: InfoTrack /Ref: 27 Lang Drive? Bolwarra Heights



LINE	BEARING	DISTANCE
①	54°48'30"	13.99
②	356°07'55"	28.015
③	356°05'35"	22.005
④	356°11'10"	19.03
⑤	148°55'	13.749 (DP 1044338)

SURVEYING AND SPATIAL INFORMATION REGULATION 2006: CLAUSE 35(1)(b) & 61(2)						
MARK	M.G.A. CO-ORDINATES		CLASS	ORDER	METHOD	ORIGIN
	EASTING	NORTHING				
SSM 92140	367 653.228	6 381 985.680	A	1		SCIMS
PM 81049	368 283.801	6 381 686.209	A	1		SCIMS
PM 81050	367 927.017	6 382 076.933	A	1		SCIMS
PM 81053	367 770.959	6 382 326.305	B	2		SCIMS

COMBINED SEA LEVEL & SCALE FACTOR = 0.999814
SOURCE: M.G.A. ZONE 56 CO-ORDINATES ADOPTED FROM S.C.I.M.S. AS AT 6TH MAR 2009 CHECKED 7TH JANUARY 2009

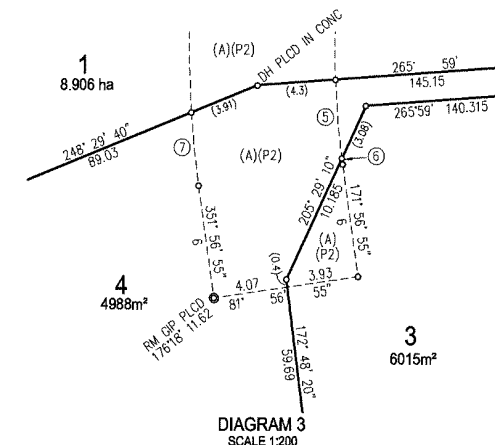
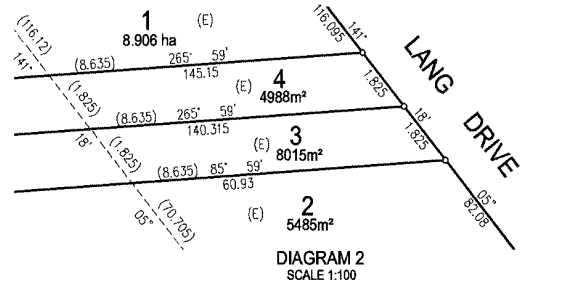
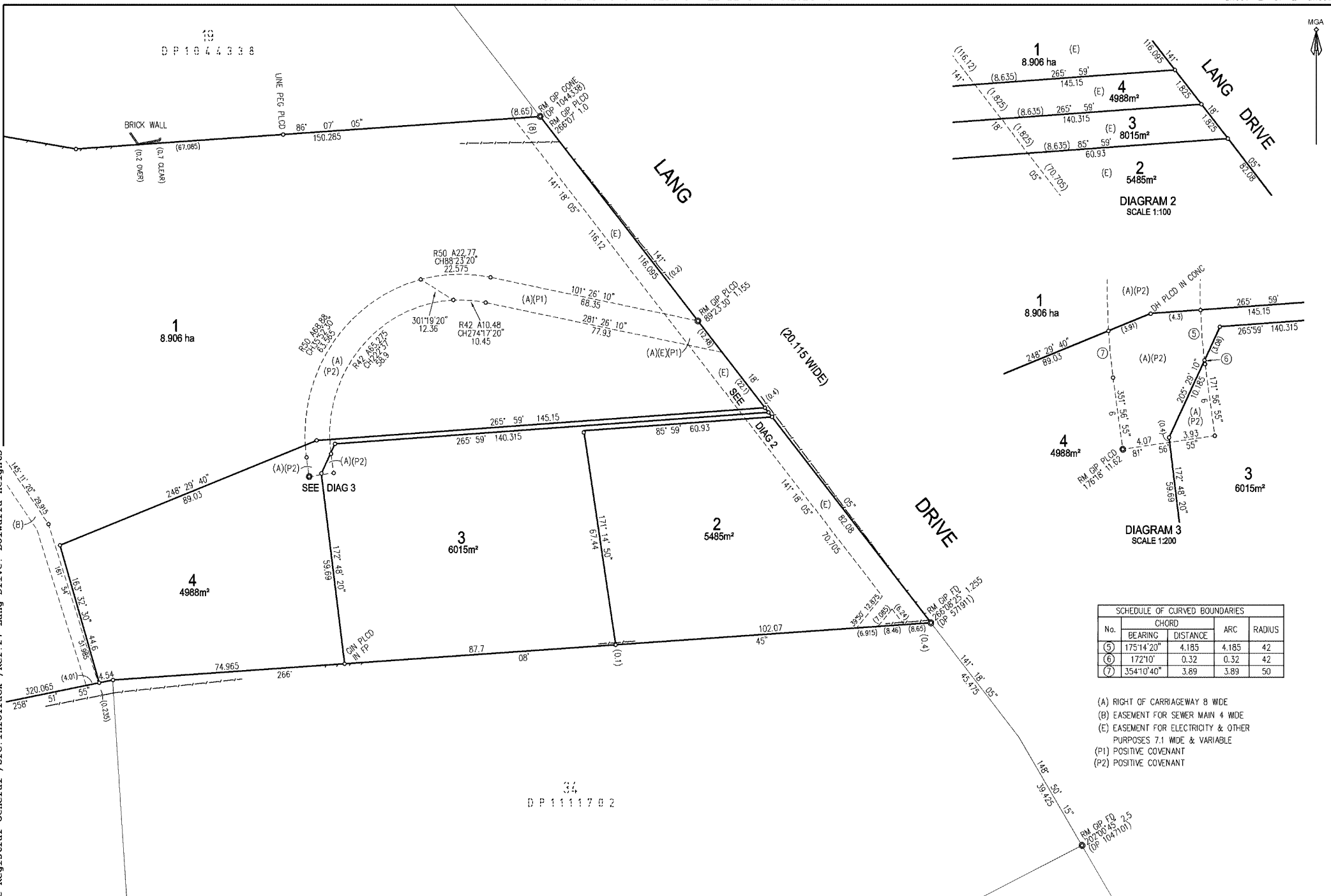


