BUS DEPOT
7A-11 RACECOURSE ROAD, 5-9 FAUNCE STREET & YOUNG STREET
Civil Stormwater Management Report

CLIENT/ **WALUYA PTY LTD**

DATE/ **AUGUST 2023**

CODE/ **22-1063**

Commercial in Confidence

Document Registration

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Document Author	GLEN JAMES

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A	FOR APPROVAL	15-12-22	Glen James	☒	☒
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Contents

APPENDIX

1. Introduction

This Civil Stormwater Management Report supports the proposed redevelopment of 7A-11 Racecourse Road, 5-9 Faunce Street and Young Street 1 in West Gosford. Refer to Figure 1 for location of the proposed development.

AT&L have been engaged by Waluya Pty Ltd to prepare a Development Application (DA) Civil Stormwater Management Report on the civil and stormwater management requirements for the proposed development.

This report is written to comply with Gosford Development Development Control Plan 2013 (DCP), and Gosford City Council Water Cycle Management requirements.

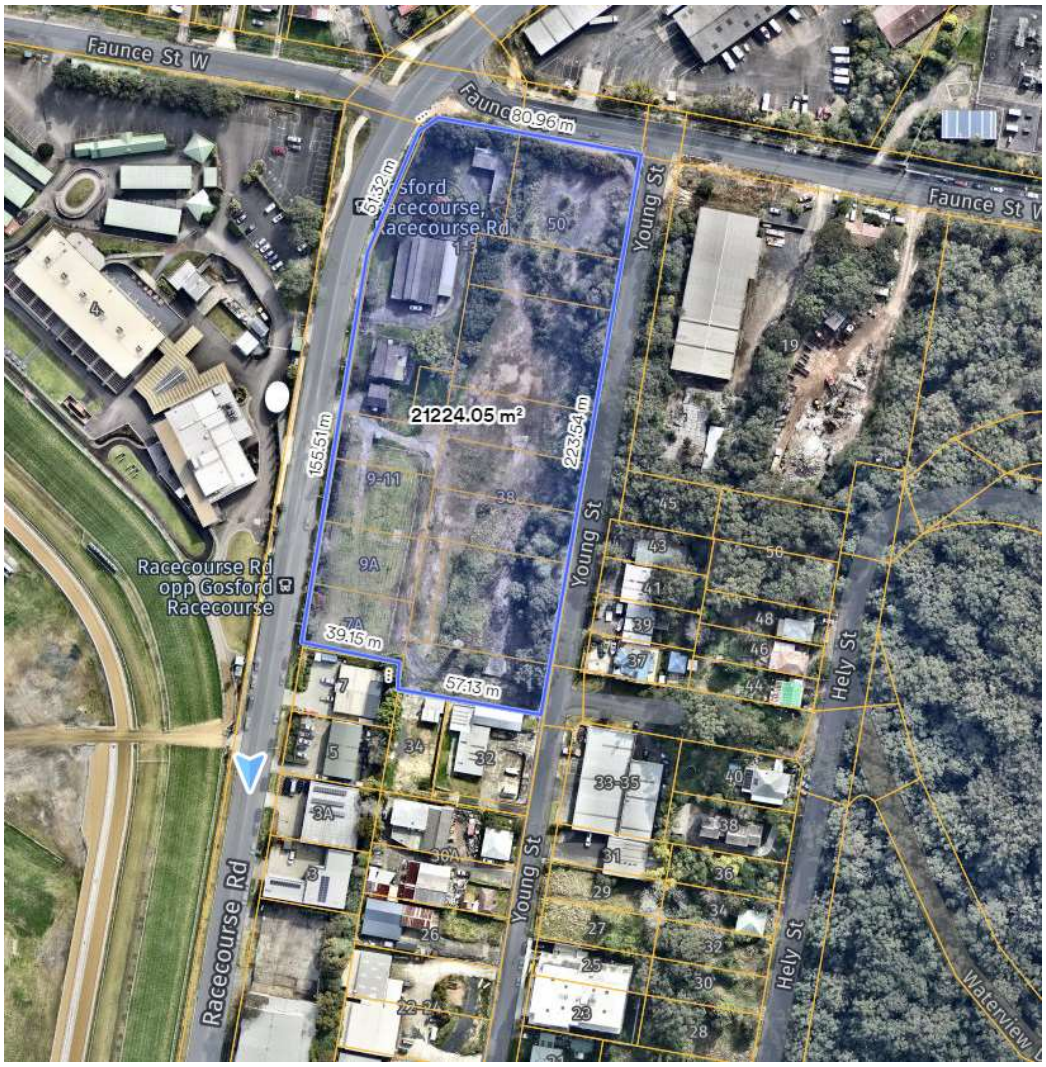


Figure 1 – Site Location (Courtesy of NearMap)

2. Project Description

This development application is for a proposed bus depot with ancillary offices and carparking located at 7A-11 Racecourse Road, 5-9 Faunce Street and Young Street, West Gosford.

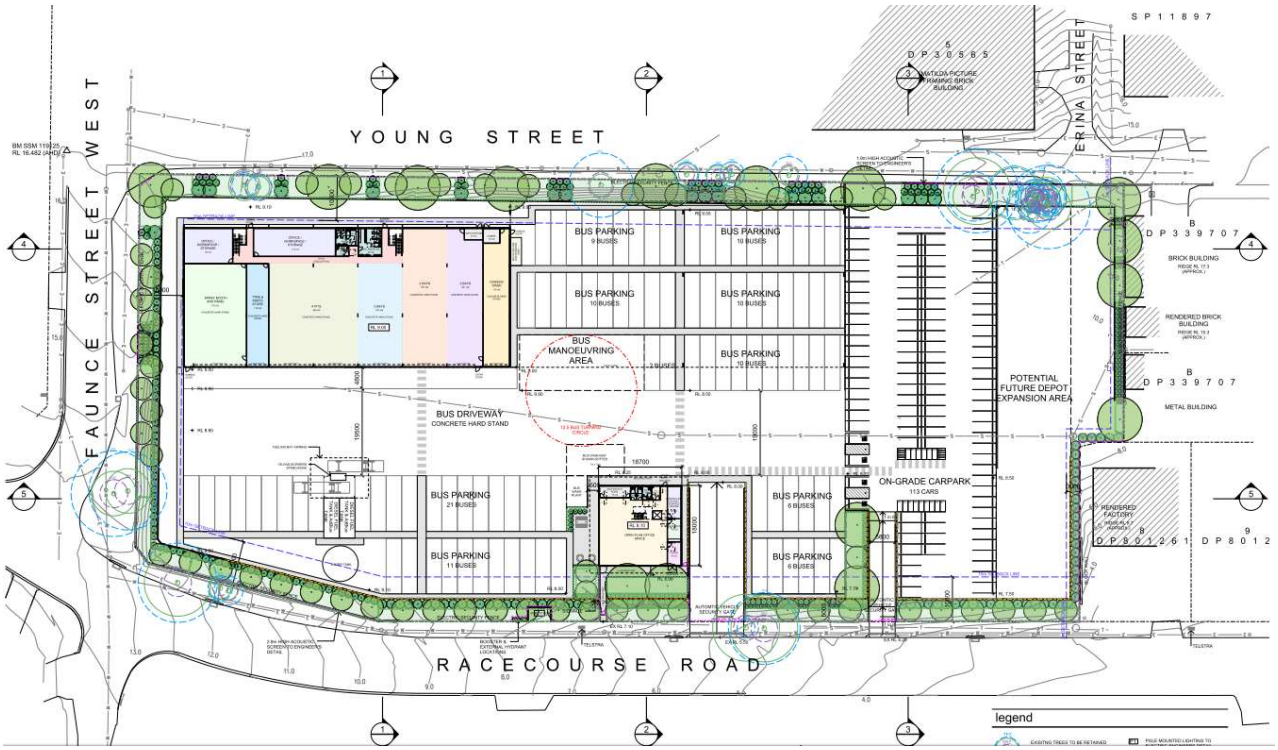


Figure 2 - Proposed Site Plan (Courtesy of DEM)

2.1. Scope of Report

This report outlines the design criteria for:

- Stormwater infrastructure;
- How stormwater is managed across the site;
- Identification of existing utility infrastructure; and
- How the future development will be serviced.

Refer to Appendix B for the Civil Development Application Civil Works Package Drawings.

This report has been prepared to satisfy the requirements and conditions of the following documents:

- Gosford City Council DCP 2013;
- Gosford City Council Water Cycle Management Guidelines; and
- OEH's Managing Urban Stormwater: Soils and Construction Guideline.

This civil infrastructure report includes:

- Stormwater Management:

- Piped and Overland Flows;
- Water Sensitive Urban Design (WSUD);
- Dial Before you Dig (DBYD) information (Appendix D); and

3. Stormwater Management

3.1. Proposed Site Stormwater Drainage

All proposed stormwater drainage from the development will be designed in accordance with Gosford City Council/Central Coast Council requirements.

All stormwater is proposed to connect into the existing stormwater infrastructure located within the adjacent council road network Racecourse Road to the west. Stormwater generated within the proposed site will be detained to ensure post-development flows are less than pre-development flows in accordance with the Gosford City Council stormwater guidelines.

Refer to the Civil Drawings in Appendix B for layout and details for the proposed stormwater network across the site.

Stormwater generated within the proposed site will be treated to the Gosford City Council Council DCP water treatment rates using a combination of proprietary treatment devices and natural WSUD elements.

3.2. Hydrology

- Pipe drainage shall be designed to accommodate the 20-year ARI storm event in accordance with Gosford City Council requirements;
- The combined piped and overland flow paths shall be designed to accommodate the 100-year ARI storm event.
- Where trapped low points are unavoidable and potential for flooding private property is a concern, an overland flowpath capable of carrying the total 100-year ARI storm event shall be provided. Alternatively, the pipe and inlet system may be upgraded to accommodate the 100-year ARI storm event;
- Rainfall intensities shall be as per the Intensity-Frequency-Duration table in accordance with Gosford City Council rainfall data;
- Times of concentration for each sub catchment shall be determined using the kinematic wave equation. Minimum time of concentration is 5 mins and the maximum are 20 mins. Runoff coefficients shall be calculated in accordance with AR&R. The fraction impervious shall be determined from analysis of the sub catchments;
- Runoff coefficients shall be calculated in accordance with the ARR&R. The fraction impervious shall be determined from analysis of the sub-catchments;
- Flow width in gutter shall not exceed 2.5m for the 20-year ARI storm event;
- Velocity depth ratios shall not exceed 0.4 for all storms up to and including the 100-year ARI event;
- Bypass from any pit on grade shall not exceed 10 l/s;
- Blockage factors of 10% and 30% shall be adopted for kerb inlet and grated pits respectively; and
- All pits deeper than 1.8m to be reinforced.

3.3. Hydraulics

- A hydraulic grade line HGL design method shall be adopted for all road pipe drainage design. The HGL shall be shown on all drainage long sections;
- The minimum pipe size shall be 375mm diameter RCP (external) and 150mm uPVC (internal);
- Maximum spacing between pits shall not exceed 75m;
- The minimum pipe grade shall be 1% (external) and 0.5% (internal);
- All pipes shall be Rubber Ring Jointed unless noted otherwise;
- The minimum cover over pipes shall be 450mm in grassed areas and 600mm within carriageways;
- Where minimum cover cannot be achieved due to physical constraints the pipe class shall be suitably increased;
- All trafficable pipes shall be a minimum Class 3 Reinforced Concrete Pipes or Fibre Reinforced Cement/ HDPE equivalent;
- The pipe friction coefficients to be adopted shall be:

Materials	Mannings – n	Colebrook-White – k	Min. Pipe Class
RCP	0.012	0.3	3
FRC	0.011	0.15	3

Table 1 - Pipe Details

- All pipes classes shall be designed for the ultimate service loads and where applicable, construction loads will be designed for;
- Pipes discharging to the overland flow path shall adopt a minimum tailwater level equivalent to respective overland flow level;
- Pit Loss coefficients shall be calculated in accordance with Missouri Charts;
- A minimum 150mm freeboard shall be maintained between pit HGL and pit surface levels;
- Overland flowpaths shall maintain a minimum of 100mm freeboard to all habitable floor levels; and
- Pits deeper than 1.2m shall contain step irons at 300 mm centres.

3.4. Modelling Software

DRAINS modelling for the OSD tanks.

MUSIC modelling software has been used to evaluate pollutant loads from the developed lot. MUSIC data files and output results are attached in Appendix C.

3.5. Overland Flows and Flooding

Refer to AT&L flooding report for flood impact assessment for the proposed development contained within Appendix F.

4. Stormwater Management

4.1. OSD Requirement

As discussed within Section 3.2, OSD is required within the development to ensure the development does not increase the risk of downstream flooding of roads and properties, or erosion of unstable waterways.

The OSD within the site has been designed to achieve the following outcomes:

- Post developed peak flows to be mitigated to pre-developed peak flows for all storm events between and including the 1- and 100-year events. Refer to Table .

Duration	Pre-Developed Flows (m3/s)	Post Developed Flows (m3/s)
1 YR ARI	0.167	0.110
2 YR ARI	0.274	0.135
5 YR ARI	0.447	0.355
10 YR ARI	0.572	0.562
20 YR ARI	0.731	0.665
50 YR ARI	0.957	0.787
100 YR ARI	1.160	0.887

Table 2: Pre-Post Developed Flows from Development Site

4.2. Proposed OSD Tank Details

The proposed OSD tanks will be constructed within the proposed hardstand with WSUD built downstream of the proposed tanks. The outlet pipes from the tank will discharge into the street/swale network to the west of the site refer to Appendix C and D for details.

On Site Detention (OSD)	Catchment to Tank (ha)	2-YR OSD Volume (Min.) (m^3)	100-YR TOTAL OSD Volume (Min.) (m^3)	Primary Outlet	Secondary Outlet
Tank 1	1.16	260.30	432.30	150mm Orifice Plate	330mm Orifice Plate
Tank 2	0.845	188.80	233.70	200mm Orifice Plate	530mm Orifice Plate

Table 1 - OSD Tank Volumes

Note: OSD discharge conditions have been confirmed by detailed site survey refer to Appendix A for details.

4.3. Water Sensitive Urban Design (WSUD)

Water Sensitive Urban Design (WSUD) encompasses all aspects of urban water cycle management, including water supply, wastewater and stormwater management. WSUD is intended to minimise the impacts of development upon the water cycle and to achieve more sustainable forms of urban development.

All stormwater runoff from the buildings only will be directed into water quality measures.

Proprietary treatment devices will treat the water to satisfy Council's water quality requirements. These devices have been modelled as an Ocean Protect Oceansave, Ocean Protect Oeanguards, Ocean Protect Jellyfish and Swale systems By utilising these treatment devices, stormwater draining from the development will meet the required Gosford City Council water quality treatment rates before discharge into the existing stormwater network.

A summary of the required number and position of the treatment devices is indicated within the stormwater drainage plans within Appendix B. Refer also to Appendix C for a summary of the MUSIC model undertaken.

4.4. WSUD Modelling - Music Model

The MUSIC Model for Urban Stormwater Improvement Conceptualisation (MUSIC X) was used to evaluate pollutants loads from the site.

A conceptual view of the MUSIC model used in this report can be found in Appendix C.

4.4.1. Results

MUSIC modelling results for each stage are presented as mean annual loads at the receiving node indicate that adopted target reductions (as per the Cumberland Council DCP) are achieved, as shown in Table 6. MUSIC Link results are contained within Appendix C.

Pollutant	Sources (Kg/yr)	Residual Load (Kg/yr)	Reduction (%)	Target Reduction (%)
Total Suspended Solids	5693	660.80	88.39	85
Total Phosphorus	9.952	3.765	62.17	60
Total Nitrogen	47.53	26.09	45.10	45
Gross Pollutants	475.10	227.48	94.22	90

Table 3 – Overall Site Pollutant Loads

4.5. Ocean Protect Maintenance

The maintenance frequency of the Ocean Protect units is dependent upon several factors:

- Catchment area;
- Surrounding land use;
- Vegetation type;
- Traffic loading; and
- Rainfall patterns.

It is recommenced that during the first year of operation the units should be monitored monthly, with maintenance as required.

To ensure that the unit performs optimally, the material collected via the filter bag should be emptied when the level of material is no more than approximately half to two thirds of the total bag depth or when there is evidence of material overflow.

Additional monitoring should be conducted following moderate to extreme rainfall events when preceding months have had little to no rainfall. This monitoring is considered necessary to accommodate for higher

volumes of runoff generated during major rainfall events. It is anticipated greater accumulation of surface contamination during low rainfall periods and to ensure that the units have been damage due to high pipe velocities.

Upon completion of all maintenance the monitoring/maintenance checklist is to be completed and kept for records, as per Ocean Protect manufacturers guidelines.

5. Sedimentation and Erosion Control

5.1. Sedimentation and Erosion Control (Construction)

A Soil and Water Management Plan (SWMP) has been prepared in accordance with the NSW Department of Housing Publication titled: Managing Urban Stormwater – Soils and Construction (2004) for the whole site.
The key objective of the SWMP are:

- Acknowledging the activities on a construction site which may contribute to erosion, sedimentation and water quality impacts;
- The implementation of industry best management practices to minimise adverse water quality and sedimentation impacts brought about through construction activities on waterbodies surrounding the work; and
- Establishment of processes that effectively manage erosion, sedimentation and water quality practices during the life of the project.

5.1.1. Sources of Pollution

The activities and aspects of the works that have potential to lead to erosion, sediment transport, siltation and contamination of natural waters include:

- Earthworks undertaken immediately prior to rainfall periods;
- Work areas that have not been stabilised;
- Extraction of construction water from waterways during low rainfall periods;
- Clearing of vegetation and the methods adopted, particularly in advance of construction works;
- Stripping of topsoil, particularly in advance of construction works;
- Bulk earthworks and construction of pavements;
- Works within drainage paths, including depressions and waterways;
- Stockpiling of excavated materials;
- Storage and transfer of oils, fuels, fertilisers and chemicals;
- Maintenance of plant and equipment;
- Ineffective implementation of erosion and sediment control measures;
- Inadequate maintenance of environmental control measures; and
- Time taken for the rehabilitation / revegetation of disturbed areas.

5.1.2. Potential Impacts

The major potential impacts on the riparian environment relate to erosion of distributed areas or stockpiles and sediment transportation. Potential adverse impacts from erosion and sediment transportation can include:

- Loss of topsoil;
- Increased water turbidity;
- Decreased levels of dissolved oxygen;
- Changed salinity levels;
- Changed pH levels;
- Smothering of stream beds and aquatic vegetation;
- Reduction in aquatic habitat diversity;
- Increased maintenance costs; and
- Decrease in waterway capacity leading to increased flood levels and durations.

5.2. Soil and Water Management Plan

5.2.1. Overall Strategy

The following construction methodology will be followed to minimise the impact of sedimentation due to construction works:

- Diversion of "clean" water away from the disturbed areas and discharge via suitable scour protection;
- Diversion of "clean" upstream flow away from disturbed areas, in-line with construction staging (to be confirmed during detailed design);
- Provision of hay bale type flow diverters to catch drainage and divert to "clean" water drains;
- Collection of sediment-laden water into temporary sediment control basins within basement excavation to capture the design storm volume and undertake flocculation (if required);
- Provision of construction traffic shaker grids and wash-down to prevent vehicles carrying soils beyond the site;
- Provision of silt fences to filter and retain sediments at source;
- Rapid stabilisation of disturbed and exposed ground surfaces with hydro-seeding areas where future construction and building works are not currently proposed/

Refer to AT&L Drawings DAC071 to DAC072 for Erosion and Sediment Control Plans, for all proposed control and protection measures across the site.

5.2.2. Design of Sediment and Erosion Control Measures

Suitable erosion and sediment controls shall be provided by the Contractor and maintained throughout all stages of works, including at completion of the bulk earthworks.
All design, documentation, installation and maintenance of sediment and erosion controls will be in accordance with the requirements of:

- Protection of the Environment Operations Act;
- Cumberland Council specifications; and
- Office of Environment and Heritage's 'Managing Urban Stormwater: Soils and Construction. Landcom, (4th Edition) (The "Blue Book") Volume 1 and Volume 2.

Ultimately, the final temporary sediment basin locations and sizes will be provided to suit development staging requirements, and will be sized and maintained in accordance with the requirements of the above-mentioned authority documents.

5.3. Site Inspection and Maintenance

The inspection and maintenance requirements outlined in this section must be carried out while either earthworks is being conducted, and all areas re-established.
The Contractor will be required to inspect the site after every rainfall event and at least weekly, and will:

- Inspect and assess the effectiveness of the SWMP and identify any inadequacies that may arise during normal work activities or from a revised construction methodology;
- Construct additional erosion and sediment control works as necessary to ensure the desired protection is given to downstream lands and waterways;
- Ensure that drains operate properly and to affect any repairs;
- Remove spilled sand or other materials from hazard areas, including lands closer than 5 metres from areas of likely concentrated or high velocity flows especially waterways and paved areas;

- Remove trapped sediment whenever less than design capacity remains within the structure;
- Ensure rehabilitated lands have affectively reduced the erosion hazard and to initiate upgrading or repair as appropriate;
- Maintain erosion and sediment control measures in a fully functioning condition until all construction activity is completed and the site has been rehabilitated;
- Remove temporary soil conservation structures as the last activity in the rehabilitation.
- Do not dispose of sediment in a manner that will create an erosion or pollution hazard;
- Submerged inflow pipes must be inspected and de-silted (as required) after each inflow event.