NOTE: ALL FENCES ARE POST & WIRE UNLESS OTHERWISE STATED

(A) RIGHT OF CARRIAGEWAY 8 WIDE
 (B) EASEMENT FOR SEWER MAIN 4 WIDE
 (E) EASEMENT FOR ELECTRICITY & OTHER PURPOSES 7.1 WIDE & VARIABLE
 (P1) POSITIVE COVENANT
 (P2) POSITIVE COVENANT

Surveyor: JOEL WILLIAM EDWARDS Date of Survey: 16/02/10 Surveyor's Ref: 09/21 X:\08_21_AutoCAD\0821_DP_B.dwg	PLAN OF SUBDIVISION OF LOT 262 DP 1053563.	LGA: MAITLAND Locality: BOLWARRA HEIGHTS Subdivision No: 052191 Lengths are in metres. Reduction Ratio 1:2000	Registered: 20-09-2010	DP1156433
---	--	--	---------------------------	------------------

DP1156433
 DP1156433 P / Rev: 20-Sep-2010 / NSW LRS / Pgs: ALL / Prt: 13-Jun-2023 16:19 / Seq: 2 of 6
 © Office of the Registrar-General / Src: Infrack / Ref: 27 Lang Drive? Bolwarra Heights



SCHEDULE OF CURVED BOUNDARIES				
No.	CHORD			
	BEARING	DISTANCE	ARC	RADIUS
(5)	175°14'20"	4.185	4.185	42
(6)	172°10"	0.32	0.32	42
(7)	354°10'40"	3.89	3.89	50

- (A) RIGHT OF CARRIAGEWAY 8 WIDE
- (B) EASEMENT FOR SEWER MAIN 4 WIDE
- (E) EASEMENT FOR ELECTRICITY & OTHER PURPOSES 7.1 WIDE & VARIABLE
- (P1) POSITIVE COVENANT
- (P2) POSITIVE COVENANT

Surveyor: JOEL WILLIAM EDWARDS Date of Survey: 16/02/10 Surveyor's Ref: 09/21 X:\08_21_Audit\CAD\0821_DP_B.dwg	PLAN OF SUBDIVISION OF LOT 262 DP 1053563.	LGA: MAITLAND Locality: BOLWARRA HEIGHTS Subdivision No: 052191 Lengths are in metres. Reduction Ratio 1:750
Registered:		20-09-2010
DP1156433		

PLAN FORM 6

WARNING: Creating or loading will lead to rejection

DEPOSITED PLAN ADMINISTRATION SHEET

Sheet 1 of 4 sheet(s)

SIGNATURES, SEALS and STATEMENTS of intention to dedicate public roads, to create public reserves, drainage reserves, easements, restrictions on the use of land or positive covenants.

Pursuant to Section 88B of the Conveyancing Act 1919, as amended it is intended to create:-

1. Right of Carriageway 8 wide (A)
2. Restriction on the Use of Land
3. Easement for Sewer Main 4 wide (B)
4. Easement for Electricity & Other Purposes 7.1 wide & variable (E)
5. Positive Covenant (P1)
6. Positive Covenant (P2)

Use PLAN FORM 6A

for additional certificates, signatures, seals and statements

Crown Lands NSW/Western Lands Office Approval

I.....in approving this plan certify
 (Authorised Officer)
 that all necessary approvals in regard to the allocation of the land shown herein have been given
 Signature:.....
 Date:.....
 File Number:.....
 Office:.....

Subdivision Certificate

I certify that the provisions of s.109J of the Environmental Planning and Assessment Act 1979 have been satisfied in relation to:

the proposed.....SUBDIVISION..... set out herein
 (insert 'subdivision' or 'new road')

Seubert

* Authorised Person/General Manager/Accredited Certifier

Consent Authority: Maitland City Council
 Date of Endorsement: 17.8.10
 Accreditation no:
 Subdivision Certificate no: 052191
 File no: DA.05.2191

* Delete whichever is inapplicable.

DP1156433

Registered:  20-09-2010

Title System: TORRENS

Purpose: SUBDIVISION

PLAN OF SUBDIVISION OF LOT 262 DP1053563

LGA: Maitland

Locality: Bolwarra Heights

Parish: Middlehope

County: Durham

Surveying & Spatial Information Regulation, 2006

I, Joel William Edwards - Pulver Cooper & Blackley.....
 of 98 Lawes Street, East Maitland.....
 a surveyor registered under the *Surveying & Spatial Information Act, 2002*, certify that the survey represented in this plan is accurate, has been made in accordance with the *Surveying & Spatial Information Regulation, 2006* and was completed on 16/02/10

The survey relates to Lot 1 to 4 inclusive.....

(specify the land actually surveyed or specify any land shown in the plan that is not the subject of the survey)

Signature Joel Edwards Dated: 24/06/10
 Surveyor registered under the *Surveying & Spatial Information Act, 2002*

Datum Line:...'X'-'Y'
 Type: Urban/Rural

Plans used in the preparation of survey/compilation

- DP163627 DP1053563
- DP571911
- DP818584
- DP849379
- DP1044388
- DP1047101

(if insufficient space use Plan Form 6A annexure sheet)

SURVEYOR'S REFERENCE: 09/21

23/06/2010

* OFFICE USE ONLY

DEPOSITED PLAN ADMINISTRATION SHEET

Sheet 2 of 4 sheet(s)

PLAN OF SUBDIVISION OF LOT 262 DP1053563


DP1156433

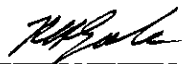
Registered:  20-092010

Subdivision Certificate No: 052191

Date of Endorsement: 17.8.10

SIGNED in my presence by)
KEVIN HOWARD GALE)
who is personally known to me)


Signature of Witness



Kevin Howard Gale

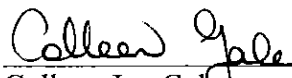
STEPHEN PUNCH
Name of Witness

27 LANG DRNE

BOLWARRA HEIGHTS, 2320
Address of Witness

SIGNED in my presence by)
COLLEEN JOY GALE)
who is personally known to me)


Signature of Witness


Colleen Joy Gale

STEPHEN PUNCH
Name of Witness

27 LANG DRIVE

BOLWARRA HEIGHTS, 2320
Address of Witness

DEPOSITED PLAN ADMINISTRATION SHEET

Sheet 3 of 4 sheet(s)

PLAN OF SUBDIVISION OF LOT 262 DP1053563

*

DP1156433

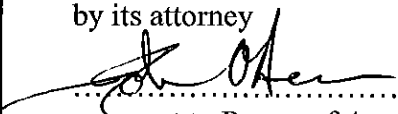
Registered:  20-09-2010

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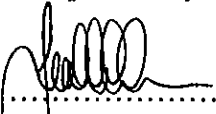
Subdivision Certificate No: 052191

Date of Endorsement: 17.8.10

HUNTER WATER CORPORATION
by its attorney


.....
pursuant to Power of Attorney
Book 951 No. 4562

John O'Hearn
.....
Signed in my presence by its Attorney
who is personally know to me


.....
Witness

Leah Wilcox
.....
Name of Witness

36 Honeysuckle Dr
.....
Newcastle
.....
Address of Witness

* OFFICE USE ONLY

DEPOSITED PLAN ADMINISTRATION SHEET

Sheet 4 of 4 sheet(s)

PLAN OF SUBDIVISION OF LOT 262 DP1053563

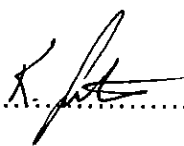
DP1156433

Registered:  20-09-2010

Subdivision Certificate No: 052191

Date of Endorsement: 17.8.10

EXECUTED for and on behalf of)
ENERGY AUSTRALIA by)
KATHERINE MARGARET GUNTON)
its duly constituted Attorney pursuant to)
Power of Attorney registered Book 4528)
No. 401 in the presence of:)

..... 
Attorney

..... 
Witness

..... Bridget Anne Thomson
Name of Witness (please print)

570 George Street,
Sydney, NSW, 2000
.....
Address of Witness

* OFFICE USE ONLY

CERTIFICATE OF TITLE

PROPERTY ACT, 1900



12631250

NEW SOUTH WALES

Vol. **12631** Fol. **250**

Edition issued 26-11-1974



CANCELLED

IVA No.15776

Lawton
Registrar General.



12631 Fol. 250

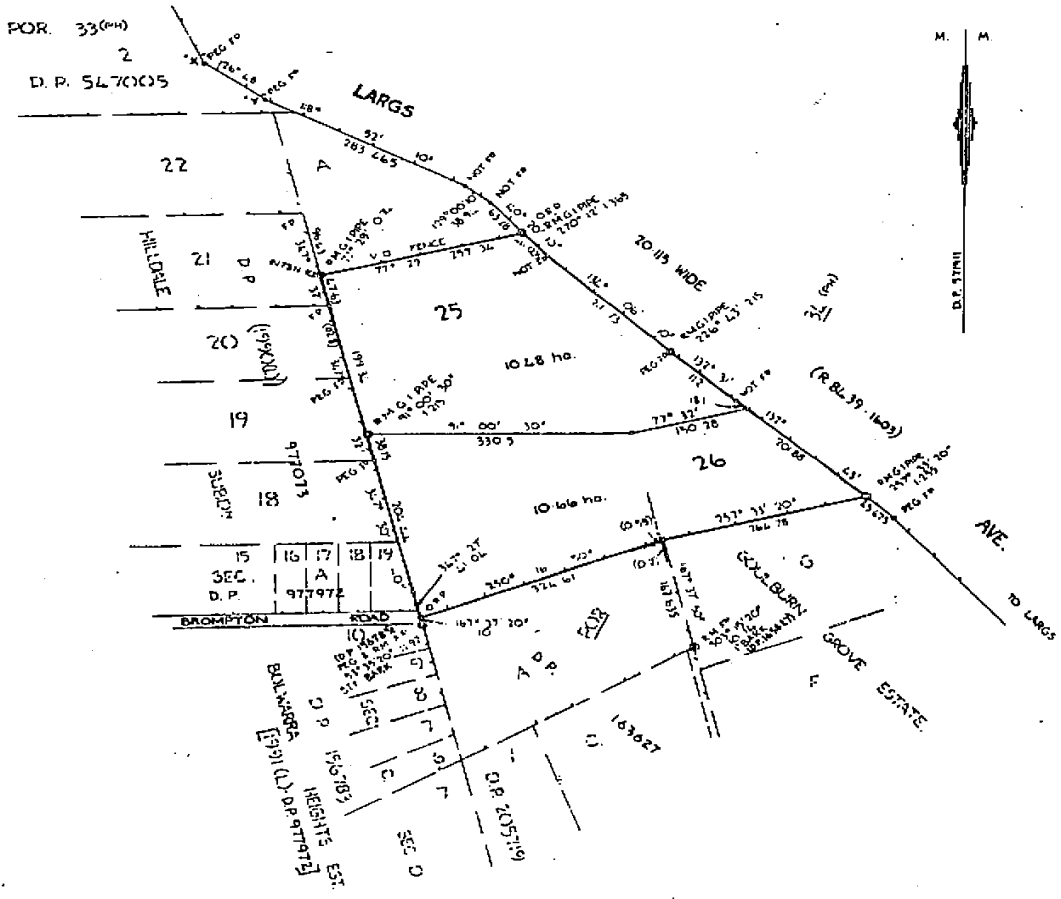
(Page 1) Vol.

I certify that the person described in the First Schedule is the registered proprietor of the undermentioned estate in the land within described subject nevertheless to such exceptions encumbrances and interests as are shown in the Second Schedule.



PLAN SHOWING LOCATION OF LAND

LENGTHS ARE IN METRES



WARNING: THIS DOCUMENT MUST NOT BE REMOVED FROM THE LAND TITLES OFFICE.

ESTATE AND LAND REFERRED TO

Estate in Fee Simple in Lot 26 in Deposited Plan 571911 at Largs in the City of Maitland Parish of Middlehope and County of Durham being part of Portion 34 granted to Standish Laurence Harris on 31-12-1832.

FIRST SCHEDULE

~~JOHN BENNETTS of Charlestown, Accountant and MARGARET ANN BENNETTS, his wife, as Joint Tenants, of the part comprised in Conveyance Book 3147 No. 348 and RODERICK STUART McDONALD of Maitland, Accountant and VALERIE MERLE McDONALD, his wife, as Joint Tenants of the part comprised in Conveyance Book 3147 No. 349.~~

SECOND SCHEDULE

1. Reservations and conditions, if any, contained in the Crown Grant above referred to.
2. CAUTION. The land within described is held subject to any subsisting interest (as defined in Section 28A of the Real Property Act, 1900). 26.11.1974

PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR GENERAL ARE CANCELLED.