5.4. Conclusion

The erosion control measures proposed for the site will comply with the requirements of Gosford City Council Council DCP and The Department of Environment, Climate Change and Water (DECC).

The proposed SWMP will ensure that the best management practice is applied to the development site in controlling and minimising the negative impacts of soil erosion.

Appendix A

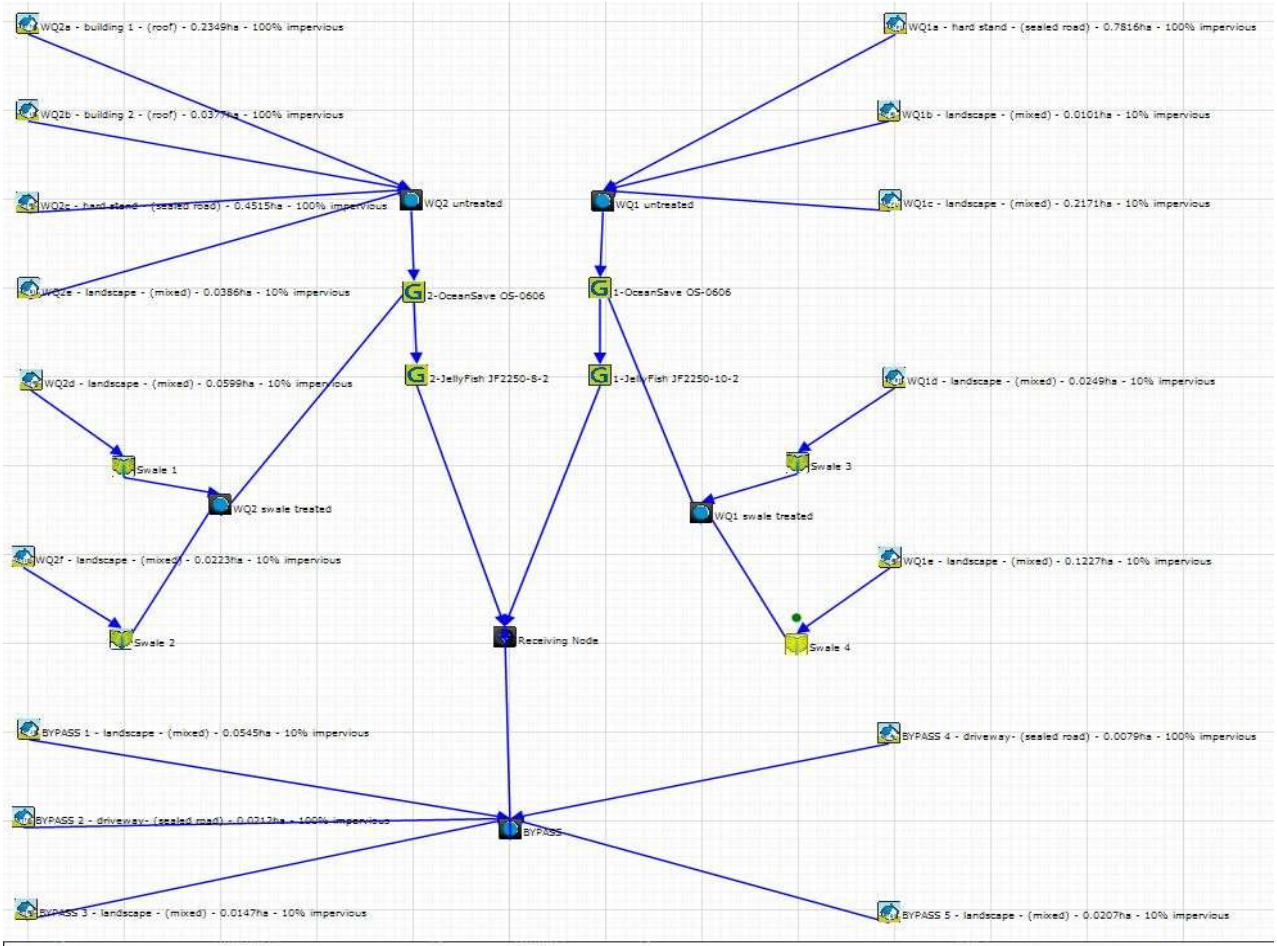
Detailed Site Survey

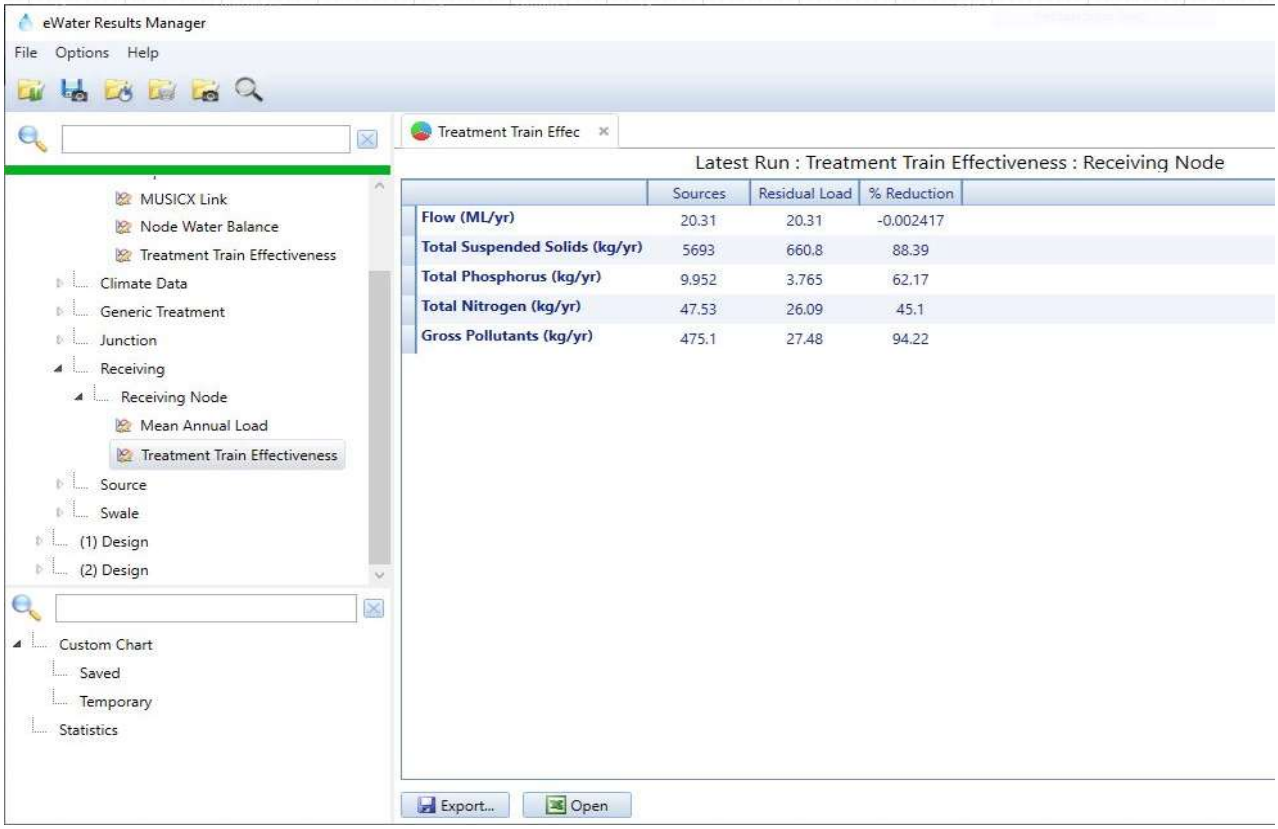
Appendix B

Civil Development Application Drawings

Appendix C

MUSIC Model and Report





	Sources	Residual Load	% Reduction
Flow (ML/yr)	20.31	20.31	-0.002417
Total Suspended Solids (kg/yr)	5693	660.8	88.39
Total Phosphorus (kg/yr)	9.952	3.765	62.17
Total Nitrogen (kg/yr)	47.53	26.09	45.1
Gross Pollutants (kg/yr)	475.1	27.48	94.22

Appendix D

Dial Before you Dig (DBYD)

Appendix E

Drains Results

	OSD 1					OSD 2				
DESIGN	TANK RL	7.6	m			TANK RL	8.1	m		
	TANK IL	5	m			TANK IL	6	m		
	VOLUME	see plan				VOLUME	see plan			
	2YR ORIFICE IL	5.1	m			2YR ORIFICE IL	6.1	m		
	2YR ORIFICE D	150	mm			2YR ORIFICE D	200	mm		
	2YR ORIFICE CL	5.175	m			2YR ORIFICE CL	6.2	m		
	2YR WEIR RL	6.35	m	HIGHER THAN DRAINS, OK		2YR WEIR RL	7.35	m	HIGHER THAN DRAINS, OK	
	2YR WEIR L	5	m			2YR WEIR L	5	m		
	100YR ORIFICE IL	5	m			100YR ORIFICE IL	6	m		
	100YR ORIFICE D	330	mm			100YR ORIFICE D	530	mm		
	100YR ORIFICE CL	5.165	m			100YR ORIFICE CL	6.265	m		
	100YR WEIR RL	7.1	m	HIGHER THAN DRAINS, OK		100YR WEIR RL	7.6	m	HIGHER THAN DRAINS, OK	
	100YR WEIR L	5	m			100YR WEIR L	3.8	m		

		SITE		OSD 1			OSD 2			SITE			
DRAINS	AEP	PRE (L/s)	POST (L/s)	OSD DISCHARGE (L/s)	TWL (m)	FB TO SURFACE (m)	OSD DISCHARGE (L/s)	TWL (m)	FB TO SURFACE (m)	BYPASS (L/s)	TOTAL PSD (L/s)	PSD < PRE?	PSD/PRE (%)
	1EY (1YR)	167	417	42	5.92	1.68	58	7.02	1.08	10	110	YES	66
	0.5EY (2YR)	274	550	49	6.2	1.4	70	7.23	0.87	16	135	YES	49
	20%	447	742	166	6.41	1.19	163	7.4	0.7	26	355	YES	79
	10%	572	930	262	6.45	1.15	266	7.43	0.67	34	562	YES	98
	5%	731	1130	290	6.58	1.02	333	7.45	0.65	42	665	YES	91
	2%	957	1410	309	6.79	0.81	424	7.48	0.62	54	787	YES	82
	1%	1160	1660	331	7.05	0.55	490	7.57	0.53	66	887	YES	76

Appendix F

Flood Impact Assessment

at&l

SYDNEY
LEVEL 7 153 WALKER STREET
NORTH SYDNEY NSW 2060
02 9439 1777
INFO@ATL.NET.AU

BRISBANE
SUITE A LEVEL 11
127 CREEK STREET
BRISBANE QLD 4000
07 3211 9581
INFO-QLD@ATL.NET.AU

atl.net.au

Job No 33303719

Phone: 1100
www.1100.com.au

Caller Details

Contact:	Glen James	**Caller Id:**	3052001	**Phone:**	0411 257 008
Company:	AT&L				
Address:	Level 7 153 Walker Street North Sydney NSW 2060	**Email:**	glen.j@atl.net.au		

Dig Site and Enquiry Details

WARNING: The map below only displays the location of the proposed dig site and does not display any asset owners' pipe or cables. The area highlighted has been used only to identify the participating asset owners, who will send information to you directly.

User Reference: 38 Young Street
Working on Behalf of: Private

Enquiry Date:	**Start Date:**	**End Date:**
15/12/2022	22/01/2023	05/02/2023

Address:
38 Young Street
West Gosford NSW 2250

Job Purpose:	**Onsite Activities:**
Excavation	Manual Excavation
Location of Workplace:	**Location in Road:**
Both	Road, Nature Strip, Footpath

- Check that the location of the dig site is correct. If not you must submit a new enquiry.
- Should the scope of works change, or plan validity dates expire, you must submit a new enquiry.
- Do NOT dig without plans. Safe excavation is your responsibility. If you do not understand the plans or how to proceed safely, please contact the relevant asset owners.

Notes/Description of Works:
Not supplied

Your Responsibilities and Duty of Care

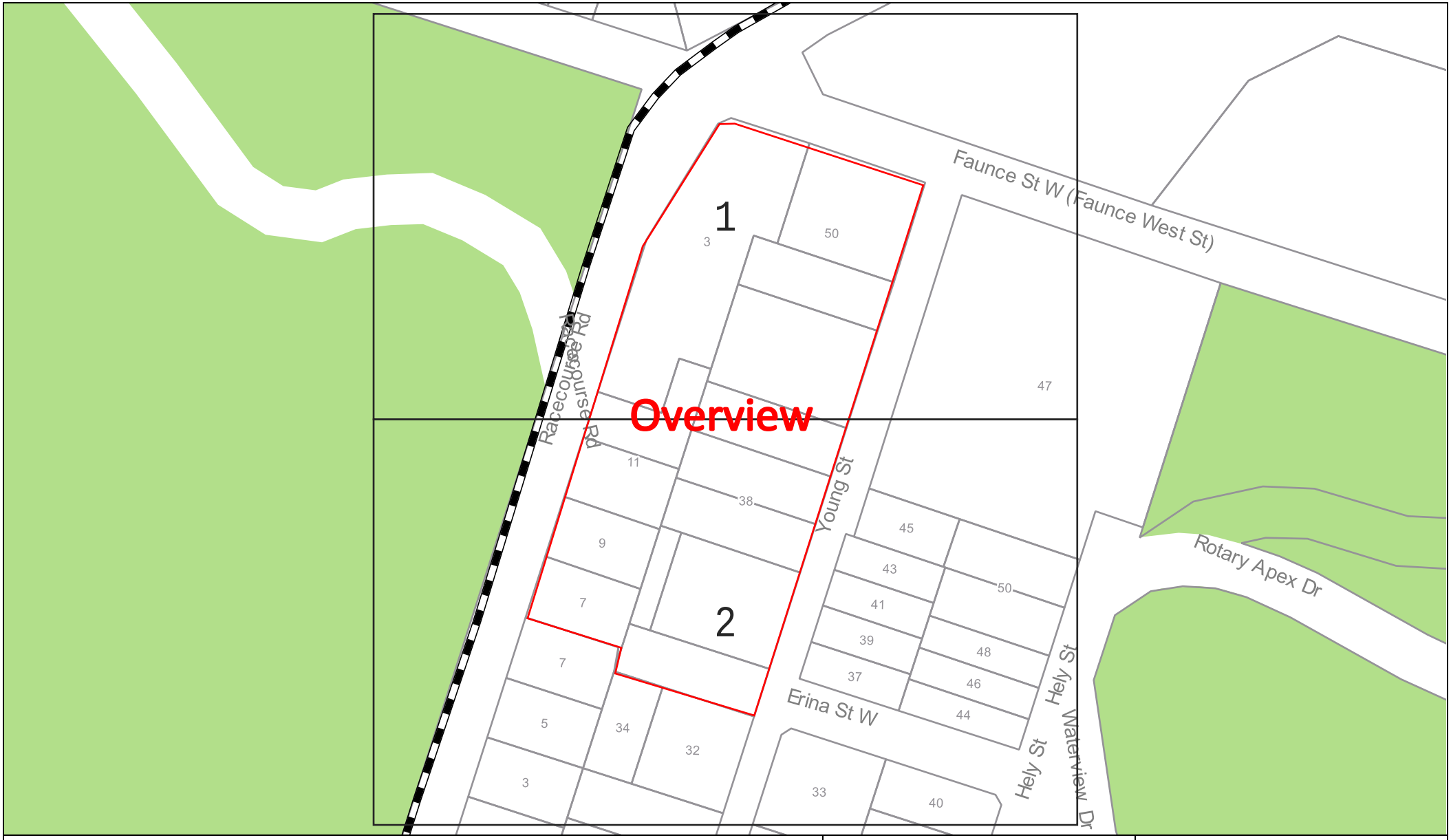
- The lodgement of an enquiry does not authorise the project to commence. You must obtain all necessary information from any and all likely impacted asset owners prior to excavation.
- If plans are not received within 2 working days, contact the asset owners directly & quote their Sequence No.
- ALWAYS perform an onsite inspection for the presence of assets. Should you require an onsite location, contact the asset owners directly. Please remember, plans do not detail the exact location of assets.
- Pothole to establish the exact location of all underground assets using a hand shovel, before using heavy machinery.
- Ensure you adhere to any State legislative requirements regarding Duty of Care and safe digging requirements.
- If you damage an underground asset you MUST advise the asset owner immediately.
- By using this service, you agree to Privacy Policy and the terms and disclaimers set out at **www.1100.com.au**
- **For more information on safe excavation practices, visit www.1100.com.au**

Asset Owner Details

The assets owners listed below have been requested to contact you with information about their asset locations within 2 working days.
Additional time should be allowed for information issued by post. It is **your responsibility** to identify the presence of any underground assets in and around your proposed dig site. Please be aware, that not all asset owners are registered with the Before You Dig service, so it is **your responsibility** to identify and contact any asset owners not listed here directly.
** Asset owners highlighted by asterisks ** require that you visit their offices to collect plans.
# Asset owners highlighted with a hash # require that you call them to discuss your enquiry or to obtain plans.

Seq. No.	Authority Name	Phone	Status
219360461	Ausgrid	(02) 4951 0899	NOTIFIED
219360462	Central Coast Council	(02) 4350 3111	NOTIFIED
219360463	Jemena Gas North	1300 880 906	NOTIFIED
219360459	NBN Co NswAct	1800 687 626	NOTIFIED
219360460	Nextgen NCC - NSW	1800 262 663	NOTIFIED
219360464	Telstra NSW Central	1800 653 935	NOTIFIED

END OF UTILITIES LIST



Sequence Number: 219360460

Date: 15/12/2022

DISCLAIMER: THIS DRAWING SHOULD NOT BE SCALED TO LOCATE CABLES. NO WARRANTY IS GIVEN THAT THE INFORMATION IS ACCURATE OR COMPLETE. IF YOU REQUIRE INFORMATION REGARDING LOCATING THE CABLE PLEASE CALL NEXTGEN. THIS DOCUMENT HAS BEEN PREPARED SOLELY FOR DIAL BEFORE YOU DIG USE. THIS PLAN CONTAINS COMMERCIALLY SENSITIVE INFORMATION AND IS TO BE TREATED ACCORDINGLY. NO SUCH INFORMATION IS TO BE PASSED ONTO OTHER PARTIES WITHOUT WRITTEN CONSENT FROM NEXTGEN PTY LTD.

nextgen GROUP

LEGEND

Digsite

Area

Assets

Cable

3rd Party Duct

Marker Post

Sequence Number: 219360460

Date: 15/12/2022

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LEGEND

Digsite	Assets
Area	Cable
	3rd Party Duct
	Marker Post

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nextgen GROUP

LEGEND

Digsite	Assets
Area	Cable
	3rd Party Duct
	Marker Post

Plant Location Details

14/12/2022

Glen James
AT&L
Level 7,153 Walker Street
North Sydney NSW 2060
Phone: +61411257008

Nextgen Networks Pty Ltd
Level 6, 333 Collins Street
Melbourne VIC 3000
T 1800 032 532
E Damage.Relocations@vocus.com.au

Dear Glen James

The following is a response to your Dial Before You Dig enquiry

Assets Affected: Nextgen Assets
Sequence No: 219360460
Location: 38 Young Street, West Gosford NSW 2250

IMPORTANT:

- Please read and understand all the information and disclaimers provided below
- Sketches and Plans provided by Nextgen Networks are circuit diagrams only and indicate the presence of telecommunications plant in the general vicinity of the geographical area shown; exact ground cover and alignments cannot be given with any certainty and cover may alter over time. Telecommunications plant seldom follow straight lines and careful on site investigation is essential to uncover and reveal its exact position
- The accuracy and/or completeness of the information in the plans can not be guaranteed often due to changes in the surrounding land subsequent to Nextgen's deployment and, accordingly the plans are intended to be indicative only

"DUTY OF CARE"
When working in the vicinity of telecommunications plant you have a legal "Duty of Care" that must be observed. The following points must be considered:

1. It is the responsibility of the owner and any consultant engaged by the owner, including an architect, consulting engineer, developer, and head contractor to design for minimal impact and protection of Nextgen Networks plant. Nextgen Networks will provide free plans and sketches showing the presence of its network to assist at this design stage.
2. It is the owner's (or constructor's) responsibility to:
   a) Request plans of Nextgen Networks plant for a particular location at a reasonable time before construction begins
   b) Visually locate Nextgen Networks plant by vacuum excavation (pot-holing) where construction activities may damage or interfere with Nextgen Networks plant (see "Essential Precautions and Approach Distances" section for more information)
   c) Contact Nextgen Networks Network (see below for details) if Nextgen Networks plant is wholly or partly located near planned construction activities

DAMAGE
ANY DAMAGE TO Nextgen Networks NETWORK MUST BE REPORTED TO 1800 032 532 IMMEDIATELY

- The owner is responsible for all plant damage when works commence prior to obtaining Nextgen Networks plans, or failure to follow agreed instructions
- Nextgen Networks reserves all rights to recover compensation for lose or damage to its cable network or other property including consequential losses

CONCERNING NEXTGEN NETWORK PLANS

- Phone 1100. Dial Before You Dig for free plans of Nextgen Networks plant locations. Please give at least 2 business days notice
- Nextgen Networks plans and information provided are valid for 30 days from the date of issue
- Nextgen Networks retains copyright in all plans and details provided in conjunction with your request. These plans and or details should be disposed of by shredding or any other secure disposal method after use
- Nextgen Networks plans or other details are provided for the use of the applicant, its servants, or agents, and shall not be used for any unauthorised purpose
- Please contact the Network Help Desk (see below for details) immediately should you locate Nextgen Networks assets not indicated on these plans
- Nextgen Networks, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and or details so supplied to the applicant, its servants and agents, and the applicant agrees to indemnify Nextgen Networks against any claim or demand for any such loss or damage
- Please ensure Nextgen Networks plans and information provided remains on-site at all times throughout your construction phase

ESSENTIAL PRECAUTION AND APPROACH DISTANCE

NOTE: If the following clearances cannot be maintained, please contact the Nextgen Network Help Desk (see below for details) for advice on how best to resolve this situation

1. On receipt of plans and sketches and before commencing excavation work or similar activities near Nextgen Networks plant, carefully locate this plant first to avoid damage. Undertake prior exposure (vacuum excavation) such as potholing when intending to excavate or work closer to Nextgen Networks plant than the following approach distances:

- Where Nextgen Networks plant is in an area where road and footpaths are well defined by kerbs or other features a minimum clear distance of 600mm must be maintained from where it could be reasonably presumed that plant would reside
- In non established or unformed reserves and terrain, this approach distance must be at least 1.5 metres
- In country/rural areas which may have wider variations in reasonably presumed plant presence, the following minimum approach distances apply:
  d) Parallel to major plant: 10 metres (for optic fibre cable)
  e) Parallel to other plant: 5 metres

  Note: Even pot-holing needs to be undertaken with extreme care, common sense and employing techniques least likely to damage cables. For example - vacuum excavation.