Vol. 12631 Fol. 250

FIRST SCHEDULE (continued)

REGISTERED PROPRIETOR	INSTRUMENT			ENTERED	Signature of Registrar General
	NATURE	NUMBER	DATE		
Roderick Stuart McDonald of Maitland, Public Accountant and Valerie Merle McDonald his wife as joint tenants.	Transfer	P159023	3-12-1974	10-2-1975	Signature
Kevin Howard Gale of East Maitland, Engineer and Colleen Joy Gale his wife, as joint tenants	Transfer	S236155	-----	8-1-1981	Signature

CANCELLED

See entry 11

P159023
 474
 R451078
 S236153
 49m
 STE
 6M
 V881764
 1884777 R
 REJECTED 2/8/81
 V884772 M
 UNLIPPED 18.5.81

SECOND SCHEDULE (continued)

NATURE	INSTRUMENT		PARTICULARS	ENTERED	Signature of Registrar General	CANCELLATION	
	NUMBER	DATE					
Mortgage	P159024	23-12-1974	to Newcastle Permanent Building Society Limited.	10-2-1975	Signature	Discharged	S236154
Caveat	R451078		by Bank of New South Wales.	5-10-1979	Signature	Withdrawn	S236153
Mortgage	S236156	---	to Commonwealth Savings Bank of Australia.	8-1-1981	Signature	Discharged	V881764

NOTE: ENTRIES RULED THROUGH AND AUTHENTICATED BY THE SEAL OF THE REGISTRAR GENERAL ARE CANCELLED

(Page 2 of 2 pages)

Reg: R13224 / Doc: CT 12631-250 CT / Rev: 01-Feb-2011 / NSW IRS / ps: All / prt: 13-Jun-2023 16:20 / Seq: 2 of 2
 © Office of the Registrar-General / Src: InfoTrack / Ref: 27 Lang Drive, Botwarra Heights



NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

13/6/2023 4:25PM

FOLIO: 26/571911

First Title(s): SEE PRIOR TITLE(S)

Prior Title(s): VOL 12631 FOL 250

Recorded	Number	Type of Instrument	C.T. Issue
28/3/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
9/8/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
16/8/1993	I566129	MORTGAGE	EDITION 1
15/5/2003	9609943	DISCHARGE OF MORTGAGE	
27/8/2003	DP1053563	DEPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH ***



NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE

13/6/2023 4:25PM

FOLIO: 262/1053563

First Title(s): OLD SYSTEM

Prior Title(s): 26/571911

Recorded	Number	Type of Instrument	C.T. Issue
27/8/2003	DP1053563	DEPOSITED PLAN	FOLIO CREATED EDITION 1
20/9/2010	DP1156433	DEPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH ***



SEARCH DATE

13/6/2023 4:19PM

FOLIO: 1/1156433

First Title(s): OLD SYSTEM

Prior Title(s): 262/1053563

Recorded	Number	Type of Instrument	C.T. Issue
20/9/2010	DP1156433	DEPOSITED PLAN	FOLIO CREATED EDITION 1
14/10/2022	AS552312	TRANSFER	
14/10/2022	AS552313	MORTGAGE	EDITION 2

*** END OF SEARCH ***

System Document Identification

Land Registry Document Identification

Form Number:01T-e
Template Number:t_nsw18
ELN Document ID:1525072195
ELN NOS ID:1525072197

TRANSFER
New South Wales
Real Property Act 1900

AS552312

Stamp Duty: 10512218-001

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

LODGED BY:

Responsible Subscriber: NATIONAL AUSTRALIA BANK LIMITED ABN 12004044937
Address: L 8, 700 Bourke ST
Melbourne 3008
Email: Pexa.notifications@nab.com.au
ELNO Subscriber Number: 581
Customer Account Number: 500001J
Document Collection Box: 45A
Client Reference: BW22354

LAND TITLE REFERENCE

1/1156433

TRANSFEROR

KEVIN HOWARD GALE

COLLEEN JOY GALE

TRANSFeree

LANG DRIVE INVESTMENTS PTY LTD ACN 656133407
Registered company

Tenancy: Sole Proprietor

CONSIDERATION

The transferor acknowledges receipt of the consideration of \$5,100,000.00

ESTATE TRANSFERRED

FEE SIMPLE

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

SIGNING FOR TRANSFEROR

I certify that:

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

Party Represented by Subscriber:

KEVIN HOWARD GALE
COLLEEN JOY GALE

Signed By: Matthew Robert Tranter

ELNO Signer Number: 57599

Signer Capacity: Practitioner Certifier

Digital Signing Certificate Number:

**Signed for
Subscriber:**

TRANTER LAWYERS PTY LTD ABN 57102530156
TRANTER LAWYERS

Subscriber Capacity:Representative Subscriber

ELNO Subscriber Number: 23618

Customer Account Number:503069

Date: 14/10/2022

SIGNING FOR TRANSFEREE

I certify that:

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

Party Represented by Subscriber:

LANG DRIVE INVESTMENTS PTY LTD

Signed By: Andrew James Filby

Signer Capacity:Practitioner Certifier

ELNO Signer Number: 49302

Digital Signing Certificate Number:

**Signed for
Subscriber:**

P J E MANAGEMENT PTY LTD ABN 34003112203

P J E MANAGEMENT PTY LTD
PETER EVANS & ASSOCIATES

Subscriber Capacity:Representative Subscriber

ELNO Subscriber Number: 2087

Customer Account Number:500427

Date: 14/10/2022



FOLIO: 1/1156433

SEARCH DATE	TIME	EDITION NO	DATE
13/6/2023	4:19 PM	2	14/10/2022

LAND

LOT 1 IN DEPOSITED PLAN 1156433
 AT BOLWARRA HEIGHTS
 LOCAL GOVERNMENT AREA MAITLAND
 PARISH OF MIDDLEHOPE COUNTY OF DURHAM
 TITLE DIAGRAM DP1156433

FIRST SCHEDULE

LANG DRIVE INVESTMENTS PTY LTD (T AS552312)