- If construction work is parallel to Nextgen Networks plant, then careful pot-holing at least every 5m is required to establish the location of all plant, hence continuing nominal locations before work can commence

2. Maintain the following minimum clearance between construction activity and actual location of Nextgen Networks Plant.

Jackhammers/Pneumatic Breakers	*Not within 1.0m of actual locations*
Vibrating Plate or Wackers Packer Compactors	*Not within 0.5m of Nextgen Networks ducts 300mm compact clearance cover before compactor can be used across Nextgen Networks ducts, and 600mm clearance across Nextgen Networks cables in the solid*
Boring Equipment (in-line, horizontal and vertical)	*Not within 2.0m of actual location Constructor to check depth via vacuum excavation (pot-hole)*
Heavy Vehicle Traffic (over 3 tonnes)	*Not to be driven across Nextgen Networks ducts with less than 600mm cover. Not to be driven across Nextgen Networks fibre with less than 1.2m cover Constructor to vacuum excavate(pot-hole) and expose plant*
Mechanical Excavators, Boring and Tree Removal	*Not within 1.0m of actual location Constructor to vacuum excavate (pot-hole) and expose plant*

- All Nextgen Networks pits and manholes should be a minimum of 1.2m in from the back of kerb after the completion of your work
- All Nextgen Networks conduit should have the following minimum depth of cover after the completion of your work:

  Footway 450mm
  Roadway 450mm at drain invert and 600mm below the pavement subgrade level invert

- All Nextgen Networks fibre in the solid should have the following minimum depth of cover after the completion of your work:

  Footway 600mm
  Roadway 1200mm at drain invert and 1200mm below the pavement subgrade level invert

- For clearance distances relating to Nextgen Networks above ground infrastructure please contact the Network Help Desk (see below for details)

FURTHER ASSISTANCE

Over-the-phone assistance can be obtained by calling the Network Help Desk below.
Nextgen require 5 clear business days notice to conduct an on-site location. The initial on site location visit will not normally incur a charge, but at the discretion of Nextgen subsequent site visits may incur a charge to be applied at an hourly rate.
Where an on-site location is provided, the owner is responsible for all vacuum excavation work (pot-holing) to visually locate and expose Nextgen Networks plant.
If plant location plans or visual location of Nextgen Networks plant by vacuum excavation reveals that the location of Nextgen Networks plan is situated wholly or partly where the owner plans to work, then **Nextgen Networks** must be contacted through the **Network Help Desk** to discuss possible engineering solutions.
The contact number for the **Network Help Desk** is 1800 032 532.

NOTE:
If Nextgen Networks relocation or protection works are part of the agreed solution, then payment to Nextgen Networks for the cost of this work shall be the responsibility of the principal developer. The principal developer will be required to provide Nextgen Networks with the details of their proposed work showing how Nextgen Networks plant is to be accommodated and these details must be approved by the Nextgen National Operations Manager prior to the commencement of site works.

RURAL LANDOWNER - IMPORTANT INFORMATION

Where Nextgen Networks owned cable crosses agricultural land Nextgen Networks will provide a one off free-on-site electronic cable location. Please note that the exact location of cables can only be verified by visual proving by pot holing, which is not covered by this service. The Network Integrity HelpDesk Officer will provide assistance in determining whether a free-on-site location is required. Please ring the Nextgen Network Help Desk as listed above.

PRIVACY NOTE

Your information has been provided to Nextgen Networks by DBYD to enable Nextgen Networks to respond to your DBYD request. Nextgen Networks keeps your information in accordance with its privacy statement entitled 'Protecting Your Privacy' which can be obtained from Nextgen Networks either by calling 1800 032 532 or visiting our website www.nextgengroup.com.au

Warning: Nextgen Networks plans show only the presence of cables and plant. They only show their position relative to road boundaries, property fences etc, at the time of installation and Nextgen Networks does not warrant or hold out that such plans are accurate thereafter due to changes that may occur over time.
DO NOT ASSUME DEPTH OR ALIGNMENT of cables or plant as these vary significantly.
The customer has A DUTY OF CARE when excavating near Nextgen Networks cables and plant. Before using machine excavators NEXTGEN PLANT MUST FIRST BE PHYSICALLY EXPOSED BY VACUUM EXCAVATION (potholing) to identify its location.
Nextgen Networks will seek compensation for damages caused to its property and losses caused to Nextgen Networks and its customers.

EXPERIENCED PLANT LOCATORS (for your area)

On-site assistance should be sought from an Experienced Plant Locater if the telecommunications plant cannot be located within 2.5 metres of the locations indicated on the drawings provided. On-site advice should be obtained from a suitably qualified contractor highly skilled in locating Nextgen Networks plant. If there is any doubt whatsoever about the actual location of the telecommunications plant, the best method for locating the telecommunications plant or the correct interpretation of the drawings provided. In the case where Nextgen Networks plant is outside a recognised road reserve Nextgen Networks recommends that the **Network Help Desk** is contacted for assistance prior to engaging an Experienced Plant Locater.

For the assistance of customers Nextgen Networks has established strict criteria to assess the skill of contractors that may be engaged by owners requiring Nextgen Networks plant locating services to perform any of the following activities if requested to do so by the owner:

- Review Nextgen Networks plans to assess the approximate location of Nextgen Networks plant
- Advise owners of the approximate location of Nextgen Networks plant according to the plans
- Advise the owners of the best method for locating Nextgen Networks plant
- Advise owners of the hazard of unqualified persons attempting to find the exact location of Nextgen Networks plant and working in the vicinity of Nextgen Networks plant without first locating its exact position
- Perform trial hole explorations by vacuum excavation (pot-holing) to expose Nextgen Networks plant with a high degree of skill, competence and efficiency and utilising all necessary safety equipment

Nextgen Networks does not accept any liability or responsibility for the performance of or advice given by any Plant Locater engaged by you but we will, if requested, recommend suitably qualified plant locators.

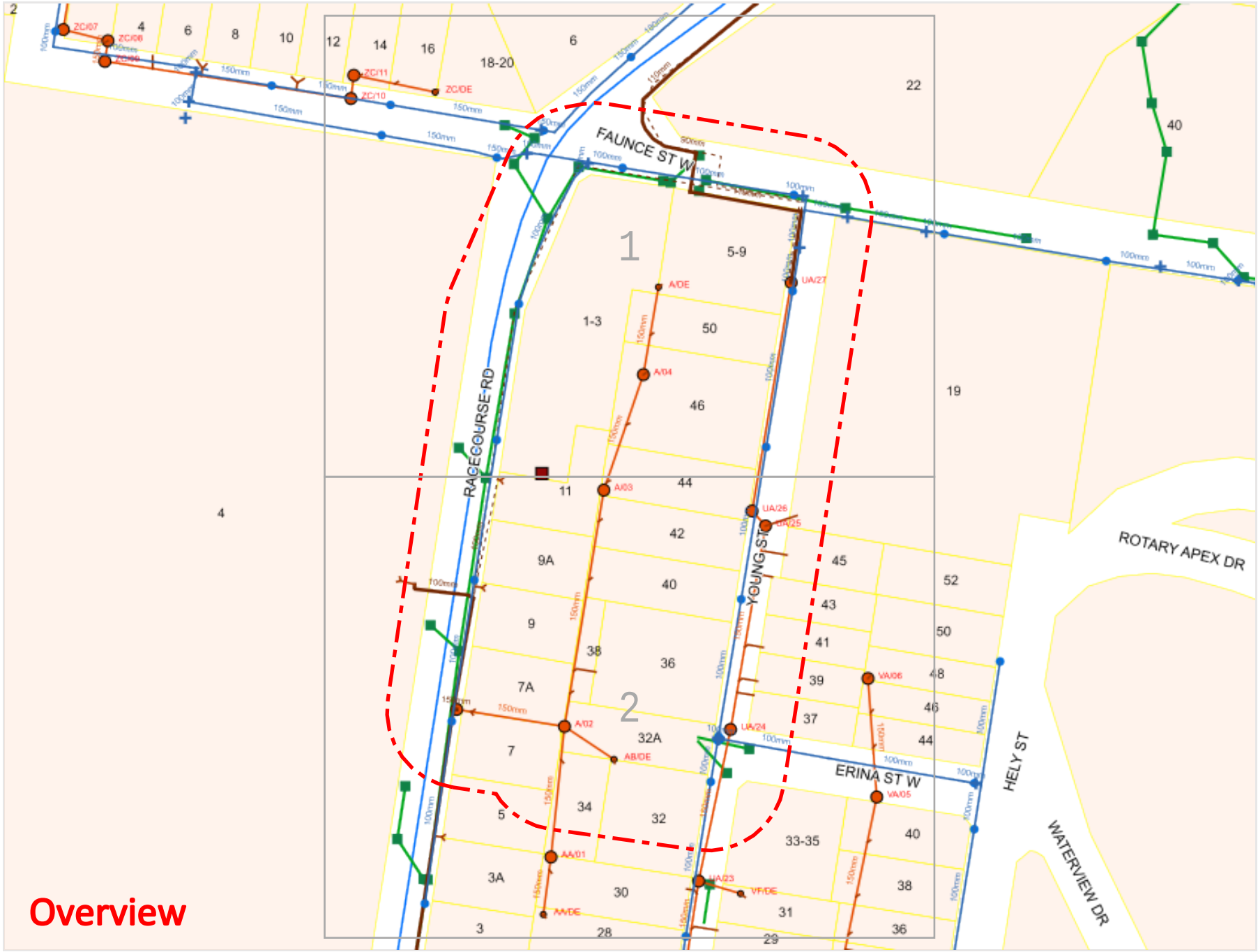
GENERAL DISCLAIMER

While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Nexgen or PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

Central Coast Council

Sequence No: 219360462
Job No: 33303719
Location: 38 Young Street, West Gosford, NSW 2250

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.



Legend

- Watermain
- Watermain (Asbestos)
- Watermain - Expired
- Watermain - Expired (Asbestos)
- Water Valve
- Watermain - Recycled
- Water Hydrant
- Sewer Service Connection
- Sewer Pressure Main
- Sewer Pressure Main- Expired
- Sewer Network Structures
- Sewer Maintenance Hole
- Sewer Dead End
- Sewer Lamphole
- Sewer Gravity Main
- Sewer Gravity Main (Asbestos)
- Sewer Gravity Main - Expired
- Drainage Pit
- Drainage Pipe
- Drainage Pipe - Expired
- Drainage Culverts
- Drainage Culverts - Expired

N

Scale: 1:2050
Expires: 12 Jan 2023

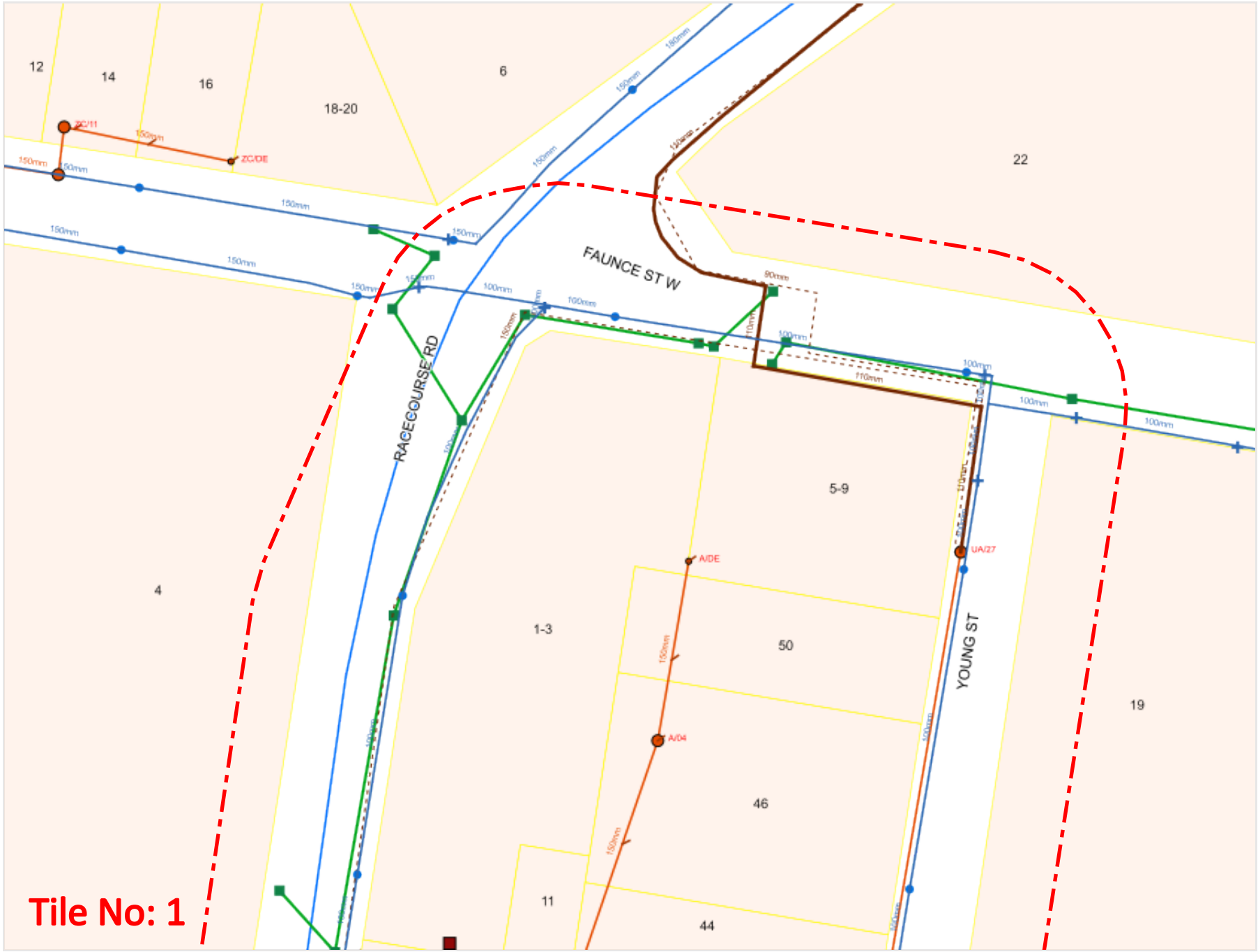
DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Central Coast Council nor PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

Overview

Central Coast Council

Sequence No: 219360462
Job No: 33303719
Location: 38 Young Street, West Gosford, NSW 2250

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.



Tile No: 1

Legend

- Watermain
- Watermain (Asbestos)
- Watermain - Expired
- Watermain - Expired (Asbestos)
- Water Valve
- Watermain - Recycled
- Water Hydrant
- Sewer Service Connection
- Sewer Pressure Main
- Sewer Pressure Main- Expired
- Sewer Network Structures
- Sewer Maintenance Hole
- Sewer Dead End
- Sewer Lamphole
- Sewer Gravity Main
- Sewer Gravity Main (Asbestos)
- Sewer Gravity Main - Expired
- Drainage Pit
- Drainage Pipe
- Drainage Pipe - Expired
- Drainage Culverts
- Drainage Culverts - Expired

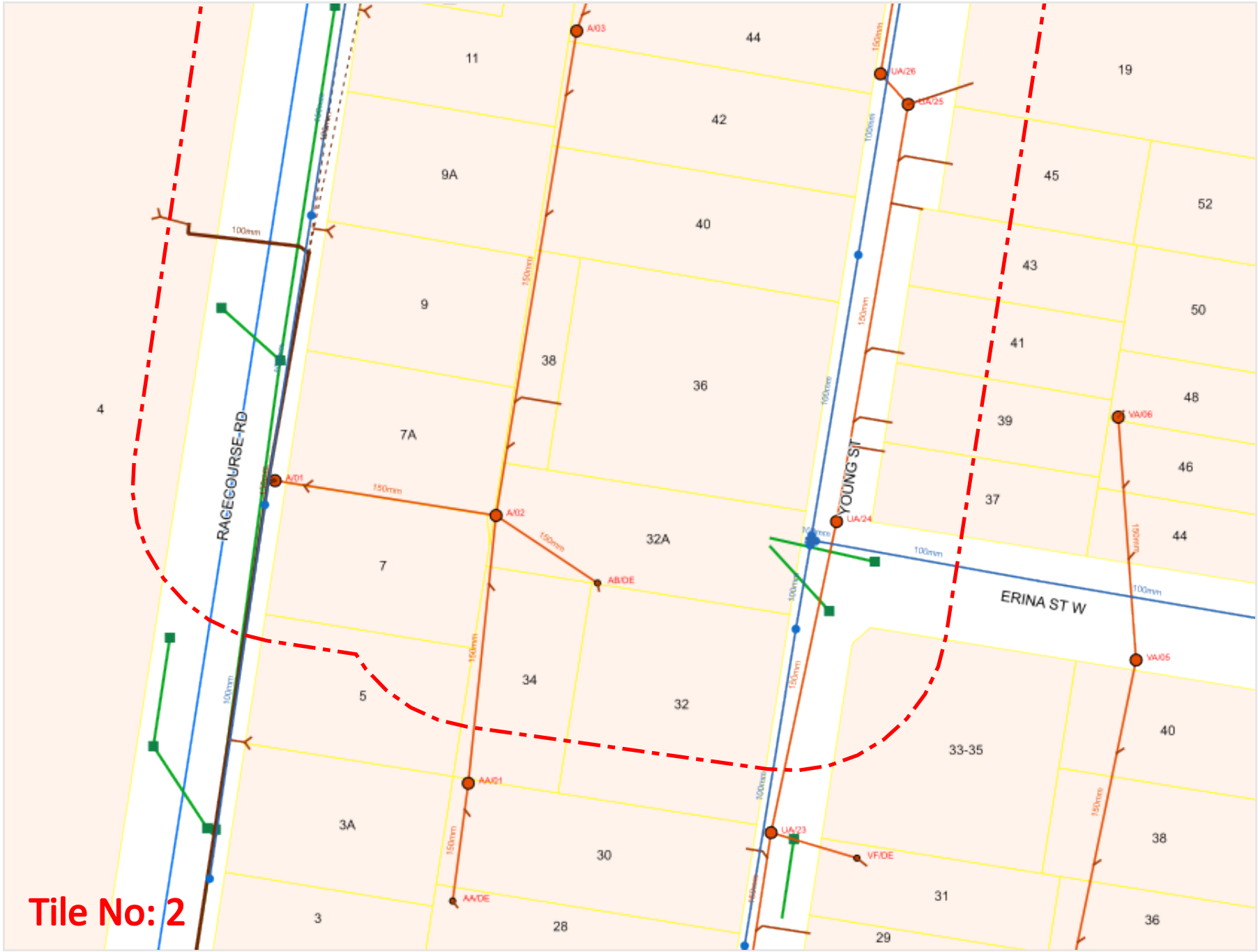
N

Scale: 1:1000
Expires: 12 Jan 2023

Central Coast Council

Sequence No: 219360462
Job No: 33303719
Location: 38 Young Street, West Gosford, NSW 2250

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.