SECOND SCHEDULE (8 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 DP1156433 RIGHT OF CARRIAGEWAY 8 METRE(S) WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 3 DP1156433 RESTRICTION(S) ON THE USE OF LAND
- 4 DP1156433 EASEMENT FOR SEWER MAIN 4 METRE(S) WIDE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 5 DP1156433 EASEMENT FOR ELECTRICITY & OTHER PURPOSES 7.1 METRE(S) WIDE AND VARIABLE AFFECTING THE PART(S) SHOWN SO BURDENED IN THE TITLE DIAGRAM
- 6 DP1156433 POSITIVE COVENANT REFERRED TO AND NUMBERED (5) IN THE S. 88B INSTRUMENT
- 7 DP1156433 POSITIVE COVENANT REFERRED TO AND NUMBERED (6) IN THE S. 88B INSTRUMENT
- 8 AS552313 MORTGAGE TO NATIONAL AUSTRALIA BANK LIMITED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

Certificate No.: PC/2023/1583

Certificate Date: 29/05/2023

Fee Paid: \$62.00

Receipt No.:

Your Reference: Lang Drive

SECTION 10.7 PLANNING CERTIFICATE
Environmental Planning and Assessment Act, 1979 as amended

APPLICANT:	SNL Building rebekah@snlbuilding.com.au
PROPERTY DESCRIPTION:	27 Lang Drive BOLWARRA HEIGHTS NSW 2320
PARCEL NUMBER:	47427
LEGAL DESCRIPTION:	Lot 1 DP 1156433

IMPORTANT: Please read this Certificate carefully.

The information provided in this Certificate relates only to the land described above. If you need information about an adjoining property or nearby land, a separate certificate will be required.

All information provided is correct as at the date of issue of this Certificate. However, it is possible for changes to occur at any time after the issue of this Certificate.

For more information on the Planning Certificate please contact our Customer Experience team on 4934 9700.

SECTION 10.7(2)

The following matters relate to the land, as required by section 10.7(2) of the
Schedule 2 of the ("the Act") and clause 284 and

ITEM 1 - Names of relevant planning instruments and development control plans

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

State Environmental Planning Policies

The Minister for Planning has notified that the following State Environmental Planning Policies (SEPPs) shall be specified on Certificates under Section 10.7 of the Environmental Planning and Assessment Act, 1979.

The land is affected by the following State Environmental Planning Policies:

- SEPP65 Design Quality of Residential Apartment Development
- SEPP (Biodiversity and Conservation) 2021
- SEPP (Industry and Employment) 2021
- SEPP (Primary Production) 2021
- SEPP (Planning Systems) 2021
- SEPP (Housing) 2021
- SEPP Building Sustainability Index: BASIX 2004
- SEPP (Exempt and Complying Development Codes) 2008
- SEPP (Resources and Energy) 2021
- SEPP (Transport and Infrastructure) 2021
- SEPP (Resilience and Hazards) 2021

Local Environmental Plan (LEP)

Maitland LEP 2011, published 16 December 2011, applies to the land.

Development Control Plan prepared by Council

Maitland Development Control Plan 2011 applies to the land.

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

Planning Proposal for a Local Environmental Plan

No draft local Environmental Plans that have been on public exhibition under the Act are applicable to the land.

Detailed information on draft environmental planning instruments is available at

the NSW Department of Planning and Environment Current LEP Proposals website; or Maitland City Council's website.

Draft Development Control Plans

No draft Development Control Plan(s) that have been on public exhibition under the Act are applicable to the land.

Draft State Environmental Planning Policies

No draft State Environmental Planning Policy(s) applying to the land is, or has been publicised the subject of community consultation or on public exhibition under the Act.

ITEM 2 – Zoning and land use under relevant planning instruments

For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a State Environmental Planning Policy or proposed State Environmental Planning Policies)

R5 Large Lot Residential

a) Purpose/Objective

- To provide residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and scenic quality
- To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future
- To ensure that development in the area does not unreasonably increase the demand for public services or public facilities
- To minimise conflict between land uses within this zone and land uses within adjoining zones

b) Permitted with Consent

Bed and breakfast accommodation; Building identification signs; Business identification signs; Dual occupancies; Dwelling houses; Home-based child care; Home industries; Neighbourhood shops; Oyster aquaculture; Pond-based aquaculture; Roads; Tank-based aquaculture; Any other development not specified in item 2 or 4

c) Permitted without Consent

Home occupations

d) Prohibited

Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Biosolids treatment facilities; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Entertainment facilities; Exhibition villages; Extractive industries; Farm buildings; Forestry; Freight transport facilities; Function centres; Heavy industrial storage

establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Information and education facilities; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Passenger transport facilities; Places of public worship; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sewage treatment plants; Sex services premises; Signage; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water recycling facilities; Wharf or boating facilities; Wholesale supplies.

Detailed information on the land zone mapping is available at the NSW Department of Planning and Environment ePlanning Spatial Viewer website; or Maitland City Council's website.

Note: Detailed information on the local environmental plan is available at NSW Legislation – In force legislation.

For the land zoned R5 Large Lot Residential the Maitland LEP 2011 does not contain a development standard specifying the land dimensions required to permit the erection of a dwelling house on the land.

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The land IS NOT identified in an area of outstanding biodiversity value under the Biodiversity Conservation Act.

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The land IS NOT in a Heritage Conservation Area.

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The land does NOT contain an item of Environmental Heritage.

Note: An item of environmental heritage, namely Aboriginal heritage, listed on the Aboriginal Heritage Information Management System (AHIMS), may be situated on the land. The Department of Planning and Environment, Biodiversity and Conservation Division.

ITEM 3 – Contribution plans

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Maitland S94A Levy Contributions Plan 2006

263 High Street
Maitland NSW 2320

t 02 4934 9700
f 02 4933 3209

info@maitland.nsw.gov.au
maitland.nsw.gov.au

All correspondence should be directed to: General Manager P.O. Box 220 Maitland NSW 2320

Maitland City Wide Section 94 Contributions Plan 2016

Maitland S94 Contributions Plan (City Wide) 2006

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The land IS NOT in a special contributions area.

Note: In addition to the above developer contribution plans, Development Servicing Plans for water and sewer connection may be applicable, attracting additional contributions for the development, particularly where development will connect to water and/or sewer services.

ITEM 4 – Complying Development

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Complying development under the **Housing Code** may not be carried out on the land as it is not within an applicable zone.

Complying development under the **Low Rise Medium Density Housing Code and Greenfield Housing Code** may not be carried out on the land as it is not within an applicable zone.

Complying development under the **Rural Housing Code** may be carried out on the land.

Complying development under the **Housing Alterations Code** may be carried out on the land.

Complying development under the **General Development Code** may be carried out on the land.

Complying development under the **Commercial and Industrial Alterations Code** may be carried out on the land.

Complying development under the **Commercial and Industrial (New Buildings and Additions) Code** may not be carried out on the land as it is not within an applicable zone.

Complying development under the **Subdivisions Code** may be carried out on the land.

Complying development under the **Demolition Code** may be carried out on the land.

Complying development under the **Fire Safety Code** may be carried out on the land.

Complying development under the **Container Recycling Facilities Code** may not be carried out on the land.

Note: Despite the above provisions, if only part of a lot is subject to an exclusion or exemption under Clause 1.17A or Clause 1.19 of ,

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5 . \$%&1 , complying development may be carried out on that part of the lot that is not affected by the exclusion or exemption.**

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&+&/-&.- 1. &+&3 +

The provisions of Clauses 1.17A(1)(c) to (e), (2), (3) and (4), 1.18(1)(c3) and 1.19 are not identified on the land. Complying development may be undertaken in accordance with the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 as amended.

Note: This information needs to be read in conjunction with the whole of the State Environment Planning Policy. If an identification, restriction or characteristic of land referred to above is not located on or does not comprise, the whole of the relevant land, complying development may be carried out on any part of the land not so identified, restricted or characterised.

Note: Information regarding whether the property is affected by flood related development controls or is bushfire prone land is identified in other sections of this certificate. If your property is identified as being impacted by bushfire or flooding, a specific technical assessment of these issues will be required as part of any Complying Development Certificate application under the State Environment Planning Policy, or a development application for any other type of development requiring consent from Council.

Note: Despite any references above advising that Complying Development may be undertaken on the land, certain Complying Development may be precluded from occurring on the land due to requirements contained in the remainder of State Environment Planning Policy (Exempt and Complying Development Codes) 2008. It is necessary to review the State Environment Planning Policy in detail to ensure that specific types of complying development may be undertaken on the land.

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There are no variations to the exempt development codes within the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 that apply in the Maitland local government area.

For further information on complying development, please refer to the Department of Planning and Environment.

ITEM 5 – Exempt Development

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ITEM 6 – Affected building notices and building product rectification orders

Whether the council is aware that –

The Council IS NOT aware of any affected building notice which is in force in respect of the land.

The Council is NOT aware of any building product rectification order which is in force in respect of the land and that has not been fully complied with.

The Council IS NOT aware of any notice of intention to make a building product rectification order being given in respect of the land and that is outstanding.

ITEM 7 - Land Reserved for Acquisition

Whether an environmental planning instrument or proposed environmental planning instrument referred to in section 1 makes provision in relation to the acquisition of the land by an authority of the State, as referred to in the Act, section 3.15.

No environmental planning instrument, deemed environmental planning instrument or draft environmental planning instrument applying to the land provides for the acquisition of the land by a public authority, as referred to in section 3.15 of the Act.

ITEM 8 – Road widening and road realignment

Whether the land is affected by road widening or road realignment under –

- a) The land is NOT affected by road widening under Division 2 of Part 3 of the Roads Act 1993.
- b) The land is NOT affected by road widening under any environmental planning instrument
- c) The land is NOT affected by any road-widening or realignment under any resolution of the Council
- d) The land is NOT affected by road-widening or realignment under a resolution of the Council

Note: This item relates to Council's road proposals only. Other authorities, including the NSW Roads and Traffic Authority may have road widening proposals.

ITEM 9 – Flood related development controls

The land or part of the land IS within the flood planning area and subject to flood related development controls.

The land or part of the land IS between the flood planning area and the probable maximum flood and subject to flood related development controls.

The Maitland LEP 2011 identifies the flood planning level (FPL) as the level of a 1:100 ARI flood event plus 0.5m freeboard. The probable maximum flood has the same meaning as the Floodplain Development Manual.

Note in this section – has the same meaning as in the Floodplain Development Manual. 6) 5 means the Floodplain Development Manual (ISBN 0 7347 5476 00) published by the NSW Government in April 2005. has the same meaning as in Floodplain Development Manual

Note: The information provided in item 9 is based on the data and information presently available to the Council and on development controls in force as at the date of this certificate. The identification of land as not being subject to flood related development controls does not mean that the land is not, or may not be, subject to flooding or that the land will not in the future be subject to flood related development controls, as additional data and information regarding the land become available.

ITEM 10 – Council and other public authority policies on hazard risk restrictions

Whether any of the land is affected by an adopted policy that restricts the development of the land because of the likelihood of land slip, bush fire, tidal inundation, subsidence, acid sulfate soils, contamination, aircraft noise, salinity, coastal hazards, sea level rise or another risk, other than flooding.

All land within the Maitland Local Government Area has the potential to contain acid sulfate soils. Clause 7.1 of the Maitland Local Environmental Plan 2011 generally applies. Development consent is required where works described in the Table to this clause are proposed on land shown on the Maitland LEP 2011 Acid

Sulfate Soils Map as being of the class specified for those works.

The Council has adopted by resolution a policy on contaminated land which may restrict the development of the land to which this certificate relates. This policy is implemented when zoning or land use changes are proposed on lands which:

- are considered to be contaminated; or
- which have previously been used for certain purposes; or
- which have previously been used for certain purposes but Council's records do not have sufficient information about previous use of the land to determine whether the land is contaminated; or
- have been remediated for a specific use.

Consideration of Council's adopted policy and the application of provisions under relevant State legislation is warranted.

Note in this section –

means a policy adopted –

- a) by the council, or
- b) by another public authority, if the public authority has notified the council that the policy will be included in a planning certificate issued by council.

ITEM – 11 Bush fire prone land

If any of the land is bush fire prone land, designated by the Commissioner of the NSW Rural Fire Service under the Act, section 10.3, a statement that all or some of the land is bush fire prone land.

The land is mapped as bushfire prone land and as such restrictions may apply to new development on this land.

Note – In accordance with the bush fire prone land, in relation to area, means land recorded for the time being as bush fire prone on a bush fire prone land map for the area. This mapping is subject to periodic review.

Note – The identification of land as not being bushfire prone does not mean that the land is not, or may not be affected by bushfire or that the land will not in the future be subject to bushfire related development controls, as additional data and information regarding the land become available.