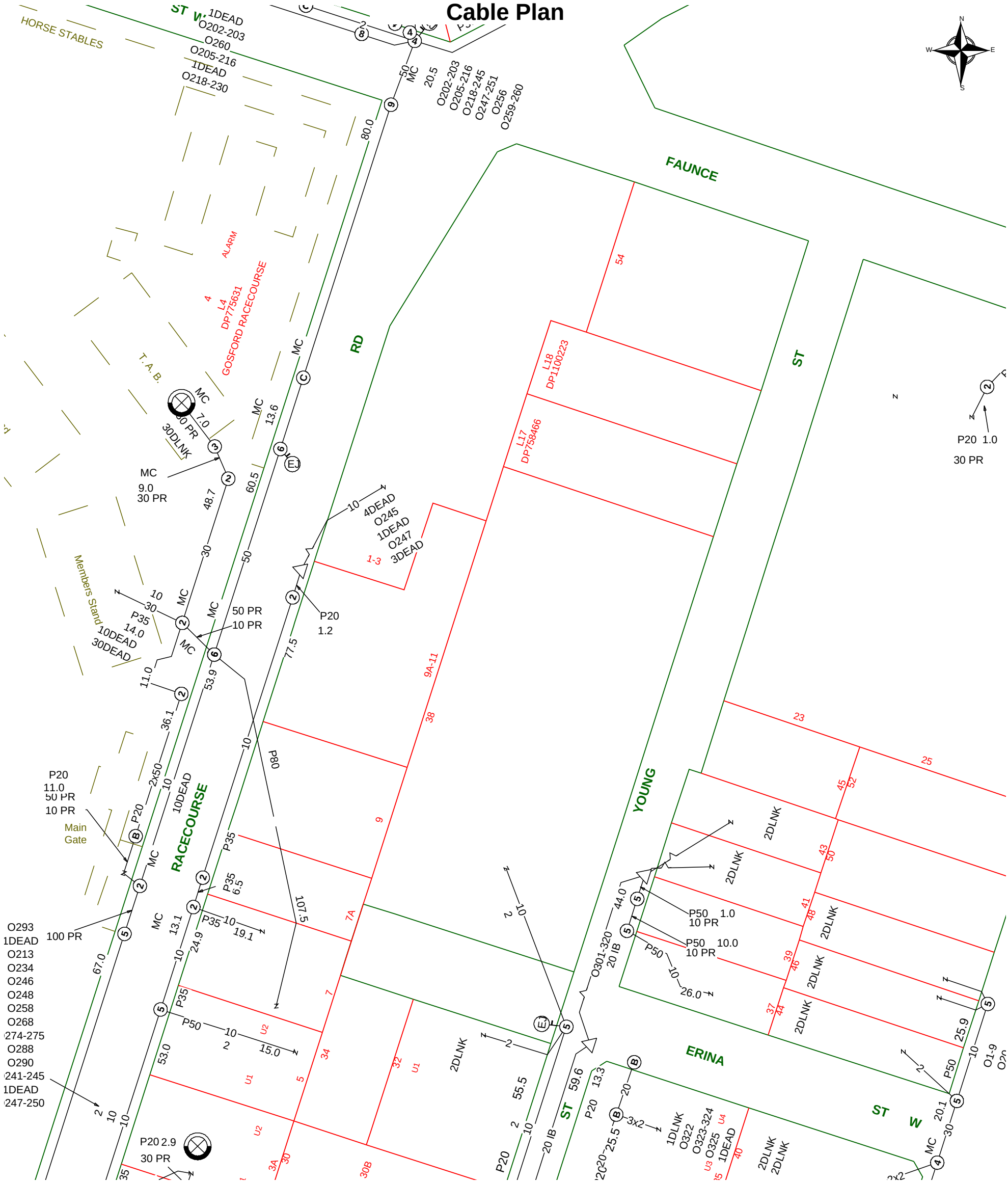
Legend

- Watermain
- Watermain (Asbestos)
- Watermain - Expired
- Watermain - Expired (Asbestos)
- Water Valve
- Watermain - Recycled
- Water Hydrant
- Sewer Service Connection
- Sewer Pressure Main
- Sewer Pressure Main- Expired
- Sewer Network Structures
- Sewer Maintenance Hole
- Sewer Dead End
- Sewer Lamphole
- Sewer Gravity Main
- Sewer Gravity Main (Asbestos)
- Sewer Gravity Main - Expired
- Drainage Pit
- Drainage Pipe
- Drainage Pipe - Expired
- Drainage Culverts
- Drainage Culverts - Expired

N

Scale: 1:1000
Expires: 12 Jan 2023

Cable Plan



Report Damage: https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment Ph - 13 22 03 Email - Telstra.Plans@team.telstra.com Planned Services - ph 1800 653 935 (AEST bus hrs only) General Enquiries	Sequence Number: 219360464
TELSTRA CORPORATION LIMITED A.C.N. 051 775 556	CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.
Generated On 15/12/2022 10:01:52	

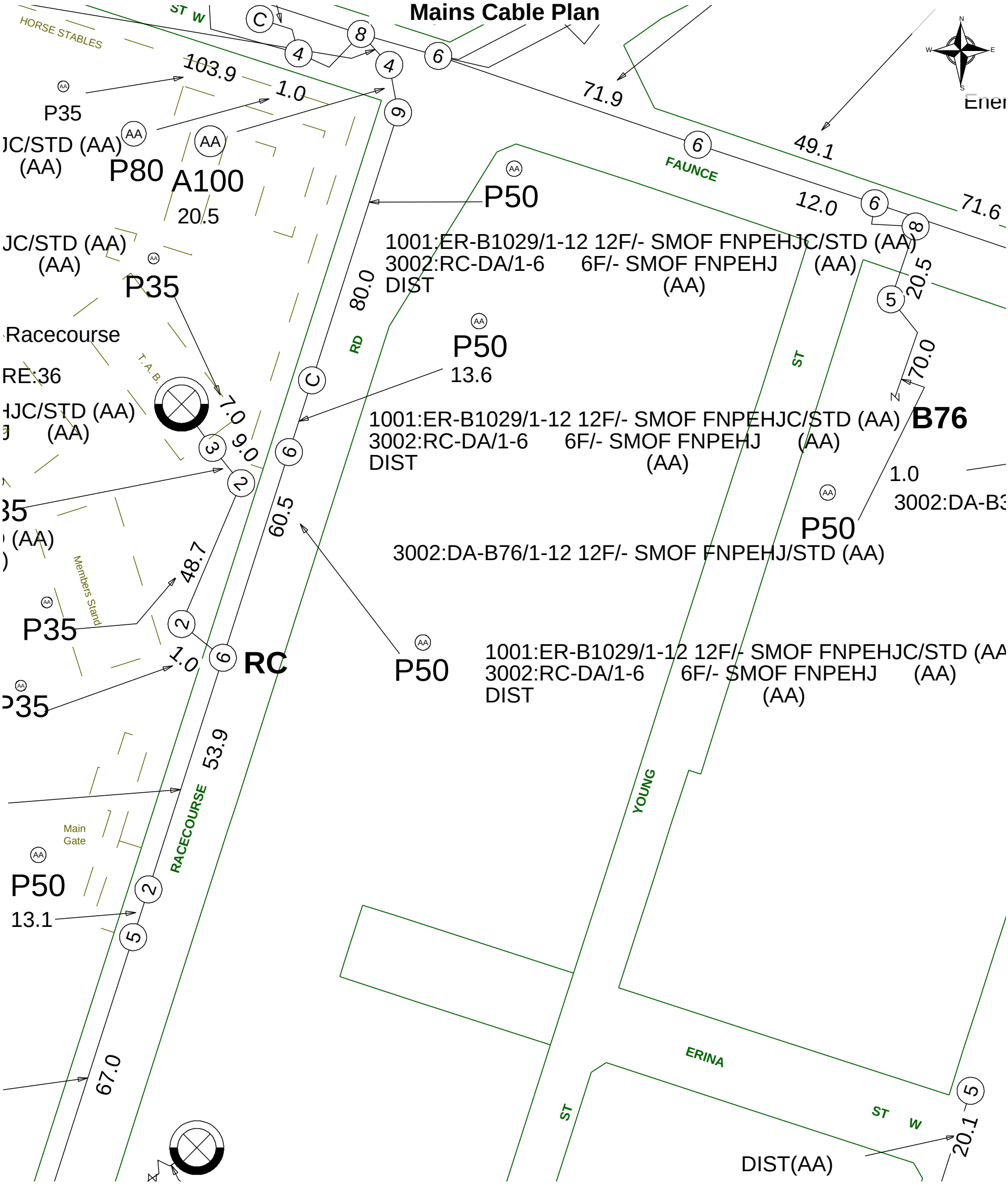
The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

WARNING

Telstra plans and location information conform to Quality Level "D" of the Australian Standard AS 5488-Classification of Subsurface Utility Information.
As such,Telstra supplied location information is indicative only.Spatial accuracy is not applicable to Quality Level D.
Refer to AS 5488 for further details. The exact position of Telstra assets can only be validated by physically exposing it.
Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy.
Further on site investigation is required to validate the exact location of Telstra plant prior to commencing construction work.
A Certified Locating Organisation is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works.

See the Steps- Telstra Duty of Care that was provided in the email response.

Mains Cable Plan



Report Damage: https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment Ph - 13 22 03 Email - Telstra.Plans@team.telstra.com Planned Services - ph 1800 653 935 (AEST bus hrs only) General Enquiries	Sequence Number: 219360464
TELSTRA CORPORATION LIMITED A.C.N. 051 775 556	CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.
Generated On 15/12/2022 10:01:53	

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Refer to AS 5488 for further details. The exact position of Telstra assets can only be validated by physically exposing it.
Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy.
Further on site investigation is required to validate the exact location of Telstra plant prior to commencing construction work.
A Certified Locating Organisation is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works.

See the Steps- Telstra Duty of Care that was provided in the email response.

If further information is required, please contact:
Ausgrid BYDA
Phone: (02) 4951 0899
Fax: (02) 4951 0729

Emergency Phone Number 131388

Underground Cable Location Search Advice

-- Ausgrid Assets Not Recorded in the Vicinity --

(Caution Still Required)

To:	Glen James AT&L Level 7,153 Walker Street North Sydney NSW 2060		
		Phone No:	+61411257008
		Issue Date:	15/12/2022

In response to your enquiry, Sequence No219360461 the records of Ausgrid **do not** disclose that there are Ausgrid underground cables in the defined search location.

This search is based on the geographical position of the dig site as denoted in the Before You Dig Australia caller confirmation sheet and an overview is provided:

Address:	38 Young Street West Gosford NSW 2250
Job #:	33303719

****Important****

All information provided to you is ONLY VALID FOR 30 DAYS from the date of issue

YOU MUST READ AND UNDERSTAND THE:
IMPORTANT INFORMATION
AND
CHECKLIST FOR WORK NEAR OR AROUND UNDERGROUND CABLES
THAT ARE INCLUDED AS PART OF THIS ADVICE

Ausgrid

Emergency Phone Number 131388

IMPORTANT INFORMATION

YOU MUST BE AWARE THAT:

1. There may be underground cables owned by other utilities, in the vicinity of your work, about which Ausgrid has no information.

2. Ausgrid does not usually keep plans of privately owned underground cables or its underground service cables on private property. (Refer NS 156 for further information.)

YOU MUST MAKE YOUR OWN ENQUIRIES IN RESPECT OF THESE CABLES.

YOU MUST UNDERSTAND THAT:

1. Ausgrid takes all reasonable care in providing details of its underground cables. However, owing to changes in road and footway alignments and levels, and the age and incompleteness of some records, it is not possible to conclusively specify the location of all of Ausgrid's underground cables. The accuracy and completeness of the information provided to you cannot be guaranteed. It is intended to be indicative only. It must not be **solely** relied upon when undertaking underground works.

2. Except to the extent that liability may not be capable of lawful exclusion, Ausgrid, its servants and agents will be under no liability whatsoever to any person for loss or damage (including indirect or consequential loss or damage) however caused (including without limitation, for breach of contract, negligence and breach of statute) which may be suffered or incurred from or in connection with the advice provided.

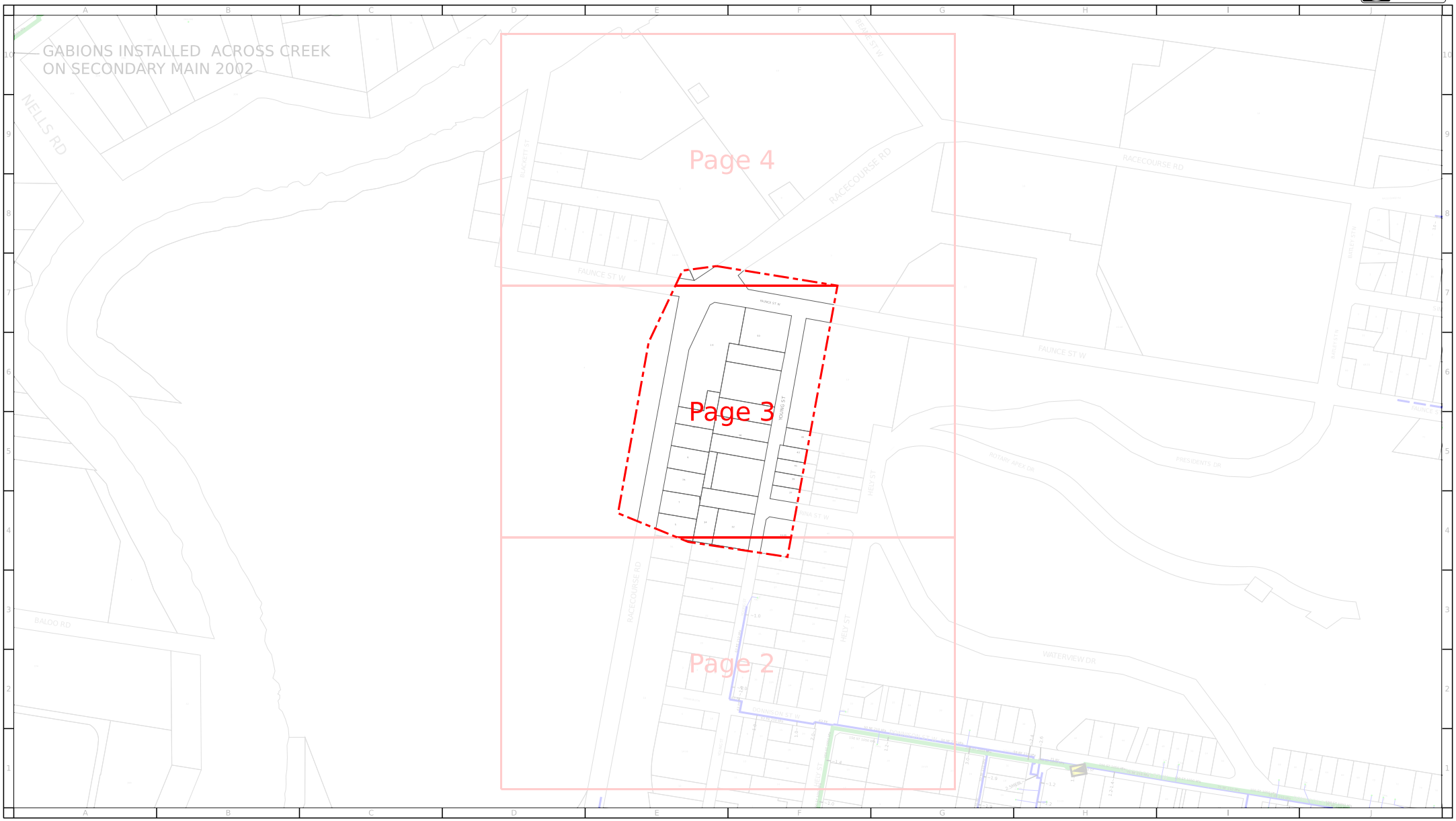
3. Due to the inherent dangers associated with **excavation, under boring and directional drilling** in the vicinity of underground cables, precautions must always be taken when undertaking any underground works. Ausgrid's Network Standard NS 156 specifies standards for working in the vicinity of underground cables. It is deemed to be part of this Advice, and it must be read by you.

4. Due to the inherent risk of compromising the stability of Ausgrid's power poles during excavation which could lead to pole movement or collapse, precautions must always be taken. If excavation is to be carried out within 1m from a power pole, Ausgrid must be contacted at construction.works@ausgrid.com.au for advice. Do not proceed until you have received such advice from Ausgrid.

YOU MUST READ NETWORK STANDARD NS 156, *WORKING NEAR OR AROUND UNDERGROUND CABLES.* IT IS PART OF THIS ADVICE.

DBYD Authority: Jemena Gas Networks (NSW)

DBYD Location: 38 Young Street West Gosford NSW, 2250



Jemena
ABN 87 003 004 322

For legend details, please refer to the Coversheet attachment provided as part of this DBYD response.

N
W E
S

Scale: 1:6301

Issue Date: 14/12/2022
DBYD Seq No: 219360463
DBYD Job No: 33303719
Overview Page:

DBYD Authority: Jemena Gas Networks (NSW)

DBYD Location: 38 Young Street West Gosford NSW, 2250

Jemena
ABN 87 003 004 322

For legend details, please refer to the Coversheet attachment provided as part of this DBYD response.

N W E S

Scale: 1:2000

Issue Date: 14/12/2022
DBYD Seq No: 219360463
DBYD Job No: 33303719

0m 10m 20m 30m 40m 50m 60m 70m 80m

WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagramatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.

DBYD Authority: Jemena Gas Networks (NSW)

DBYD Location: 38 Young Street West Gosford NSW, 2250

Jemena
ABN 87 003 004 322

For legend details, please refer to the Coversheet attachment provided as part of this DBYD response.

N
W E
S

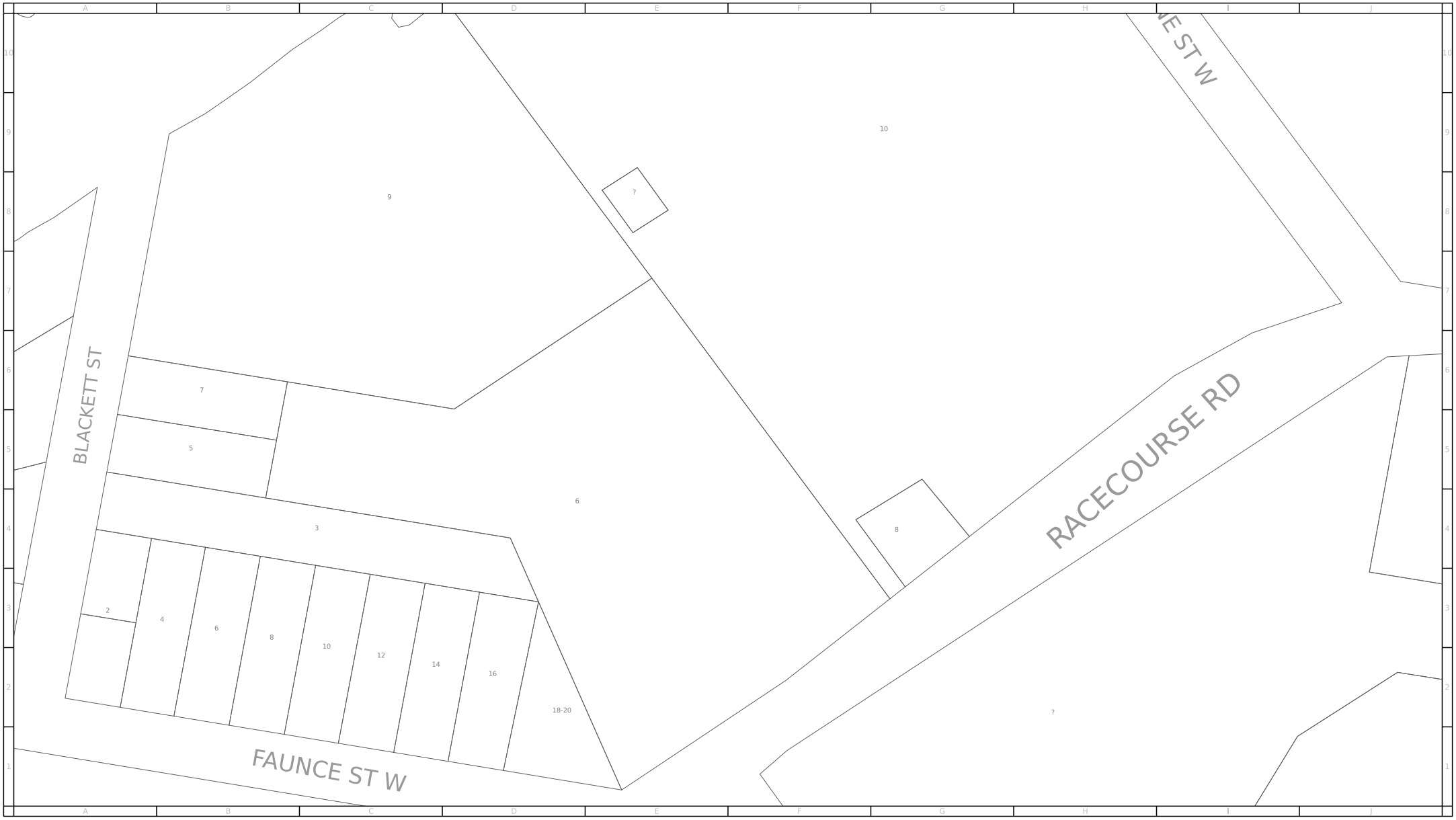
Scale: 1:2000

Issue Date: 14/12/2022
DBYD Seq No: 219360463
DBYD Job No: 33303719

0m 10m 20m 30m 40m 50m 60m 70m 80m

DBYD Authority: Jemena Gas Networks (NSW)

DBYD Location: 38 Young Street West Gosford NSW, 2250



Jemena
ABN 87 003 004 322

For legend details, please refer to the Coversheet attachment provided as part of this DBYD response.

N
W E
S

Scale: 1:2000

Issue Date: 14/12/2022
DBYD Seq No: 219360463
DBYD Job No: 33303719

0m 10m 20m 30m 40m 50m 60m 70m 80m

WARNING: This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagramatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.

Jemena Gas Network Protection

Jemena Asset Management Pty Ltd ABN 53 086 013 461
for and on behalf of Jemena Gas Networks (NSW) Ltd ABN 87 003 004 322

NO ASSETS AFFECTED

This information is only valid for 28 days from the date of issue

Please note that there are N**o Gas Mains or Services** in the vicinity of your intended work, as generally illustrated on the attached map. For an explanation of the map, please see the legend attached and read the important information below.

Please note that you have duty of care to ensure that Jemena's assets are not compromised or damaged during any digging, future development or construction work.

Excavation Guidelines:
It is essential that the location of gas pipe/s are confirmed by carefully pot-holing by hand excavation prior to proceeding with mechanical excavation in the vicinity of gas pipes. If you cannot locate the pipe, contact the local Jemena depot.

Important Information:

1. The enclosed plans have been prepared solely for the use of Jemena Gas Networks (NSW) Ltd and Jemena Asset Management Pty Ltd (together "Jemena") and show the position of Jemena's underground gas mains and installations in public gazetted roads. If the enclosed plans show gas assets located on private property or other third party property, these are approximate locations.
2. There may be underground assets owned by other utilities in the vicinity of your work and it is your responsibility to identify and locate such assets.
3. The plans may show the position of underground mains and installations relative to fences, buildings and other structures as they existed at the time the assets were installed and may not have been updated to take account of any subsequent changes in the location or style of those features. Depth of underground assets may also vary as a result of changes to road, footpath or surface levels subsequent to asset installation.
4. While Jemena takes all reasonable care to ensure the accuracy and completeness of the information provided, it makes no warranty as to the accuracy or completeness of the enclosed plans and does not assume any duty of care to you nor any responsibility for the accuracy, adequacy, suitability or completeness of the plans or for any error or omission. It is intended to be indicative only and must not be solely relied upon when undertaking underground works.
5. Except to the extent that liability may not be capable of being lawfully excluded, Jemena, its employees, agents, officers and contractors will not be liable to any person for loss or damage (including indirect and consequential loss or damage) which may be suffered or incurred in connection with the provision of this information.
6. Persons excavating or carrying out other earthworks will be held responsible for any damage caused to Jemena's underground mains, service lines and equipment. In accordance with the *Work Near Underground Assets – Guide* published in 2007 by Work Cover Authority*, Jemena recommends that you carry out potholing by hand to accurately confirm the location of gas mains and installations prior to commencing excavations.

Jemena BYDA Administration: 1300 880 906 ***Guide** available via: www.safework.nsw.gov.au

In case of Emergency Phone 131 909 (24 hours)

Jemena Gas Networks

Before You Dig Australia Map Legend
Nov 2022

Network Mains

- Proposed New Main (coloured as per kPa)
- Proposed Isolate (coloured as per kPa)
- Unknown kPa
- 2kPa Low Pressure gas main
- 7kPa Low Pressure gas main
- 30kPa Medium pressure gas main
- 100kPa Medium Pressure gas main
- 210kPa Medium Pressure gas main
- 300kPa Medium Pressure gas main
- 400kPa Medium Pressure gas main
- 1050kPa High Pressure gas main
- 3500kPa High Pressure gas main
- 7000kPa High Pressure gas main
- >7000kPa Transmission pipeline
- Isolated Service - Former Med/High Pressure
- Isolated Steel Main -**Treat as High Pressure**

100 PVC — Conduit or Casing
Size & Material (see conduit material codes)

Critical Main -**Treat as High Pressure**
(Main coloured as per kPa)

EXPOSED — Exposed Main section

SHALLOW-SP — Shallow Main section: see Protection Code below, no code assume no protection

SP	Steel Plate	CE	Concrete Encased
PP	PE Plate	UNK	Unknown Type
CS	Concrete Slab		

Network Assets

- Siphon
- Network Valve
- High Pressure Main Line Valve (=>1050kPa)
- High Pressure Automatic Line Break Valve (>1050kPa)
- Boundary Regulator Set (=<1050kPa)
- Distribution Regulator Set (=<1050kPa)
- High Pressure Regulating Station (>1050kPa)

Annotations

Pipe and Conduit Material Codes

NY	Nylon	NB	Nominal Bore – Cast Iron
PE	Polyethylene	ST	Steel
P/PL	Plastic (undefined)	C/CO	Copper
PVC	Polyvinyl Chloride		

Pipe code combinations and dimension references

6NB 50MM NY — 50mm Nylon main inserted into 6 inch (Nominal Bore) Cast Iron pipe

50MM 32MM NY — 32mm Nylon main inserted into 50mm Steel pipe

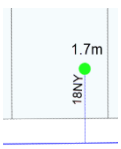
~1.5 — Distance (in metres) of main from Boundary Line (MBL)

MBK	Distance in Metres Back of Kerb
MKL	Distance in Metres from Kerb Line
MEBL	Distance in Metres from Eastern Boundary Line (North/South/West)
MCL	Distance in Metres from Centre Line of Road
MFL	Distance in Metres from Fence Line

Gas Services

- Gas service – coloured by kPa
- Serviced Site indicator

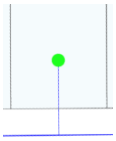
Jemena has created service pipe features programmatically based on known pipe characteristics and cartographic principles. They may provide guidance to identify assets whilst in the field in addition to existing processes.



Distance (in metres) of service from side Boundary where the service pipe crosses from the road reserve into the private lot

Service placed towards left or right boundary

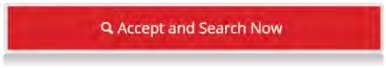
Service pipe size & material where known



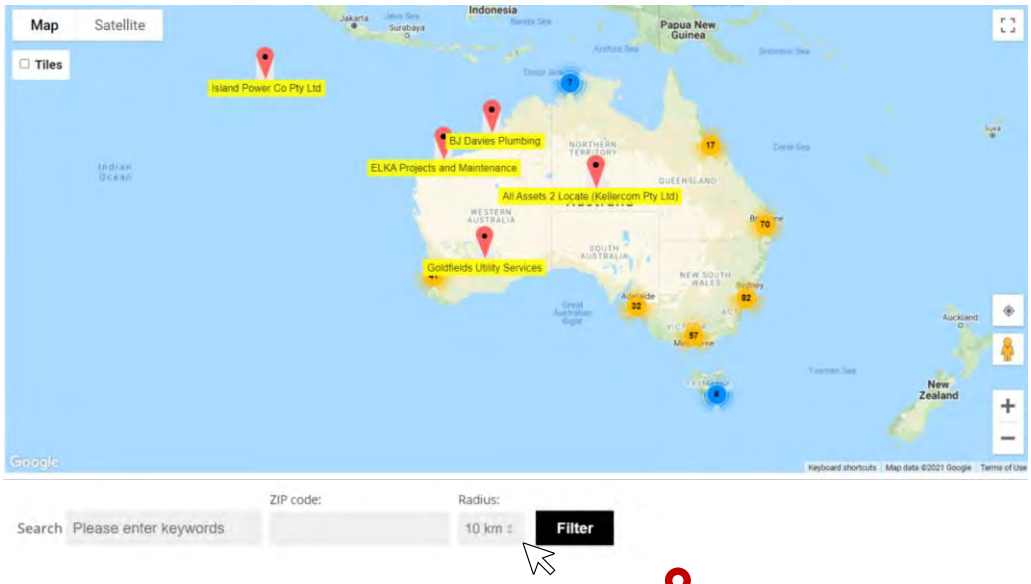
For connected sites with insufficient asset details, service is shown down the centre of the lot with no attributes plotted

Certified Locating Organisations (CLO)

Find the closest CLO to your worksite on: https://dbydlocator.com/certified-locating-organisation/

Read the disclaimer and click: 

A national map and an A-Z list of Certified Locating Organisations is displayed.



Use the map to zoom to your work area and choose the closest Locator indicated.

OR search by entering the **postcode** of your work area.

1. **Enter the post/zip code**
2. **Choose your search radius**
3. **Click filter** (If there is no result, you may have to increase the search radius)
4. **Click on the closest for CLO details or view the results displayed below the map**

Locator skills have been tested, and the Organisation has calibrated location and safety equipment.

Telstra is aware of each Certified Locating Organisation and their employee locators.

Only a DBYD Certified Locator registered with a Certified Locating Organisation is authorised to access Telstra network for locating purposes.

Each Certified Locator working for a CLO is issued with a photo ID Card, authorising them to access Telstra pits and manholes for the purpose of cable and plant locations.

Please ask to see your Locators' CLO ID Card.

Before You Dig Australia

Think before you dig

This document has been sent to you because you requested plans of the Telstra network through Before You Dig Australia (BYDA).

If you are working or excavating near telecommunications cables, or there is a chance that cables are located near your site, you are responsible to avoid causing damage to the Telstra network.

Please read this document carefully. Taking your time now and following the steps below can help you avoid damaging our network, interrupting services, and potentially incurring civil and criminal penalties.

Our network is complex and working near it requires expert knowledge. Do not attempt these activities if you are not qualified to do so.

Your checklist

1. Plan

Plan your work with the latest plans of our network.

Plans provided through the BYDA process are indicative only*.

This means the actual location of our asset may differ substantially from that shown on the plans.

Refer to steps 2 and 3 to determine actual location prior to proceeding with construction.

2. Prepare

Engage a DBYD Certified Locating Organisation (CLO) via dbydlocator.com to identify, validate and protect Telstra assets before you commence work.

3. Pothole

Validate underground assets by potholing by hand or using non-destructive vacuum extraction methods.

Electronic detection alone (step 2) is not deemed to validate underground assets and must not be used for construction purposes.

If you cannot validate the Telstra network, you must not proceed with construction.

4. Protect

Protect our network by maintaining the following distances from our assets:

- 1.0m Mechanical Excavators, Farm Ploughing, Tree Removal
- 500mm Vibrating Plate or Wacker Packer Compactor
- 600mm Heavy Vehicle Traffic (over 3 tonnes) not to be driven across Telstra ducts or plant
- 1.0m Jackhammers/Pneumatic Breakers
- 2.0m Boring Equipment (in-line, horizontal and vertical)

5. Proceed

You can proceed with your work only once you have completed all the appropriate preparation, potholing and protection.

Useful information

Report any damage immediately

https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment

13 22 03

If you receive a message asking for an account or phone number say "I Don't have one" Then say "Report Damage" then press 1 to speak to an operator.

Relocating assets

If your project requires the relocation of a Telstra asset, please contact the Telstra Network Integrity Group:

Request Asset Relocation Or Commercial Works (telstra.com.au)

NetworkIntegrity@team.telstra.com

1800 810 443 (AEST business hours only)

Never try to move or alter our network infrastructure without authorisation. By law, only authorised people can work on our assets or enter a facility owned or operated by us. Any interference, including unauthorised entry or tampering, may result in legal action.

Further information

Plan enquiries

1800 653 935 (AEST business hours only)

Telstra.Plans@team.telstra.com

Information on how to find cables and request asset relocations:

https://www.telstra.com.au/consumer-advice/digging-construction

Asset Plan Readers

PDF Adobe Acrobat Reader DC Install for all versions
DWF Download Design Review | DWF Viewer | Autodesk

Disclaimer and legal details

*Telstra advises that the accuracy of the information provided by Telstra conforms to Quality Level D as defined in AS5488-2013.

It is a criminal offence under the Criminal Code Act 1995 (Cth) to tamper or interfere with telecommunications infrastructure.

Telstra will also take action to recover costs and damages from persons who damage assets or interfere with the operation of Telstra's networks.

By receiving this information including the indicative plans that are provided as part of this information package you confirm that you understand and accept the risks of working near Telstra's network and the importance of taking all of the necessary steps to confirm the presence, alignments and various depths of Telstra's network. This in addition to, and not in replacement of, any duties and obligations you have under applicable law.

When working in the vicinity of a telecommunications plant you have a "Duty of Care" that must be observed. Please read and understand all the information and disclaimers provided below.

The Telstra network is complex and requires expert knowledge to interpret information, to identify and locate components, to pothole underground assets for validation and to safely work around assets without causing damage. If you are not an expert and/or qualified in these areas, then you must not attempt these activities. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers. The 5 P's to prevent damage to Telstra assets are listed above. Construction activities and/or any activities that potentially may impact on Telstra's assets must not commence without first undertaking these steps. Construction activities can include anything that involves breaking ground, potentially affecting Telstra assets.

If you are designing a project, it is recommended that you also undertake these steps to validate underground assets prior to committing to your design.

This Notice has been provided as a guide only and may not provide you with all the information that is required for you to determine what assets are on or near your site of interest. You will also need to collate and understand all of the information received from other Utilities and understand that some Utilities are not a part of the BYDA program and make your own enquiries as appropriate. It is the responsibility of the entities undertaking the works to protect Telstra's network during excavation / construction works.

Telstra owns and retains the copyright in all plans and details provided in conjunction with the applicant's request. The applicant is authorised to use the plans and details only for the purpose indicated in the applicant's request. The applicant must not use the plans or details for any other purpose.

Telstra plans or other details are provided only for the use of the applicant, its servants, agents, or Certified Locating Organisation. The applicant must not give the plans or details to any parties other than these and must not generate profit from commercialising the plans or details.

Telstra, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and or details so supplied to the applicant, its servants and agents, and the applicant agrees to indemnify Telstra against any claim or demand for any such loss or damage.

Please ensure Telstra plans and information provided always remains on-site throughout the inspection, location, and construction phase of any works.

Telstra plans are valid for 60 days after issue and must be replaced if required after the 60 days.

Data Extraction Fees

In some instances, a data extraction fee may be applicable for the supply of Telstra information. Typically, a data extraction fee may apply to large projects, planning and design requests or requests to be supplied in non-standard formats. For further details contact Telstra Planned Services.

Telstra does not accept any liability or responsibility for the performance of or advice given by a Certified Locating Organisation. Certification is an initiative taken by Telstra towards the establishment and maintenance of competency standards. However, performance and the advice given will always depend on the nature of the individual engagement.

Neither the Certified Locating Organisation nor any of its employees are an employee or agent for Telstra. Telstra is not liable for any damage or loss caused by the Certified Locating Organisation or its employees.

Once all work is completed, the excavation should be reinstated with the same type of excavated material unless specified by Telstra

The information contained within this pamphlet must be used in conjunction with other material supplied as part of this request for information to adequately control the risk of potential asset damage.

When using excavators and other machinery, also check the location of overhead power lines.

Workers and equipment must maintain safety exclusion zones around power lines

WARNING: Telstra plans and location information conform to Quality Level 'D' of the Australian Standard AS 5488 - Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans. FURTHER ON SITE INVESTIGATION IS REQUIRED TO VALIDATE THE EXACT LOCATION OF TELSTRA PLANT PRIOR TO COMMENCING CONSTRUCTION WORK. A plant location service is an essential part of the process to validate the exact location of Telstra assets and to ensure the assets are protected during construction works. The exact position of Telstra assets can only be validated by physically exposing them. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

Privacy Note

Your information has been provided to Telstra by BYDA to enable Telstra to respond to your BYDA request. Telstra keeps your information in accordance with its privacy statement. You can obtain a copy at www.telstra.com.au/privacy or by calling us at 1800 039 059 (business hours only).

IT'S HOW WE CONNECT

OPENING ELECTRONIC MAP ATTACHMENTS -

Telstra Cable Plans are generated automatically in either PDF or DWF file types dependant on the site address and the size of area selected. You may need to download and install free viewing software from the internet e.g.

PDF Map Files (max size A3)

Adobe Acrobat Reader (http://get.adobe.com/reader/),

DWF Map Files (all sizes over A3)

Autodesk A360 (https://360.autodesk.com/viewer) or

Autodesk Design Review (http://usa.autodesk.com/design-review/) for DWF files. (Windows)

Telstra DBYD map related enquiries

email - Telstra.Plans@team.telstra.com

1800 653 935 (AEST Business Hours only)

REPORT ANY DAMAGE TO THE TELSTRA NETWORK IMMEDIATELY

Report online - https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment

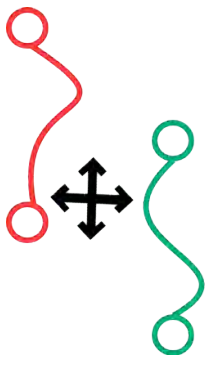
Ph: **13 22 03**

If you receive a message asking for a phone or account number say:

"I don't have one" then say "Report Damage" then press 1 to speak to an operator.

Telstra New Connections / Disconnections

13 22 00



Telstra asset relocation enquiries: 1800 810 443 (AEST business hours only).

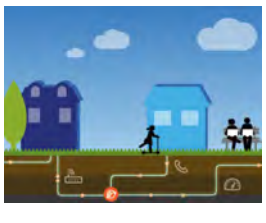
NetworkIntegrity@team.telstra.com

https://www.telstra.com.au/consumer-advice/digging-construction

Certified Locating Organisation (CLO)

https://dbydlocator.com/certified-locating-organisation/

Please refer to attached Accredited Plant Locator.pdf



Telstra Smart Communities
Information for new developments (developers, builders, homeowners)
https://www.telstra.com.au/smart-community

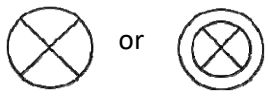
LEGEND

IT'S HOW WE CONNECT

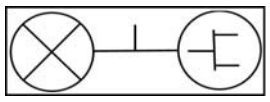
For more info contact a Certified Locating Organisation or Telstra Plan Services 1800 653 935

Exchange
(Major Cable Present)

Footway Access Chamber
(can vary from 1-lid to 12-lid)



Pillar / Cabinet
(above ground / free standing)



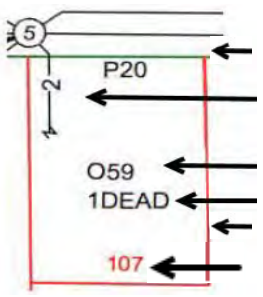
Above ground complex equipment housing (eg RIM)
Please Note: This equipment is powered by 240V Electricity

OC — Other Carrier Telecommunications Cable/Asset

Dist — Distribution cables in Main Cable ducts

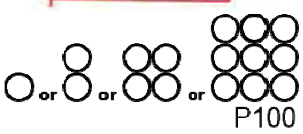
MC — Main Cable ducts on a Distribution plan

▲ — Blocked or damaged duct.

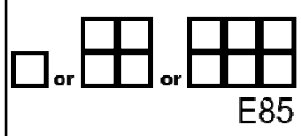


Roadside / Front Boundary
2 pair lead-in to property from pit in street 1

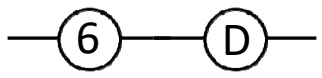
pair working (pair ID 059)
1 pair dead (i.e. spare, not connected)
Side / Rear Property Boundary
Property Number



Single to multiple round conduit
Configurations 1.2.4.9 respectively
(attached text denotes conduit type and size)



Multiple square conduit
Configurations 2, 4, 6 respectively
(attached text denotes conduit type and size)



Cable Jointing Pit
(number / Letter indicating Pit Type)

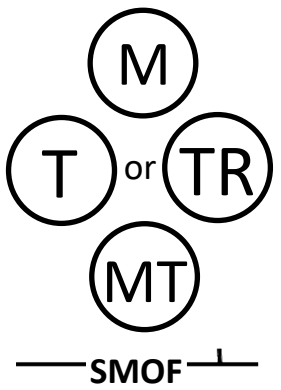
Elevated Joint
(above ground joint on buried cable)

Telstra Plant in shared Utility trench

Aerial Cable

Aerial Cable
(attached to joint Use Pole eg. Power)

Direct Buried Cable



Marker Post Installed

Buried Transponder

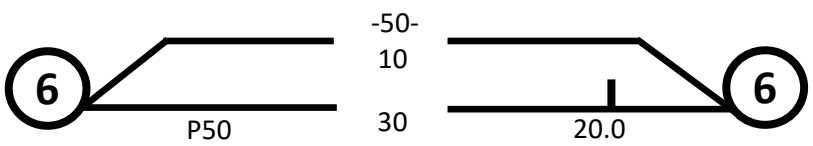
Marker Post, Transponder

Optical Fibre cable direct buried

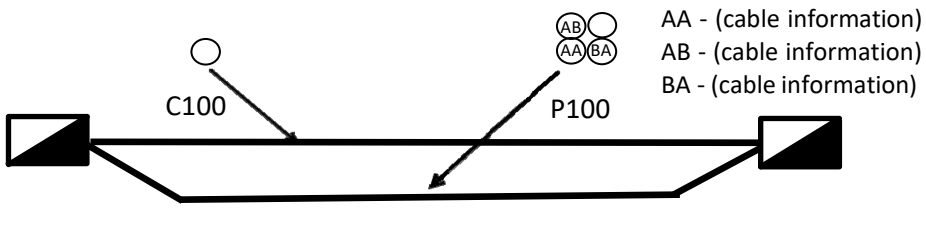
Some examples of conduit type and size:

A - Asbestos cement, P - PVC / Plastic, C - Concrete,
GI - Galanised iron, E - Earthenware
Conduit sizes *nominally* range from 20mm to 100mm
P50 50mm PVC conduit
P100 100mm PVC conduit
A100 100mm asbestos cement conduit

Some Examples of how to read Telstra Plans



One 50mm PVC conduit (P50) containing a 50-pair and a 10-pair cable between two 6-pits. approximately 20.0m apart, with a direct buried 30-pair cable along the same route



Two separate conduit runs between two footway access chambers (manholes) approximately 245m apart A nest of four 100mm PVC conduits (P100) containing assorted cables in three ducts (one being empty) and one empty 100mm concrete duct (C100) along

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MUSIC-*link* Report

Project Details		Company Details	
Project:		**Company:**	
Report Export Date:	10/08/2023	**Contact:**	
Catchment Name:	Receiving Node	**Address:**	
Catchment Area:	2.1203ha	**Phone:**	
Impervious Area*:	75.1473848040372%	**Email:**	
Rainfall Station:			
Modelling Time-step:	Six minutes		
Modelling Period:	01/01/74 - 31/12/1993 11:54:00 PM		
Mean Annual Rainfall:	1296.513mm		
Evapotranspiration:	1261.206mm		
MUSICX Version:	1.1.0.11940 (5.0.3.11940)		
MUSIC-link data Version:	3.8		
Study Area:	Central Coast Council		
Scenario:	Central Coast Development		