ITEM – 12 Loose-fill asbestos insulation

If the land includes residential premises, within the meaning of the Home Building Act 1989, Part 8, Division 1A, that are listed on the Register kept under that Division, a statement to that effect.

There are no premises on the subject land listed on the register.

ITEM – 13 Mine subsidence

Whether the land is declared to be a mine subsidence district, within the meaning of the Coal Mine Subsidence Compensation Act 2017.

The land has NOT been proclaimed to be within a Mine Subsidence District under the meaning of section 20 of the Coal Mine Subsidence Compensation Act 2017.

ITEM – 14 Paper subdivision information

There is no development plan that applies to the:

- 1) Land or that is proposed to be subject to a consent ballot
- 2) There is no subdivision order that applies to the land.

ITEM – 15 Property vegetation plans

If the land in relation to which a property vegetation plan is approved and in force under the Native Vegetation Act 2003, Part 4, a statement to that effect, but only if the council has been notified of the existence of the plan by the person or body that approved the plan under that Act.

The Council has not received any notification from Hunter Local Land Services that this land is affected by a property vegetation plan under Part 4 of the Native Vegetation Act 2003 (and that continues in force).

ITEM – 16 Biodiversity stewardship sites

If the land is a biodiversity stewardship site under a biodiversity stewardship agreement under the Biodiversity Conservation Act 2016, Part 5, a statement to that effect, but only if the council has been notified of the existence of the agreement by the biodiversity Conservation Trust.

The Council is not aware if the land is a biodiversity stewardship site under a biodiversity stewardship agreement under part 5 of the

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Note – Biodiversity stewardship agreements include biobanking agreements under the "# % & Part 7A that are taken to be biodiversity stewardship agreements under the ! Part 5.

ITEM 17 – Biodiversity certified land

If the land is biodiversity certified land under the Biodiversity Conservation Act 2016, Part 8, a statement to that effect.

The land is not biodiversity certified land under Part 8 of the Biodiversity Conservation Act 2016.

Note – Biodiversity certified land includes land certified under the "# % & Part 7AA that is taken to be certified under the ! Part 8.

ITEM 18 – Orders under Trees (Disputes Between Neighbours) Act 2006

Whether an order has been made under the Trees (Disputes Between Neighbours) Act 2006 to carry out work in relation to a tree on the land, but only if the council has been notified of the order.

Council has NOT received notification from the Land and Environment Court of NSW that the land is affected by an Order under Trees – (Disputes Between Neighbours) Act 2006.

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

If the [redacted] applies to the council, whether the owner, or a previous owner, of the land has given written consent to the land being subject to annual charges under the [redacted] section 496B, for coastal protection services that relate to existing coastal protection works.

The owner (or any previous owner) of the land has NOT consented in writing to the land being subject to annual charges under section 496B of the Local Government Act 1993 for coastal protection services that relate to existing coastal protection works (within the meaning of section 553B of that Act).

Note - In this section existing coastal protection works has the same meaning as in the Local Government Act 1993, section 553B.

Note – Existing coastal protection works are works to reduce the impact of coastal hazards on land, such as seawalls, revetments, groynes and beach nourishment, that existed before 1 January 2011

ITEM 20 – Western Sydney Aerotropolis

The State Environmental Planning Policy (Precincts – Western Parkland City) 2021 does not apply to land within the Maitland City Council local government area.

ITEM 21 – Development consent conditions for seniors housing

If State Environmental Planning Policy (Housing) 2021, Chapter 3, Part 5 applies to the land, any conditions of a development consent granted after 11 October 2007 in relation to the land that are of the kind set out in that Policy, section 88(2).

Clause 88(2) of the [redacted] + [redacted] restricts occupation of development approved for seniors housing to:

- a) Seniors or people who have a disability
- b) People who live in the same household with seniors or people who have a disability,
- c) Staff employed to assist in the administration and provision of services to housing provided under this Part.

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

Whether there is a current site compatibility certificate under State Environmental Planning Policy (Housing) 2021, or a former site compatibility certificate, of which the council is aware, in relation to proposed development on the land and, if there is a certificate –

- a) the period for which the certificate is current, and
- b) that a copy may be obtained from the Department.

If State Environmental Planning Policy (Housing) 2021, Chapter 2, Part 2, Division 1 or 5 applies to the land, any conditions of a development consent in relation to the land that are of a kind referred to in that Policy, section 21(1) or 40(1).

Any conditions of a development consent in relation to land that are kind referred to in State Environmental Planning Policy (Affordable Rental Housing) 2009, clause

17(1) or 38(1).

Note - No Seniors Housing development consent conditions apply to this land.

Note - In this section – Former site compatibility certificate means a site compatibility certificate issued under State Environmental Planning Policy (Affordable Rental Housing) 2009.

Council is unaware if a Site Compatibility Certificate (Affordable Rental Housing) has been issued in accordance with State Environmental Planning Policy (Affordable Rental Housing) 2009.

Note. The following matters are prescribed by section 59(2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate.

Contaminated Land

- a) The land to which this certificate relates is NOT significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.
 - b) The land to which this certificate relates is NOT subject to a management order within the meaning of the Contaminated Land Management Act 1997.
 - c) The land to which this certificate relates is NOT the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.
 - d) The land to which this certificate relates is NOT the subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.
 - e) Council has NOT been provided with a site audit statement, within the meaning of the Contaminated Land Management Act 1997, for the land to which this Certificate relates.
-

David Evans
General Manager

APPENDIX

D

UNEXPECTED FINDS PROTOCOL



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Unexpected Finds Protocol

27 Lang Drive

304000998



Prepared for
SNL Building Construction Pty Ltd

31/08/2023

 **Cardno**

now

 **Stantec**

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Pty Ltd

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1	31/08/2023	First Issue to Client	BC	DS

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Attachments

- Unexpected Finds Protocol

1 Introduction

This Unexpected Finds Protocol (UFP) has been developed for the proposed residential subdivision located at 27 Lang Drive, Bolwarra Heights, NSW (the 'Site'). Stantec were provided with a layout plan of the proposed subdivision, prepared by GCA Engineering Solutions Pty Ltd (Project No. 22218LD, Drawing No. 202, Revision 1, Dated 27.03.2023). Based on review of the plans and discussions with the client, it is understood that the proposed subdivision comprises demolition of the existing structures on Site, creation of fourteen (14) large residential lots (1-14), and one (1) internal road. The "Site" can be seen depicted in Figure 1, attached in Appendix A of the Preliminary Site Investigation (PSI).