* takes into account area from all source nodes that link to the chosen reporting node, excluding Import Data Nodes

Treatment Train Effectiveness		Treatment Nodes		Source Nodes	
Node:	**Reduction**	**Node Type**	**Number**	**Node Type**	**Number**
Flow	-0.002%	Generic Treatment Nodes	4	Urban_Roof Nodes	2
TSS	88.393%	Swale Nodes	4	Urban_SealedRoad Nodes	4
TP	62.167%			Urban_Mixed Nodes	10
TN	45.104%				
GP	94.216%				

Comments

Passing Parameters

Node Type	Node Name	Parameter	Min	Max	Actual
Generic	1-JellyFish JF2250-10-2	High Flow Bypass	None	99	0.055 m³/s
Generic	1-OceanSave OS-0606	High Flow Bypass	None	99	0.028 m³/s
Generic	2-JellyFish JF2250-8-2	High Flow Bypass	None	99	0.045 m³/s
Generic	2-OceanSave OS-0606	High Flow Bypass	None	99	0.028 m³/s
Receiving	Receiving Node	Flow Reduction	None	None	-0.002 %
Receiving	Receiving Node	GP Reduction	90	None	94.216 %
Receiving	Receiving Node	TN Reduction	45	None	45.104 %
Receiving	Receiving Node	TP Reduction	45	None	62.167 %
Receiving	Receiving Node	TSS Reduction	80	None	88.393 %
Swale	Swale 1	Bed Slope	0.02	0.05	0.02
Swale	Swale 2	Bed Slope	0.02	0.05	0.02
Swale	Swale 3	Bed Slope	0.02	0.05	0.02
Swale	Swale 4	Bed Slope	0.02	0.05	0.02
Urban_Mixed	BYPASS 1 - landscape - (mixed) - 0.0545ha - 10% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_Mixed	BYPASS 1 - landscape - (mixed) - 0.0545ha - 10% impervious	Nitrogen Constituents.Storm Flow.Mean	0.3	0.3	0.3
Urban_Mixed	BYPASS 1 - landscape - (mixed) - 0.0545ha - 10% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85
Urban_Mixed	BYPASS 1 - landscape - (mixed) - 0.0545ha - 10% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.6	-0.6	-0.6
Urban_Mixed	BYPASS 1 - landscape - (mixed) - 0.0545ha - 10% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_Mixed	BYPASS 1 - landscape - (mixed) - 0.0545ha - 10% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.15	2.15	2.15
Urban_Mixed	BYPASS 3 - landscape - (mixed) - 0.0147ha - 10% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_Mixed	BYPASS 3 - landscape - (mixed) - 0.0147ha - 10% impervious	Nitrogen Constituents.Storm Flow.Mean	0.3	0.3	0.3
Urban_Mixed	BYPASS 3 - landscape - (mixed) - 0.0147ha - 10% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85
Urban_Mixed	BYPASS 3 - landscape - (mixed) - 0.0147ha - 10% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.6	-0.6	-0.6
Urban_Mixed	BYPASS 3 - landscape - (mixed) - 0.0147ha - 10% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_Mixed	BYPASS 3 - landscape - (mixed) - 0.0147ha - 10% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.15	2.15	2.15
Urban_Mixed	BYPASS 5 - landscape - (mixed) - 0.0207ha - 10% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11

Node Type	Node Name	Parameter	Min	Max	Actual
Urban_Mixed	BYPASS 5 - landscape - (mixed) - 0.0207ha - 10% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85
Urban_Mixed	BYPASS 5 - landscape - (mixed) - 0.0207ha - 10% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.6	-0.6	-0.6
Urban_Mixed	BYPASS 5 - landscape - (mixed) - 0.0207ha - 10% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_Mixed	BYPASS 5 - landscape - (mixed) - 0.0207ha - 10% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.15	2.15	2.15
Urban_Mixed	WQ1b - landscape - (mixed) - 0.0101ha - 10% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_Mixed	WQ1b - landscape - (mixed) - 0.0101ha - 10% impervious	Nitrogen Constituents.Storm Flow.Mean	0.3	0.3	0.3
Urban_Mixed	WQ1b - landscape - (mixed) - 0.0101ha - 10% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85
Urban_Mixed	WQ1b - landscape - (mixed) - 0.0101ha - 10% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.6	-0.6	-0.6
Urban_Mixed	WQ1b - landscape - (mixed) - 0.0101ha - 10% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_Mixed	WQ1b - landscape - (mixed) - 0.0101ha - 10% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.15	2.15	2.15
Urban_Mixed	WQ1c - landscape - (mixed) - 0.2171ha - 10% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_Mixed	WQ1c - landscape - (mixed) - 0.2171ha - 10% impervious	Nitrogen Constituents.Storm Flow.Mean	0.3	0.3	0.3
Urban_Mixed	WQ1c - landscape - (mixed) - 0.2171ha - 10% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85

Only certain parameters are reported when they pass validation

Node Type	Node Name	Parameter	Min	Max	Actual
Urban_Mixed	WQ1c - landscape - (mixed) - 0.2171ha - 10% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.6	-0.6	-0.6
Urban_Mixed	WQ1c - landscape - (mixed) - 0.2171ha - 10% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_Mixed	WQ1c - landscape - (mixed) - 0.2171ha - 10% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.15	2.15	2.15
Urban_Mixed	WQ1d - landscape - (mixed) - 0.0249ha - 10% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_Mixed	WQ1d - landscape - (mixed) - 0.0249ha - 10% impervious	Nitrogen Constituents.Storm Flow.Mean	0.3	0.3	0.3
Urban_Mixed	WQ1d - landscape - (mixed) - 0.0249ha - 10% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85
Urban_Mixed	WQ1d - landscape - (mixed) - 0.0249ha - 10% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.6	-0.6	-0.6
Urban_Mixed	WQ1d - landscape - (mixed) - 0.0249ha - 10% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_Mixed	WQ1d - landscape - (mixed) - 0.0249ha - 10% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.15	2.15	2.15
Urban_Mixed	WQ1e - landscape - (mixed) - 0.1227ha - 10% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_Mixed	WQ1e - landscape - (mixed) - 0.1227ha - 10% impervious	Nitrogen Constituents.Storm Flow.Mean	0.3	0.3	0.3
Urban_Mixed	WQ1e - landscape - (mixed) - 0.1227ha - 10% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85
Urban_Mixed	WQ1e - landscape - (mixed) - 0.1227ha - 10% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.6	-0.6	-0.6
Urban_Mixed	WQ1e - landscape - (mixed) - 0.1227ha - 10% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_Mixed	WQ1e - landscape - (mixed) - 0.1227ha - 10% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.15	2.15	2.15
Urban_Mixed	WQ2d - landscape - (mixed) - 0.0599ha - 10% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_Mixed	WQ2d - landscape - (mixed) - 0.0599ha - 10% impervious	Nitrogen Constituents.Storm Flow.Mean	0.3	0.3	0.3
Urban_Mixed	WQ2d - landscape - (mixed) - 0.0599ha - 10% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85
Urban_Mixed	WQ2d - landscape - (mixed) - 0.0599ha - 10% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.6	-0.6	-0.6
Urban_Mixed	WQ2d - landscape - (mixed) - 0.0599ha - 10% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_Mixed	WQ2d - landscape - (mixed) - 0.0599ha - 10% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.15	2.15	2.15
Urban_Mixed	WQ2e - landscape - (mixed) - 0.0386ha - 10% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_Mixed	WQ2e - landscape - (mixed) - 0.0386ha - 10% impervious	Nitrogen Constituents.Storm Flow.Mean	0.3	0.3	0.3
Urban_Mixed	WQ2e - landscape - (mixed) - 0.0386ha - 10% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85
Urban_Mixed	WQ2e - landscape - (mixed) - 0.0386ha - 10% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.6	-0.6	-0.6
Urban_Mixed	WQ2e - landscape - (mixed) - 0.0386ha - 10%	Total Suspended Solids Constituents.Base	1.2	1.2	1.2

Node Type	Node Name	Parameter	Min	Max	Actual
Urban_Mixed	WQ2e - landscape - (mixed) - 0.0386ha - 10% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.15	2.15	2.15
Urban_Mixed	WQ2f - landscape - (mixed) - 0.0223ha - 10% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_Mixed	WQ2f - landscape - (mixed) - 0.0223ha - 10% impervious	Nitrogen Constituents.Storm Flow.Mean	0.3	0.3	0.3
Urban_Mixed	WQ2f - landscape - (mixed) - 0.0223ha - 10% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85
Urban_Mixed	WQ2f - landscape - (mixed) - 0.0223ha - 10% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.6	-0.6	-0.6
Urban_Mixed	WQ2f - landscape - (mixed) - 0.0223ha - 10% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_Mixed	WQ2f - landscape - (mixed) - 0.0223ha - 10% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.15	2.15	2.15
Urban_Roof	WQ2a - building 1 - (roof) - 0.2349ha - 100% impervious	Nitrogen Constituents.Base Flow.Mean	0.32	0.32	0.32
Urban_Roof	WQ2a - building 1 - (roof) - 0.2349ha - 100% impervious	Nitrogen Constituents.Storm Flow.Mean	0.3	0.3	0.3
Urban_Roof	WQ2a - building 1 - (roof) - 0.2349ha - 100% impervious	Phosphorus Constituents.Base Flow.Mean	-0.82	-0.82	-0.82
Urban_Roof	WQ2a - building 1 - (roof) - 0.2349ha - 100% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.89	-0.89	-0.89
Urban_Roof	WQ2a - building 1 - (roof) - 0.2349ha - 100% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.1	1.1	1.1
Urban_Roof	WQ2a - building 1 - (roof) - 0.2349ha - 100% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	1.3	1.3	1.3
Urban_Roof	WQ2b - building 2 - (roof) - 0.0377ha - 100% impervious	Nitrogen Constituents.Base Flow.Mean	0.32	0.32	0.32

Only certain parameters are reported when they pass validation

Node Type	Node Name	Parameter	Min	Max	Actual
Urban_Roof	WQ2b - building 2 - (roof) - 0.0377ha - 100% impervious	Nitrogen Constituents.Storm Flow.Mean	0.3	0.3	0.3
Urban_Roof	WQ2b - building 2 - (roof) - 0.0377ha - 100% impervious	Phosphorus Constituents.Base Flow.Mean	-0.82	-0.82	-0.82
Urban_Roof	WQ2b - building 2 - (roof) - 0.0377ha - 100% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.89	-0.89	-0.89
Urban_Roof	WQ2b - building 2 - (roof) - 0.0377ha - 100% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.1	1.1	1.1
Urban_Roof	WQ2b - building 2 - (roof) - 0.0377ha - 100% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	1.3	1.3	1.3
Urban_SealedRoad	BYPASS 2 - driveway- (sealed road) - 0.0212ha - 100% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_SealedRoad	BYPASS 2 - driveway- (sealed road) - 0.0212ha - 100% impervious	Nitrogen Constituents.Storm Flow.Mean	0.34	0.34	0.34
Urban_SealedRoad	BYPASS 2 - driveway- (sealed road) - 0.0212ha - 100% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85
Urban_SealedRoad	BYPASS 2 - driveway- (sealed road) - 0.0212ha - 100% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.3	-0.3	-0.3
Urban_SealedRoad	BYPASS 2 - driveway- (sealed road) - 0.0212ha - 100% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_SealedRoad	BYPASS 2 - driveway- (sealed road) - 0.0212ha - 100% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.43	2.43	2.43
Urban_SealedRoad	BYPASS 4 - driveway- (sealed road) - 0.0079ha - 100% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_SealedRoad	BYPASS 4 - driveway- (sealed road) - 0.0079ha - 100% impervious	Nitrogen Constituents.Storm Flow.Mean	0.34	0.34	0.34
Urban_SealedRoad	BYPASS 4 - driveway- (sealed road) - 0.0079ha - 100% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85
Urban_SealedRoad	BYPASS 4 - driveway- (sealed road) - 0.0079ha - 100% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.3	-0.3	-0.3
Urban_SealedRoad	BYPASS 4 - driveway- (sealed road) - 0.0079ha - 100% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_SealedRoad	BYPASS 4 - driveway- (sealed road) - 0.0079ha - 100% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.43	2.43	2.43
Urban_SealedRoad	WQ1a - hard stand - (sealed road) - 0.7816ha - 100% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_SealedRoad	WQ1a - hard stand - (sealed road) - 0.7816ha - 100% impervious	Nitrogen Constituents.Storm Flow.Mean	0.34	0.34	0.34
Urban_SealedRoad	WQ1a - hard stand - (sealed road) - 0.7816ha - 100% impervious	Phosphorus Constituents.Base Flow.Mean	-0.85	-0.85	-0.85
Urban_SealedRoad	WQ1a - hard stand - (sealed road) - 0.7816ha - 100% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.3	-0.3	-0.3
Urban_SealedRoad	WQ1a - hard stand - (sealed road) - 0.7816ha - 100% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_SealedRoad	WQ1a - hard stand - (sealed road) - 0.7816ha - 100% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.43	2.43	2.43
Urban_SealedRoad	WQ2c - hard stand - (sealed road) - 0.4515ha - 100% impervious	Nitrogen Constituents.Base Flow.Mean	0.11	0.11	0.11
Urban_SealedRoad	WQ2c - hard stand - (sealed road) - 0.4515ha - 100% impervious	Nitrogen Constituents.Storm Flow.Mean	0.34	0.34	0.34
Urban_SealedRoad	WQ2c - hard stand - (sealed road) - 0.4515ha -	Phosphorus Constituents.Base	-0.85	-0.85	-0.85

Node Type	Node Name	Parameter	Min	Max	Actual
Urban_SealedRoad	WQ2c - hard stand - (sealed road) - 0.4515ha - 100% impervious	Phosphorus Constituents.Storm Flow.Mean	-0.3	-0.3	-0.3
Urban_SealedRoad	WQ2c - hard stand - (sealed road) - 0.4515ha - 100% impervious	Total Suspended Solids Constituents.Base Flow.Mean	1.2	1.2	1.2
Urban_SealedRoad	WQ2c - hard stand - (sealed road) - 0.4515ha - 100% impervious	Total Suspended Solids Constituents.Storm Flow.Mean	2.43	2.43	2.43

Only certain parameters are reported when they pass validation

TRANSPORT DEPOT

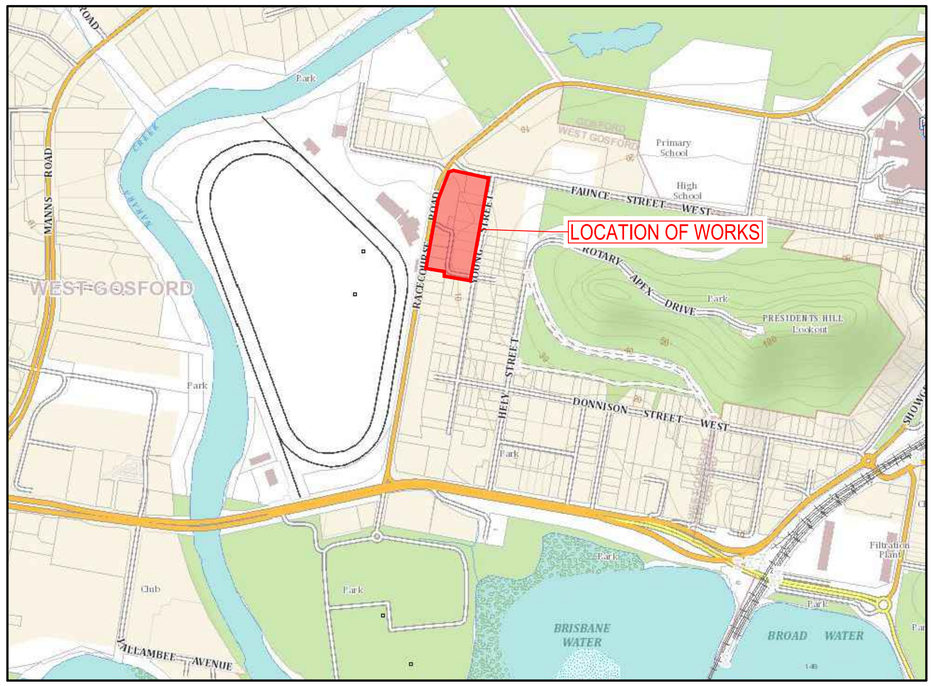
7A-11 RACECOURSE RD,

5-9 FAUNCE ST & YOUNG ST, WEST GOSFORD

CIVIL PACKAGE

STATE SIGNIFICANT DEVELOPMENT

DRAWING NO.	DRAWING TITLE
GENERAL	
22-1063-DAC000	COVER SHEET AND LOCALITY PLAN
22-1063-DAC001	GENERAL NOTES AND LEGENDS
22-1063-DAC003	GENERAL ARRANGEMENT PLAN
SITEWORKS	
22-1063-DAC011	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 1
22-1063-DAC012	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 2
22-1063-DAC013	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 3
22-1063-DAC014	SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 4
DETAILS	
22-1063-DAC021	SITEWORKS DETAILS SHEET 1
22-1063-DAC022	SITEWORKS DETAILS SHEET 2
22-1063-DAC023	SITEWORKS DETAILS SHEET 3
22-1063-DAC025	STORMWATER DRAINAGE DETAILS SHEET 1
22-1063-DAC026	STORMWATER DRAINAGE DETAILS SHEET 2
22-1063-DAC027	STORMWATER DRAINAGE DETAILS SHEET 3
22-1063-DAC028	STORMWATER DRAINAGE DETAILS SHEET 4
PAVEMENT	
22-1063-DAC031	PAVEMENT PLAN
STORMWATER DRAINAGE	
22-1063-DAC051	STORMWATER DRAINAGE OSD CATCHMENT PLAN
22-1063-DAC052	STORMWATER DRAINAGE MUSIC CATCHMENT PLAN
22-1063-DAC053	STORMWATER DRAINAGE OSD 1 ROOF PLAN
22-1063-DAC054	STORMWATER DRAINAGE OSD 1 BASE PLAN
22-1063-DAC055	STORMWATER DRAINAGE OSD 1 SECTIONS AND DETAILS
22-1063-DAC056	STORMWATER DRAINAGE OSD 2 ROOF PLAN
22-1063-DAC057	STORMWATER DRAINAGE OSD 2 BASE PLAN
22-1063-DAC058	STORMWATER DRAINAGE OSD 2 SECTIONS AND DETAILS
EROSION AND SEDIMENT CONTROL	
22-1063-DAC071	EROSION AND SEDIMENT CONTROL PLAN
22-1063-DAC075	EROSION AND SEDIMENT CONTROL DETAILS



LOCALITY PLAN

NOT TO SCALE

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

100mm on Original

Client: WALUYA PTY LTD

Scales	NTS	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: COVER SHEET AND LOCALITY PLAN

Civil Engineers and Project Managers
at&l
Level 7, 153 Walker Street
North Sydney
NSW 2060
P 02 9439 1777
E info@atl.net.au
www.atl.net.au
ABN 96 130 882 405

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC000

Issue: A

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC000.dwg

SITEWORKS NOTES

1. ORIGIN OF LEVELS:- REFER SURVEY NOTES.
2. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO AT & L.
3. MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
4. ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
5. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
6. PROVIDE 10mm WIDE EXPANSION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
7. ASPHALTIC CONCRETE SHALL CONFORM TO R.M.S. SPECIFICATION R116.
8. ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.T.A. FORM 3051 (UNBOUND), R.M.S. FORM 3052 (BOUND) COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH AS 1289 5.2.1
   FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER $50m^3$ OF BASECOURSE MATERIAL PLACED.
9. ALL SUB-BASE COURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.T.A. FORM 3051, 3051.1 AND COMPACTED TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH A.S 1289 5.2.1
   FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER $50m^3$ OF SUB-BASE COURSE MATERIAL PLACED.
10. AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL IN (9) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH R.M.S. FORM 3051 AND 3051.1 WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF AT & L.
11. SHOULD THE CONTRACTOR WISH TO USE A RECYCLED PRODUCT THIS SHALL BE CLEARLY INDICATED IN THEIR TENDER AND THE PRICE DIFFERENCE BETWEEN AN IGNEOUS PRODUCT AND A RECYCLED PRODUCT SHALL BE CLEARLY INDICATED.
12. WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (eg. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS.

STORMWATER DRAINAGE NOTES

1. STORMWATER DESIGN CRITERIA:
   (A) AVERAGE RECURRENCE INTERVAL:
   1:100 YEARS ROOFED AREAS TO SURCHARGE PIT
   1:20 YEARS EXTERNAL PAVEMENTS
   (B) RAINFALL INTENSITIES:
   TIME OF CONCENTRATION:5 MINUTES
   1:100 YEARS= 312 mm/hr
   1:20 YEARS= 218 mm/hr
   (C) RUNOFF COEFFICIENTS:
   ROOF AREAS: C_{100} =1.0
   EXTERNAL PAVEMENTS: C_{20} =1.0
2. PIPES 300 DIA. AND LARGER TO BE REINFORCED CONCRETE CLASS '4' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O.
3. PIPES UP TO 300 DIA SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS.
4. EQUIVALENT STRENGTH VCP OR FRC PIPES MAY BE USED.
5. ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE uPVC PRESSURE PIPE GRADE 6. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN HEIGHT.
6. PIPES TO BE INSTALLED TO TYPE HS3 (ROAD) HS2 (LOTS) SUPPORT IN ACCORDANCE WITH AS 3725 (1989) IN ALL CASES BACKFILL TRENCH WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
7. ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS 3500 3.1 (1998) AND AS/NZS 3500 3.2 (1998).
8. PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY AT & L.
9. ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.
10. WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.
11. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.
12. GRATES AND COVERS SHALL CONFORM TO AS 3996.
13. ALL INTERNAL PIT DIMENSIONS TO CONFORM TO AS3500.3 TABLE 8.2.
14. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
15. ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.

KERBING NOTES

1. ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25MPa U.N.O IN REINFORCED CONCRETE NOTES.
2. ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON 100mm GRANULAR BASECOURSE COMPACTED TO MINIMUM 95% MODIFIED DRY DENSITY (AS 1289 5.2.1).
3. EXPANSION JOINTS (E.J) TO BE FORMED FROM 10mm COMPRESSIBLE CORK FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE. EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, ON TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 12m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
4. WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
5. BROOMED FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS. ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED.
6. IN THE REPLACEMENT OF KERB AND GUTTER :-
   EXISTING ROAD PAVEMENT IS TO BE SAWCUT 900mm U.N.O FROM THE LIP OF GUTTER. UPON COMPLETION OF THE NEW KERB AND GUTTER NEW BASECOURSE AND SURFACE TO BE LAID 600mm WIDE U.N.O.

   EXISTING ALLOTMENT DRAINAGE PIPES ARE TO BE BUILT INTO THE NEW KERB AND GUTTER WITH 100mm DIA HOLE.

   EXISTING KERB AND GUTTER IS TO BE COMPLETELY REMOVED WHERE NEW KERB AND GUTTER IS SHOWN.

CONCRETE NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. CONCRETE QUALITY
   ALL REQUIREMENTS OF THE CURRENT ACSE CONCRETE SPECIFICATION DOCUMENT 1 SHALL APPLY TO THE FORMWORK, REINFORCEMENT AND CONCRETE UNLESS NOTED OTHERWISE.

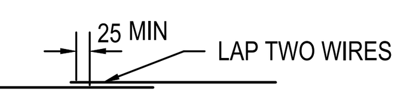
ELEMENT	AS 3600 F'c MPa AT 28 DAYS	SPECIFIED SLUMP	NOMINAL AGG. SIZE
VEHICULAR BASE	32	60	20
KERBS, PATHS, AND PITS	25	80	20

- CEMENT TYPE SHALL BE (ACSE SPECIFICATION) TYPE SL
- PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379.

3. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING BY AT & L.
4. CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE 40mm TOP AND 70mm FOR EXTERNAL EDGES UNLESS NOTED OTHERWISE.
5. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1m CENTRES BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
6. THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK, THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED AND CURED IN ACCORDANCE WITH R.T.A. SPECIFICATION R83.
7. REINFORCEMENT SYMBOLS:
   N DENOTES GRADE 450 N BARS TO AS 1302 GRADE N
   R DENOTES 230 R HOT ROLLED PLAIN BARS TO AS 1302
   SL DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS 1304

   NUMBER OF BARS IN GROUP — BAR GRADE AND TYPE
   17 N 20 250
   NOMINAL BAR SIZE IN mm — SPACING IN mm

   THE FIGURE FOLLOWING THE FABRIC SYMBOL SL IS THE REFERANCE NUMBER FOR FABRIC TO AS 1304.
8. FABRIC SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING DETAIL:



CONSTRUCTION SPECIFICATION

1. THESE DRAWINGS SHOULD BE READ IN CONJUNCTION WITH CENTRAL COAST COUNCIL'S LATEST REVISION OF THE 'ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS'

2. WHERE THERE IS A CONFLICT THE FOLLOWING IS TO OCCUR
2.1. NOTIFY THE DESIGN ENGINEER AND/OR SUPERINTENDENT
2.2. CENTRAL COAST COUNCIL'S SPECIFICATION TAKES PRECEDENT

BULK EARTHWORKS NOTES

1. ORIGIN OF LEVELS: REFER SURVEY NOTES
2. STRIP ALL TOPSOIL/ORGANIC MATERIAL FROM CONSTRUCTION AREA AND REMOVE FROM SITE OR STOCK PILE AS DIRECTED BY SUPERINTENDENT.
3. EXCAVATED MATERIAL TO BE USED AS STRUCTURAL FILL PROVIDED THE PLACEMENT MOISTURE CONTENT OF THE MATERIAL IS +/- 2% OF THE OPTIMUM MOISTURE CONTENT.
4. COMPACT FILL AREAS AND SUBGRADE TO NOT LESS THAN:

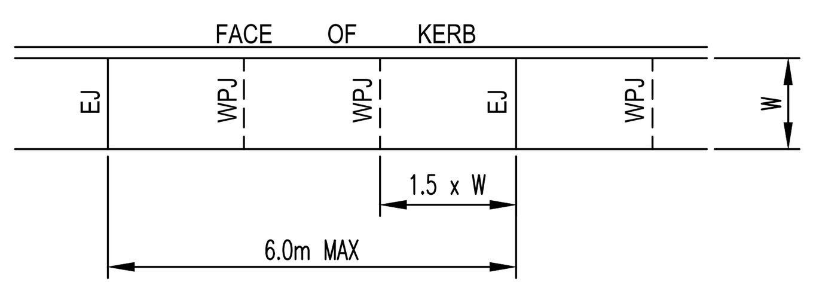
LOCATION	STANDARD DRY DENSITY (AS 1289 E 5.1.1.)
UNDER BUILDING SLABS ON GROUND	98%
UNDER ROADS AND CARPARKS	98%
LANDSCAPED AREAS UNLESS NOTED OTHERWISE	98%

5. FOR NON COHESIVE MATERIAL, COMPACT TO 75% DENSITY INDEX.
6. BEFORE PLACING FILL, PROOF ROLL EXPOSED SUBGRADE WITH AN 8 TONNE (MIN) DEADWEIGHT SMOOTH DRUM VIBRATORY ROLLER TO DETECT THEN REMOVE SOFT SPOTS (AREAS WITH MORE THAN 2mm MOVEMENT UNDER ROLLER).
7. FREQUENCY OF COMPACTION TESTING SHALL BE NOT LESS THAN :-
   (A) 1 TEST PER $200m^3$ OF FILL PLACED PER 300 LAYER OF FILL.
   (B) 3 TESTS PER VISIT
   (C) 1 TEST PER $1000m^2$ OF EXPOSED SUBGRADE
   TESTING SHALL BE "LEVEL 1" TESTING IN ACCORDANCE WITH AS 3798 (1996).
8. FILLING TO BE PLACED AND COMPACTED IN MAXIMUM 150mm LAYERS
9. NO FILLING SHALL TAKE PLACE TO EXPOSE SUBGRADE UNTIL THE AREA HAS BEEN PROOF ROLLED IN THE PRESENCE OF AT & L AND APPROVAL GIVEN IN WRITING THAT FILLING CAN PROCEED.

JOINTING NOTES

PEDESTRIAN PAVEMENT JOINTS

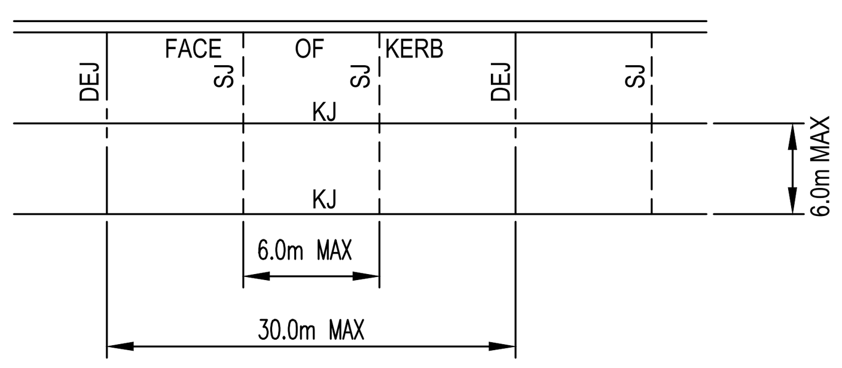
1. ALL PEDESTRIAN PAVEMENTS ARE TO BE JOINTED AS FOLLOWS. (U.N.O)
2. EXPANSION JOINTS ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX. 6.0m CENTRES.
3. WEAKENED PLANE JOINTS ARE TO BE LOCATED AT A MAX. SPACING OF 1.5 x WIDTH OF THE PAVEMENT.
4. WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND OR ADJACENT PAVEMENT JOINTS.
5. PEDESTRIAN PAVEMENT JOINT DETAIL.



NB: CHECK RELEVANT COUNCIL REQUIREMENTS IF IN PUBLIC ROAD.

VEHICULAR PAVEMENT JOINTS

6. ALL VEHICULAR PAVEMENTS TO BE JOINTED AS FOLLOWS. (U.N.O)
7. KEYED CONSTRUCTION JOINTS SHOULD GENERALLY BE LOCATED AT A MAX OF 6.0m CENTRES
8. SAWN JOINTS SHOULD GENERALLY BE LOCATED AT A MAX OF 6.0m CENTRES WITH DOWELED EXPANSION JOINTS AT MAX 30.0m CENTRES
9. VEHICULAR PAVEMENT JOINT DETAIL.



EXISTING UNDERGROUND SERVICES NOTES

THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION AND SERVICE AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE.

AT & L CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.

CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY.

CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS.

CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH, PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.

SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY TREHY INGOLD NEATE, BEING REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. AT & L DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.

SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT AT & L.

THE FOLLOWING NOTES HAVE BEEN TAKEN DIRECTLY FROM THE ORIGINAL SURVEY DOCUMENTS.

NOTES:
1. HISTORICAL SURVEY DATA USED FROM SURVEY "19881A01L" DATED "23.05.2005".
2. BOUNDARIES ARE NOT FINAL AND FURTHER INVESTIGATION REQUIRED FOR BOUNDARIES IF THEY ARE REQUIRED FOR ANY DESIGN PURPOSES.
3. THESE NOTES AND LEGEND (IF SHOWN) FORM PART OF THE PLAN AND SURVEY AND MUST REMAIN WITH THE PLAN IN ANY REPRODUCTION IN WHOLE OR PART.
4. THE CAD FILE USES METRES AS ITS BASE UNIT AND IS IN A "GROUND" COORDINATE SYSTEM. IF THE SURVEY IS STATED AS MGA, ANY POINT IN THE FILE WILL BE AN APPROXIMATE MGA COORDINATE.
5. SOME SYMBOLS REPRESENTING PHYSICAL STRUCTURES SUCH AS POWER POLES AND PITS ARE DIAGRAMMATIC ONLY AND DO NOT NECESSARILY REPRESENT THE ACTUAL SIZE AND EXTENT OF THESE FEATURES.
6. THE SURVEY INFORMATION SHOWN HERE WAS PREPARED FOR A SPECIFIC PURPOSE FOR THE CLIENT SHOWN. THIS INFORMATION IS NOT INTENDED TO BE USED FOR ANY OTHER PURPOSE OR BY ANYONE NOT AUTHORISED BY THIS CLIENT.
7. BOUNDARY DIMENSIONS AND AREAS HAVE BEEN DETERMINED BY CURRENT CADASTRAL SURVEY AND THE BOUNDARY AND EASEMENT LINES IN THE ELECTRONIC FILE HAVE BEEN INCLUDED USING THOSE SURVEYED DIMENSIONS. THE TITLE DIMENSIONS SHOWN ON THE HARD COPY PLAN TAKE PRECEDENCE OVER THE LINES IN THE ELECTRONIC FILE.
8. THE TITLE/S TO THE SUBJECT LAND HAS BEEN REVIEWED AND THE POSITION OF ALL EASEMENTS AFFECTING THE LAND ARE SHOWN. THE TERMS OF ANY EASEMENT, RESTRICTION ON THE USE OF LAND OR COVENANT AFFECTING THE LAND HAVE NOT BEEN INVESTIGATED. LEASES AND OTHER NOTATIONS MAY ALSO EXIST WHICH AFFECT THE LAND.
9. UNDERGROUND SERVICES OTHER THAN THOSE SHOWN HAVE NOT BEEN INVESTIGATED. PRIOR TO DEMOLITION, EXCAVATION OR CONSTRUCTION WORK ON THE SITE, THE RELEVANT SERVICE AUTHORITY SHOULD BE CONTACTED TO ESTABLISH DETAILED LOCATION AND DEPTH.
10. THIS SURVEY IS LIMITED TO IMPROVEMENTS AND OTHER DETAIL WHICH WERE VISIBLE AND ACCESSIBLE AT THE TIME OF SURVEY. THE LOCATION OF DETAIL SUCH AS PRIVATE UNDERGROUND SERVICE LINES AND BUILDING FOUNDATIONS WITHIN THE SITE IS UNKNOWN.
11. THE COORDINATES WITHIN THIS DRAWING RELATE TO THE DATUM SHOWN IN THE TITLE BLOCK. REFER TO A REGISTERED LAND SURVEYOR FOR FURTHER CLARIFICATION. CAUTION SHOULD BE TAKEN WHEN IMPORTING INFORMATION OBTAINED FROM OTHER SUB-CONSULTANTS OR SOURCES TO ENSURE THAT THE DATA IS ON A MATCHING COORDINATE SYSTEM.
12. CONTOURS SHOWN HEREON DEPICT THE GENERAL TOPOGRAPHY ONLY. EXCEPT AT SPOT LEVELS SHOWN, THEY DO NOT NECESSARILY REPRESENT THE EXACT LEVEL AT ANY PARTICULAR POINT.
13. ANY GUTTER, RIDGE, ROOF AND WINDOW DETAILS AND LEVELS SHOWN HAVE BEEN OBTAINED VIA INDIRECT SURVEY METHODS WHERE VISIBLE FROM GROUND LEVEL AND ARE SHOWN ON THIS PLAN IN THEIR APPROXIMATE LOCATION FOR THE PURPOSE OF GENERAL SITE ANALYSIS ONLY.
14. ANY TREE CANOPIES, TRUNK DIAMETERS AND HEIGHTS SHOWN ARE APPROXIMATE ONLY AND SHOULD BE VERIFIED BY FURTHER SURVEY WORKS IF CRITICAL TO DESIGN OR SITE ANALYSIS.
15. SMALL TREES, SHRUBS, GARDEN FEATURES, PATHWAYS AND OTHER MINOR DETAIL MAY NOT BE SHOWN ON THIS PLAN, FOR THE PURPOSES OF THIS SURVEY.

ORIGIN OF LEVELS: PM 19232
R.L. 14.428 (AHD)

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

1. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONTROL EROSION AND DOWNSTREAM SEDIMENTATION DURING ALL STAGES OF CONSTRUCTION INCLUDING THE MAINTENANCE PERIOD.
2. THE EXTENT AND POSITION OF THE EROSION AND SEDIMENT CONTROL MEASURES TO BE DETERMINED ON SITE BY THE CONTRACTOR TO SUIT THE CONSTRUCTION PROGRAM.
3. THESE PLANS PRESENT CONCEPTS ONLY AND THE MEASURES SHOWN ON THIS DRAWING(S) ARE MINIMUM REQUIREMENTS ONLY.
4. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE ESTABLISHMENT, MANAGEMENT AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL MEASURES TO MEET COUNCIL STANDARDS.
5. LARGE OPEN AREAS OR STEEP BATTERS SHOULD NOT BE LEFT EXPOSED/UNSTABILISED FOR MORE THAN 10 DAYS OR IF WET WEATHER IS FORECAST.
6. EXPOSED AREAS INCLUDING BATTERS WHICH REMAIN UN-WORKED FOR MORE THEN 10 DAYS SHOULD BE STABILISED USING TEMPORARY HYDROMULCHING, HYDROSEEDING OR MULCHING, EVEN IF AREAS WILL BE WORKED AT A LATER TIME.
7. ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH :-
   a) LOCAL AUTHORITY REQUIREMENTS
   b) EPA REQUIREMENTS
   c) NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION" 4TH EDITION MARCH 2004
8. THE CONTRACTOR SHALL BE AWARE OF ITS RESPONSIBILITIES FOR PROTECTING THE DOWNSTREAM ENVIRONMENT AND RECEIVING WATER FROM POLLUTION AND ENVIRONMENTAL HARM, UNDER THE ENVIRONMENTAL PROTECTION ACT 1994.
9. ADDITIONALLY THE CONTRACTOR SHALL BE AWARE OF ITS DUTY TO NOTIFY THE LOCAL AUTHORITY AND THE ENVIRONMENTAL PROTECTION AGENCY (NSW) OF A POTENTIAL OR ACTUAL INCIDENT OF ENVIRONMENTAL HARM, UNDER THE ENVIRONMENTAL PROTECTION ACT 1994.

RECOMMENDED IMPLEMENTATION SEQUENCE:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO WORKS COMMENCING AND IN THE FOLLOWING SEQUENCE.
   a. CONSTRUCT TEMPORARY STABILISED SITE ACCESS, ENSURING ADJACENT STORMWATER RUN OFF IS DIVERTED AWAY FROM ACCESS
   b. INSTALL SEDIMENT FENCING AND/OR BARRIER FENCING TO CONFINE INGRESS TO AND EGRESS FROM THE SITE TO STABILISED ACCESS POINT(S) ONLY.
   c. PROVIDE INLET PROTECTION TO STORMWATER INLETS AND GULLIES ON ALL ROADS ADJOINING THE SITE.
   d. CONSTRUCT BARRIER FENCING AROUND RESTRICTED 'NO-GO' ZONES OF RETAINED VEGETATION, AREAS NOT TO BE DISTURBED AND AREAS WHICH WILL REMAIN UN-WORKED.
   e. CONSTRUCT UPSTREAM DIVERSION CHANNELS TO DIVERT CLEAN WATER AROUND WORKSITE, AND INSTALL APPROPRIATE CHANNEL STABILISATION.
   f. CONSTRUCT LOW FLOW EARTH BANKS AS CATCH DRAINS PARALLEL TO CONTOURS TO LIMIT LARGE SLOPE LENGTHS (SLOPES SHOULD BE LESS THEN 80M IN LENGTH).
   g. INSTALL ALL TEMPORARY SEDIMENT FENCES.
   h. CONSTRUCT ANY NOMINATED SEDIMENT BASINS AND SEDIMENT TRAPS.
   i. STABILISE ALL DISTURBED AREAS ASAP AND PROGRESSIVELY AS WORKS ARE COMPLETED. TEMPORARY STABILISATION TO BE DONE USING MULCHING, HYDROMULCHING, HYDROSEEDEDING OR DIRECT SEEDING TO GIVE A 70% COVERAGE OF GROUND SURFACE WITHIN 14 DAYS OF WORKS COMPLETING (EVEN IF WORKS MAY CONTINUE LATER).
2. UNDERTAKE SITE DEVELOPMENT WORKS SO THAT LAND DISTURBANCE IS CONFINED TO MINIMUM WORKABLE AREAS.
3. DISTURBED AREAS TO EXTEND NO MORE THAN 5 METRES (PREFERABLY 2 METRES) FROM ESSENTIAL WORKS AREAS.
4. WORK AREAS TO BE DELINEATED BY BARRIER FENCING AND DIVERSION CHANNEL UPSLOPE AND SEDIMENT FENCING DOWNSLOPE.
5. THE CONTRACTOR SHALL ENSURE THAT THE EXISTING VEGETATION AND GROUNDCOVER IS RETAINED AS MUCH AS POSSIBLE.
6. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER USE ONSITE.
7. SITE VEGETATION APPROVED FOR CLEARING SHOULD BE MULCHED AND STOCKPILED FOR LATER USE IN LANDSCAPING, STABILISATION AND/OR SITE REHABILITATION WORKS.
8. AT ALL TIMES THE CONTRACTOR SHALL MONITOR THE PREVAILING WEATHER CONDITIONS AND PROTECT ANY DOWNSTREAM CONSTRUCTION AND RECEIVING ENVIRONMENTS.
9. EROSION AND SEDIMENT CONTROL PROTECTION MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONTRACT.
10. PLANS AND CONTROL MEASURES FOR LARGE SITES WILL NEED TO BE REVISED AND UPDATED TO REFLECT THE SITE STAGES AND PROGRESSION OF WORKS.
11. MEASURES INCLUDING SEDIMENT FENCES SHOULD BE MOVED AND REINSTATED AS WORKS PROGRESS.
12. FOOT AND VEHICULAR TRAFFIC TO BE RESTRICTED IN RECENTLY STABILISED AREAS INCLUDING THOSE HYDROSEEDED, TURFED OR SEEDED.

DUST CONTROL

1. DURING WINDY AND DRY WEATHER ANY UNPROTECTED AREAS SHALL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL. WHERE WATER IS NOT AVAILABLE IN SUFFICIENT QUANTITIES, SOIL BINDERS OR DUST RETARDANTS TO BE USED FOR DUST SUPPRESSION.
2. EXPOSED SURFACES INCLUDING BATTERS SHOULD BE LEFT ROUGH TO REDUCE WIND SPEEDS AND POTENTIAL FOR WIND EROSION.
3. USE OPEN WEAVE BARRIER FENCING ON WINDWARD SIDE OF SITE IF REQUIRED. FENCING IS GENERALLY REQUIRED WHERE AREA OF DISTURBANCE IS $>5000m^2$.

CONTROL MEASURES

1. FINAL SITE LANDSCAPING SHALL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS OF CONSTRUCTION COMPLETION.
2. SEDIMENT LADEN WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM BY USING INLET PROTECTION.
3. ALL PERIMETER BANKS AND CHANNEL DRAINS SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
4. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL ONLY BE REMOVED ONCE SITE IS STABILISED AND UPSTREAM WORKS HAVE BEEN COMPLETED.
5. AT CONSTRUCTION COMPLETION ALL TEMPORARY EARTH STRUCTURES, INCLUDING SOIL STOCKPILES ARE TO BE TRACK ROLLED AND SEEDED. THE CONTRACTOR IS TO ENSURE A 70% COVERAGE WITHIN 14 DAYS.

OTHER MATTERS

1. ACCEPTABLE RECEPTORS AND DISPOSAL PRACTICES WILL BE USED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHERS, LITTER AND GENERAL WASTE MATERIALS.
2. ANY EXISTING TREES WHICH ARE NOT REQUIRED OR APPROVED TO BE CLEARED FOR THE WORKS AND/OR FORM PART OF THE FINAL LANDSCAPING PLAN SHOULD BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
   a. PROTECTING THEM WITH BARRIER FENCING OR MARKERS.
   b. ENSURING NOTHING IS NAILED TO THEM
   c. PROHIBITING PAVING, GRADING OR PLACING OF STOCKPILES WITHIN DRIP LINE.
3. ALL VEHICLE AND EQUIPMENT WASHING SHOULD BE CONTAINED IN SPECIFIC BUNDED AREAS, DISCONNECTED FROM CONCENTRATED FLOW PATHS AND THE STORMWATER SYSTEM.
4. ANY NECESSARY VEHICLE OR EQUIPMENT REFUELING SHOULD BE UNDERTAKEN AWAY FROM CONCENTRATED FLOW PATHS AND PREFERABLY WITHIN A BUNDED AREA.
5. ANY ONSITE FUEL STORAGE AREAS SHOULD BE COVERED AND BUNDED.

MAINTENANCE OF PUBLIC ROADS

1. ALL CONSTRUCTION VEHICLES DEPARTING FROM THE SITE SHALL HAVE THEIR TYRES WASHED DOWN OR SEDIMENT REMOVED BY A STABILISED SITE ACCESS DEVICE.
2. THE STABILISED SITE ACCESS AREAS SHALL BE LOCATED SUCH THAT SILTED WATER IS FILTERED THROUGH A SUITABLE SEDIMENT TRAP (SUCH AS A SEDIMENT FENCE) INSTALLED DOWNSTREAM OF ACCESS.
3. THE CONTRACTOR SHALL INSPECT THE PUBLIC ROADS ADJACENT TO THE SITE DAILY AND MANUALLY REMOVE ANY SEDIMENT DEPOSITS (BY SWEEPING NOT WASH DOWN).

SITE INSPECTION AND MAINTENANCE

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED REGULARLY, IMMEDIATELY BEFORE SITE CLOSURE, PRIOR TO PREDICTED LARGE STORM EVENTS AND AFTER EVERY SIGNIFICANT (> 5MM) RAINFALL EVENT OR AT LEAST ON A WEEKLY BASIS.
2. THE CONTRACTOR WILL AS A MINIMUM CONDUCT EACH INSPECTION IN LINE WITH THE FOLLOWING
   a. RECORD TYPE OF DEVICE/CONTROL MEASURE BEING INSPECTED AND ITS LOCATION;
   b. RECORD THE CONDITION OF EVERY CONTROL MEASURE;
   c. RECORD MAINTENANCE REQUIREMENTS FOR EVERY CONTROL DEVICE;
   d. RECORD SEDIMENT VOLUMES REMOVED FROM SEDIMENT TRAPPING DEVICES;
   e. RECORD DETAILS OF SEDIMENT BASIN TREATMENT,

SURVEY LEGEND

Item	Symbol
Bench Mark	
Comms Underground	UC
Comms Pit/Manhole	
Comms Pillar	
Drainage Grated Pit	
Drainage Kerb Inlet Pit	
Electrical Power Pole	
Electrical Underground Cable	UE
Fence	
Gate	
Road Bollard	
Sewer Manhole	
Sewer Pipe	S
Sign Post	
Tree (Height, Trunk Diameter, Spread)	H5 D:0.2 S:4
Water Meter	
Water Tap	
Water Stop Valve	
Water Hydrant	
Bottom of Bank	
Top of Bank	

CONTRACTOR SHALL CALL;
DIAL BEFORE YOU DIG 1100
PRIOR TO COMMENCEMENT OF WORK TO OBTAIN ALL CURRENT SERVICE AUTHORITY PLANS

DIAL 1100 BEFORE YOU DIG

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

100mm on Original

Client: WALUYA PTY LTD

Scales	NTS	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: GENERAL NOTES AND LEGENDS

Civil Engineers and Project Managers
at&l
Level 7, 153 Walker Street
North Sydney
NSW 2060
P 02 9439 1777
E info@atl.net.au
www.atl.net.au
ABN 96 130 882 405

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION
A1

Project - Drawing No. 22-1063-DAC001
Issue A

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC001.dwg

SHEET 1 - DAC011

SHEET 2 - DAC012

SHEET 3 - DAC013

SHEET 4 - DAC014

LEGEND

EXISTING BOUNDARY TO BE REMOVED

EXISTING BOUNDARY

FAUNCE STREET WEST

YOUNG STREET

ERINA STREET WEST

PROPOSED TRANSPORT DEPOT

RACECOURSE ROAD

FAUNCE STREET WEST

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

100mm on Original

Bar Scales

0 10 20 30 40m

1 : 400 @ A1

Client

WALUYA PTY LTD

Scales	1:400	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project

TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title

GENERAL ARRANGEMENT PLAN

Civil Engineers and Project Managers

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Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC003

Issue: A

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LEGEND - EXISTING

SURVEY LEGEND

- BENCH MARK
- COMMS UNDERGROUND (UC)
- COMMS PIT/MANHOLE
- COMMS PILLAR
- DRAINAGE GRATED PIT
- DRAINAGE KERB INLET PIT
- ELECTRICAL POWER POLE
- ELECTRICAL UNDERGROUND CABLE (UE)
- FENCE
- GATE
- ROAD BOLLARD
- SEWER MANHOLE
- SEWER PIPE (S)
- SIGN POST
- TREE (HEIGHT, TRUNK DIAMETER, SPREAD) H5 D:0.2 S:4
- WATER METER
- WATER TAP
- WATER STOP VALVE
- WATER HYDRANT
- BOTTOM OF BANK
- TOP OF BANK

LEGEND - SITEWORKS

EXISTING

- EXISTING BOUNDARY
- EXISTING CONTOUR (10.00)
- SEWER (s)
- ELECTRICAL (e)
- WATER (w)
- STORMWATER (sw)
- TELECOMMUNICATIONS (t)
- RISING MAIN (rm)
- STRUCTURAL ROOT ZONE (SRZ) / TREE PROTECTION ZONE (TPZ)

PROPOSED

- CONTOUR (MINOR) 10.00
- CONTOUR (MINOR)
- FINISHED SURFACE LEVEL F 44.45
- VEHICULAR CROSSING (REFER TO CCC STD DWG SD0506) VC
- SWALE, MINIMUM 0.5% FALL
- KERB ONLY (KO)
- RETAINING WALL
- BATTER
- STORMWATER JUNCTION PIT & LABEL A-1
- STORMWATER SURFACE INLET PIT
- STORMWATER PIPE Ø225
- STORMWATER KERB INLET PIT
- GRATED DRAIN (GD)

NOTE:
EXISTING BOUNDARY TO BE REMOVED SWITCHED OFF ON THIS DRAWING FOR CLARITY.

FAUNCE STREET WEST

YOUNG STREET

PROVIDE TYPICAL PIPE DROPPER DESIGN TO BE CONFIRMED DURING DETAILED DESIGN

REFER TO LANDSCAPE ARCHITECT FOR DETAILS. (TYP.)

PROPOSED RETAINING WALL TO STRUCTURAL ENGINEER DETAIL. (TYP.)

PROPOSED SWALE (TYP.)

PROPOSED TRANSPORT DEPOT

FFL 9.00

PROVIDE STUB ON LINE FOR FUTURE BUILDING DOWN PIPE CONNECTION.

FOOTPATH

SWALE @MIN 0.5%

MAX 1:4

A-1 A-2 A-3 A-4 B-1 B-2 G-1 H-1 I-1 J-1 O-1 O-2

FOR CONTINUATION REFER TO SHEET 3, DAC013

FOR CONTINUATION REFER TO SHEET 2, DAC012

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

0 5 10 15 20m

1 : 200 @ A1 1 : 400 @ A3

100mm on Original

SHEET 1

Client: WALUYA PTY LTD

Scales	1:200
Grid	MGA56
Height Datum	AHD
Drawn	JC
Designed	JC
Checked	GJ
Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 1

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Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC011

Issue: A

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC011.dwg

LEGEND - SITEWORKS

EXISTING

- EXISTING BOUNDARY
- EXISTING CONTOUR (10.00)
- SEWER (s)
- ELECTRICAL (e)
- WATER (w)
- STORMWATER (sw)
- TELECOMMUNICATIONS (t)
- RISING MAIN (rm)
- STRUCTURAL ROOT ZONE (SRZ) TREE PROTECTION ZONE (TPZ) (TPZ / SRZ)

PROPOSED

- CONTOUR (MINOR) (10.00)
- CONTOUR (MINOR)
- FINISHED SURFACE LEVEL (F 44.45)
- VEHICULAR CROSSING (REFER TO CCC STD DWG SD0506) (VC)
- SWALE, MINIMUM 0.5% FALL
- KERB ONLY (KO)
- RETAINING WALL
- BUILDING OUTLINE
- BATTER
- STORMWATER JUNCTION PIT & LABEL (A-1)
- STORMWATER SURFACE INLET PIT
- STORMWATER PIPE (Ø225)
- STORMWATER KERB INLET PIT
- GRATED DRAIN (GD)

NOTE:

EXISTING BOUNDARY TO BE REMOVED SWITCHED OFF ON THIS DRAWING FOR CLARITY.

LEGEND - EXISTING

SURVEY LEGEND

- BENCH MARK
- COMMS UNDERGROUND (UC)
- COMMS PIT/MANHOLE
- COMMS PILLAR
- DRAINAGE GRATED PIT
- DRAINAGE KERB INLET PIT
- ELECTRICAL POWER POLE
- ELECTRICAL UNDERGROUND CABLE (UE)
- FENCE
- GATE
- ROAD BOLLARD
- SEWER MANHOLE
- SEWER PIPE (S)
- SIGN POST
- TREE (HEIGHT, TRUNK DIAMETER, SPREAD) (H5 D:0.2 S:4)
- WATER METER
- WATER TAP
- WATER STOP VALVE
- WATER HYDRANT
- BOTTOM OF BANK
- TOP OF BANK

ERINA STREET WEST

YOUNG STREET

PROVIDE TYPICAL PIPE DROPPER. DESIGN TO BE CONFIRMED DURING DETAILED DESIGN

PROPOSED SWALE (TYP.)

PROPOSED TRANSPORT DEPOT

PROPOSED RETAINING WALL TO STRUCTURAL ENGINEER DETAIL. (TYP.)

PROPOSED SWALE (TYP.)

REFER TO LANDSCAPE ARCHITECT FOR DETAILS. (TYP.)

PROPOSED RETAINING WALL, FOOTING TO BE DESIGNED TO ENSURE LOADING ON EXISTING SEWER SERVICE, SUBJECT TO DETAILED DESIGN

FOR CONTINUATION REFER TO SHEET 1, DAC011

FOR CONTINUATION REFER TO SHEET 4, DAC014

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

0 5 10 15 20m

1 : 200 @ A1 1 : 400 @ A3

100mm on Original

Client: WALUYA PTY LTD

Scales	1:200
Grid	MGA56
Height Datum	AHD
Drawn	JC
Designed	JC
Checked	GJ
Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 2

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Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC012

Issue: A

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LEGEND - EXISTING

SURVEY LEGEND

- BENCH MARK
- COMMS UNDERGROUND (UC)
- COMMS PIT/MANHOLE
- COMMS PILLAR
- DRAINAGE GRATED PIT
- DRAINAGE KERB INLET PIT
- ELECTRICAL POWER POLE
- ELECTRICAL UNDERGROUND CABLE (UE)
- FENCE
- GATE
- ROAD BOLLARD
- SEWER MANHOLE
- SEWER PIPE (S)
- SIGN POST
- TREE (HEIGHT, TRUNK DIAMETER, SPREAD) H5 D:0.2 S:4
- WATER METER
- WATER TAP
- WATER STOP VALVE
- WATER HYDRANT
- BOTTOM OF BANK
- TOP OF BANK

LEGEND - SITEWORKS

EXISTING

- EXISTING BOUNDARY
- EXISTING CONTOUR (10.00)
- SEWER (s)
- ELECTRICAL (e)
- WATER (w)
- STORMWATER (sw)
- TELECOMMUNICATIONS (t)
- RISING MAIN (rm)
- STRUCTURAL ROOT ZONE (SRZ) / TREE PROTECTION ZONE (TPZ)

PROPOSED

- CONTOUR (MINOR) 10.00
- CONTOUR (MINOR)
- FINISHED SURFACE LEVEL ● F 44.45
- VEHICULAR CROSSING (REFER TO CCC STD DWG SD0506) VC
- SWALE, MINIMUM 0.5% FALL
- KERB ONLY KO
- RETAINING WALL
- BATTER
- STORMWATER JUNCTION PIT & LABEL A-1
- STORMWATER SURFACE INLET PIT
- STORMWATER PIPE Ø225
- STORMWATER KERB INLET PIT
- GRATED DRAIN GD

NOTE:
EXISTING BOUNDARY TO BE REMOVED SWITCHED OFF ON THIS DRAWING FOR CLARITY.

RACECOURSE ROAD

FAUNCE STREET WEST

PROPOSED TRANSPORT DEPOT

RWT UNDERGROUND

OSD 2

PROPOSED OSD 2, REFER TO DAC056 - DAC058 FOR DETAILS

RWT OVERFLOW PIPE CONNECTION TO SURFACE INLET PIT

PROPOSED SWALE (TYP.)

REFER TO LANDSCAPE ARCHITECT FOR DETAILS. (TYP.)

PROPOSED RETAINING WALL TO STRUCTURAL ENGINEER DETAIL. (TYP.)

PROPOSED SUBSTATION, LOCATION SUBJECT TO DETAILED DESIGN

PROPOSED ON GRADE INLET PIT TO BREAK INTO EXISTING Ø525 PIPE AND MAKE GOOD. INVERT LEVEL INTERPOLATED FROM SURVEY. PROPOSED INVERT LEVEL SUBJECT TO DETAILED DESIGN

FOR CONTINUATION REFER TO SHEET 1, DAC011

FOR CONTINUATION REFER TO SHEET 4, DAC014

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

0 5 10 15 20m

1 : 200 @ A1 1 : 400 @ A3

SHEET 3

Client: WALUYA PTY LTD

Scales	1:200
Grid	MGA56
Height Datum	AHD
Drawn	JC
Designed	JC
Checked	GJ
Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: SITEWORKS AND STORMWATER DRAINAGE PLAN SHEET 3

Civil Engineers and Project Managers
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Level 7, 153 Walker Street
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ABN 96 130 882 405

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

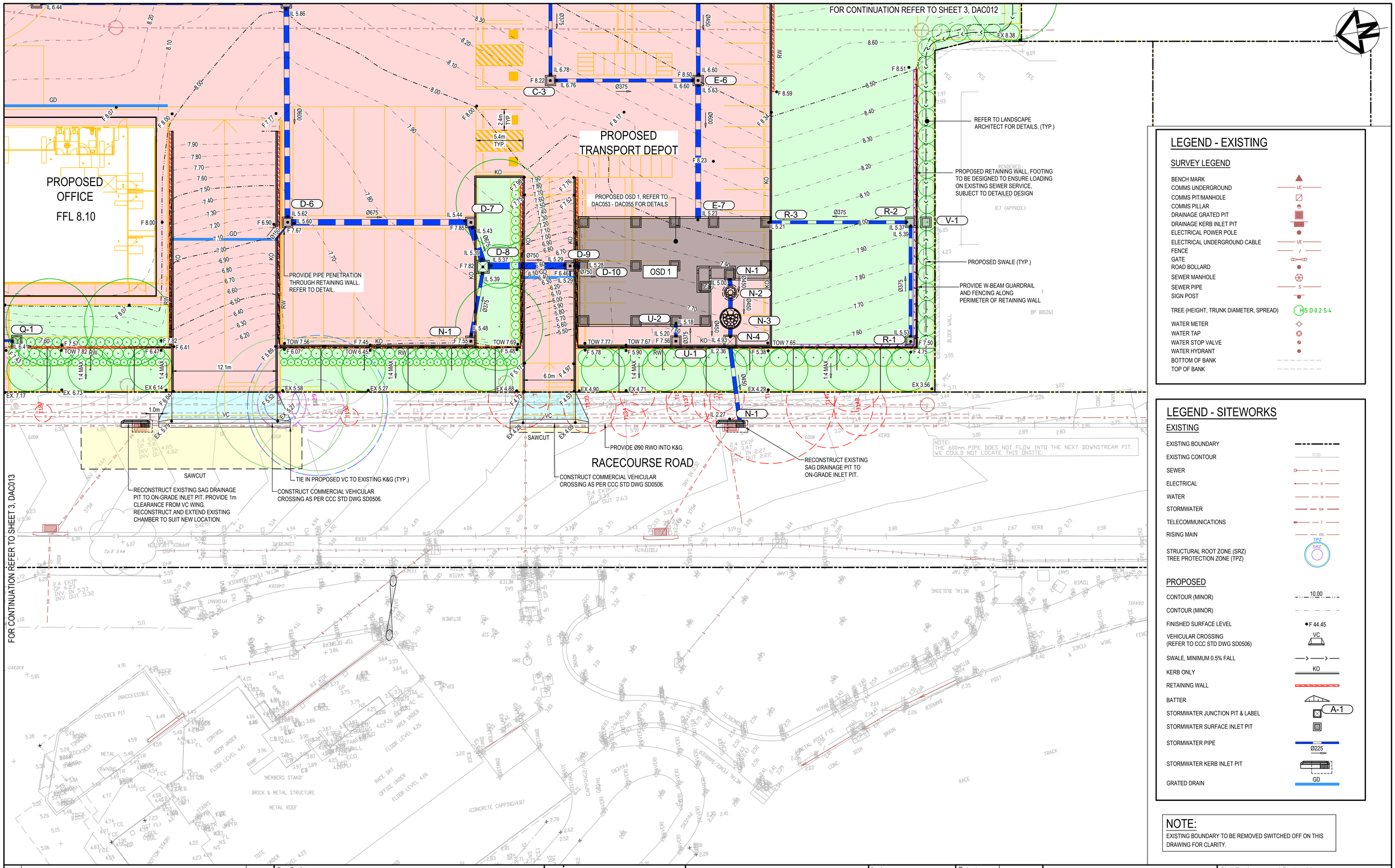
A1

Project - Drawing No.: 22-1063-DAC013

Issue: A

100mm on Original

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC013.dwg



LEGEND - EXISTING

SURVEY LEGEND

- BENCH MARK
- COMMS UNDERGROUND (UC)
- COMMS PIT/MANHOLE
- COMMS PILLAR
- DRAINAGE GRATED PIT
- DRAINAGE KERB INLET PIT
- ELECTRICAL POWER POLE
- ELECTRICAL UNDERGROUND CABLE (UE)
- FENCE
- GATE
- ROAD BOLLARD
- SEWER MANHOLE
- SEWER PIPE (S)
- SIGN POST
- TREE (HEIGHT, TRUNK DIAMETER, SPREAD) H5 D:0.2 S:4
- WATER METER
- WATER TAP
- WATER STOP VALVE
- WATER HYDRANT
- BOTTOM OF BANK
- TOP OF BANK

LEGEND - SITEWORKS

EXISTING

- EXISTING BOUNDARY
- EXISTING CONTOUR 10.00
- SEWER (S)
- ELECTRICAL (E)
- WATER (W)
- STORMWATER (SW)
- TELECOMMUNICATIONS (T)
- RISING MAIN (rm)
- STRUCTURAL ROOT ZONE (SRZ) / TREE PROTECTION ZONE (TPZ)

PROPOSED

- CONTOUR (MINOR) 10.00
- CONTOUR (MINOR)
- FINISHED SURFACE LEVEL F 44.45
- VEHICULAR CROSSING (REFER TO CCC STD DWG SD0506) VC
- SWALE, MINIMUM 0.5% FALL
- KERB ONLY KO
- RETAINING WALL
- BATTER
- STORMWATER JUNCTION PIT & LABEL A-1
- STORMWATER SURFACE INLET PIT
- STORMWATER PIPE Ø225
- STORMWATER KERB INLET PIT
- GRATED DRAIN GD

NOTE:

EXISTING BOUNDARY TO BE REMOVED SWITCHED OFF ON THIS DRAWING FOR CLARITY.

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

100mm on Original

Bar Scales

0 5 10 15 20m

1 : 200 @ A1 1 : 400 @ A3

SHEET 4

Client: WALUYA PTY LTD

Scales	1:200	Drawn	JC
		Designed	JC
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: SITEWORKS AND STORMWATER DRAINAGE PLAN
SHEET 4

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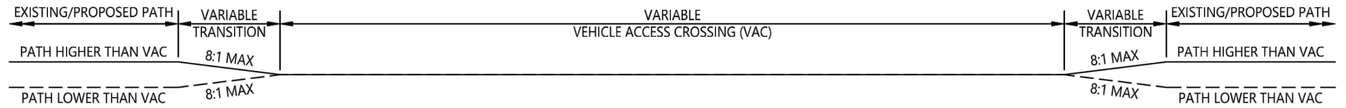
Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