The purpose of the Unexpected Finds Protocol is to document the process for evaluating any unexpected environmental finds during the project, and to specify safety measures to be implemented to manage such circumstances and prevent any adverse environmental and human health impacts.

1.1 Scope

This Unexpected Finds Protocol (UFP) is specific to the proposed industrial subdivision located 27 Lang Drive, Bolwarra Heights, NSW as shown in Figure 1, attached to Appendix A of the PSI. It provides guidance and procedures for dealing with any unexpected finds that may be encountered during the disturbance works carried out on Site.

1.2 References

The following documents have been reviewed in preparation of this Unexpected Finds Protocol:

- > National Parks and Wildlife Act 1974 (NSW)
- > Coroners Act 2009 (NSW)
- > Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth)
- > Heritage Act 1977 (NSW)
- > National Environmental Protection Measure (1999)

2 Procedure

2.1 General

The following procedure should be used to assess any unexpected finds that are encountered throughout the duration of the project. Unexpected finds may include but are not limited to heritage items, unidentified filling, odorous or stained soils, and suspected asbestos materials. All Site personnel are required to report any unexpected finds to the site manager, if observed during the course of their works.

2.2 Training and Induction of Personnel

Personnel involved in the project on Site are to be inducted to the unexpected finds protocol.

Site inductions would include making workers and site personnel aware of the possibility of unexpected finds. Inductions will also include the immediate course of actions to be taken by workers if they were to find anything, including stopping work, notifying their supervisor immediately and completing the Incident Report forms. The induction should be reinforced at daily toolbox meetings.

2.3 Initial Response

If any unexpected/unidentified material is uncovered during disturbance works, the following procedure should be followed;

- > Cease all works in the immediate area.
- > Identify the category of the find (Contaminated Soils, Heritage, uncovering of Asbestos Materials etc).
- > Delineate and restrict access to the area using fencing and /or appropriate barriers and signage.
- > Ensure appropriate training and PPE is available for any persons required to enter the area.
- > Document the nature of the find.
- > Engage a suitably qualified consultant to assess the unexpected find.
- > The consultant will assess the unexpected find and provide advice regarding the preliminary assessment with reference to Sections 2.4 – 2.8 below, which will include the following:
 - The need for further immediate management controls if required;
 - Further assessment and / or remediation works required in accordance with relevant guidelines;
 - Preparation of Remediation Action Plan (RAP) if required or provide clean up advice;
 - If required, clean up strategies of the affected area will be implemented.
 - If appointed, correspondence with a Site Auditor shall be undertaken.

Works within the affected area are not to recommence until it is deemed safe and suitable for works to continue. Written confirmation shall be undertaken by the appropriate consultant following appropriate advice and clean up procedures.

2.4 Skeletal Remains

In the event that skeletal remains are uncovered and the remains are not immediately identifiable as non-human remains, a qualified archaeologist should be engaged to determine their origin. If the skeletal remains are identifiable as human remains, the Local Police should be contacted to assess the discovery. Under no circumstances should the skeletal remains be disturbed without prior consultation with the relevant authorities which may include the coroner, police, Office of Environment & Heritage, aboriginal groups or a qualified anthropologist.

2.5 Aboriginal Heritage

In the event that any relic, artefact or material that is suspected of being Aboriginal Heritage is uncovered, works must cease immediately in the area. The Office of Environment and Heritage (OEH) should be notified, as well as the National Parks and Wildlife Service, NSW Police and local Aboriginal Stakeholders.

The Office of Environment and Heritage requires notification and an AHIP permit is required prior to the removal of any Aboriginal artefacts. An AHIP permit is issued under the National Parks and Wildlife Act and applications can be made directly to the OEH.

2.6 Archaeological Heritage

Items of archaeological heritage may be uncovered during disturbance works. Items of archaeological heritage may include Aboriginal artefacts or remains, European artefacts following settlement. European heritage may include items such as roadways (telford & corduroy timber road bases etc), kerbing, culverts, building foundations and tools. A suitably qualified archaeologist should be engaged to assess the find.

2.7 Potentially Contaminated Soils

In the event that any odorous, stained or unidentified soils are uncovered during the site works, a suitable qualified environmental consultant should be engaged to assess the material and the following procedures should apply:

- > Excavation works at that part of the Site where suspect soil material was encountered should cease until an inspection by an environmental consultant is carried out;
- > Based on a visual inspection, the consultant will provide guidance on health and safety of remedial works, soil storage and soil disposal to allow construction works to proceed if possible;

Based on sampling and analysis the consultant will provide advice as to any additional requirements (i.e. managed on Site or any offsite disposal requirements).

2.8 Asbestos Containing Materials

Contingency measures must be developed to evaluate any unexpected finds of suspected asbestos containing materials. These are to specify safety measures that can be implemented to manage and prevent any adverse environmental and human health impacts. Appropriate contingency measures in relation to asbestos impacted soils and suspected asbestos containing materials (ACM) include:

- > Where suspected ACM is encountered excavation works must cease until an inspection by an environmental consultant is carried out;
- > Any illegal dumping containing suspected asbestos bearing material or synthetic mineral fibres should be inspected by an environmental consultant.

Following a visual inspection; and sampling if necessary, the consultant will provide interim advice on health and safety requirements to allow construction works to proceed if possible;

Based on sampling and analysis the consultant will provide advice as to any additional requirements (i.e. management or disposal requirements).

Following an inspection and sampling for laboratory testing (where required), works can continue following the consultants written advice.

2.9 Summary

Where an area is identified as containing an isolated find, works must cease, and an inspection and sampling (where required) shall be undertaken by a suitable qualified consultant in accordance with Sections 2.4 to 2.8.

Works within the area shall only recommence following the advice of the suitable qualified personal.

An Unexpected Finds Protocol procedure form is available attached to this UFP document.

APPENDIX

A

UNEXPECTED FINDS PROTOCOL



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UNEXPECTED FINDS PROTOCOL INCIDENT REPORT FORM

Location of discovery (photographs, location map etc):

Nature of find (contaminated soils, heritage, asbestos etc.):

Action Taken:

Date:

Recorded By: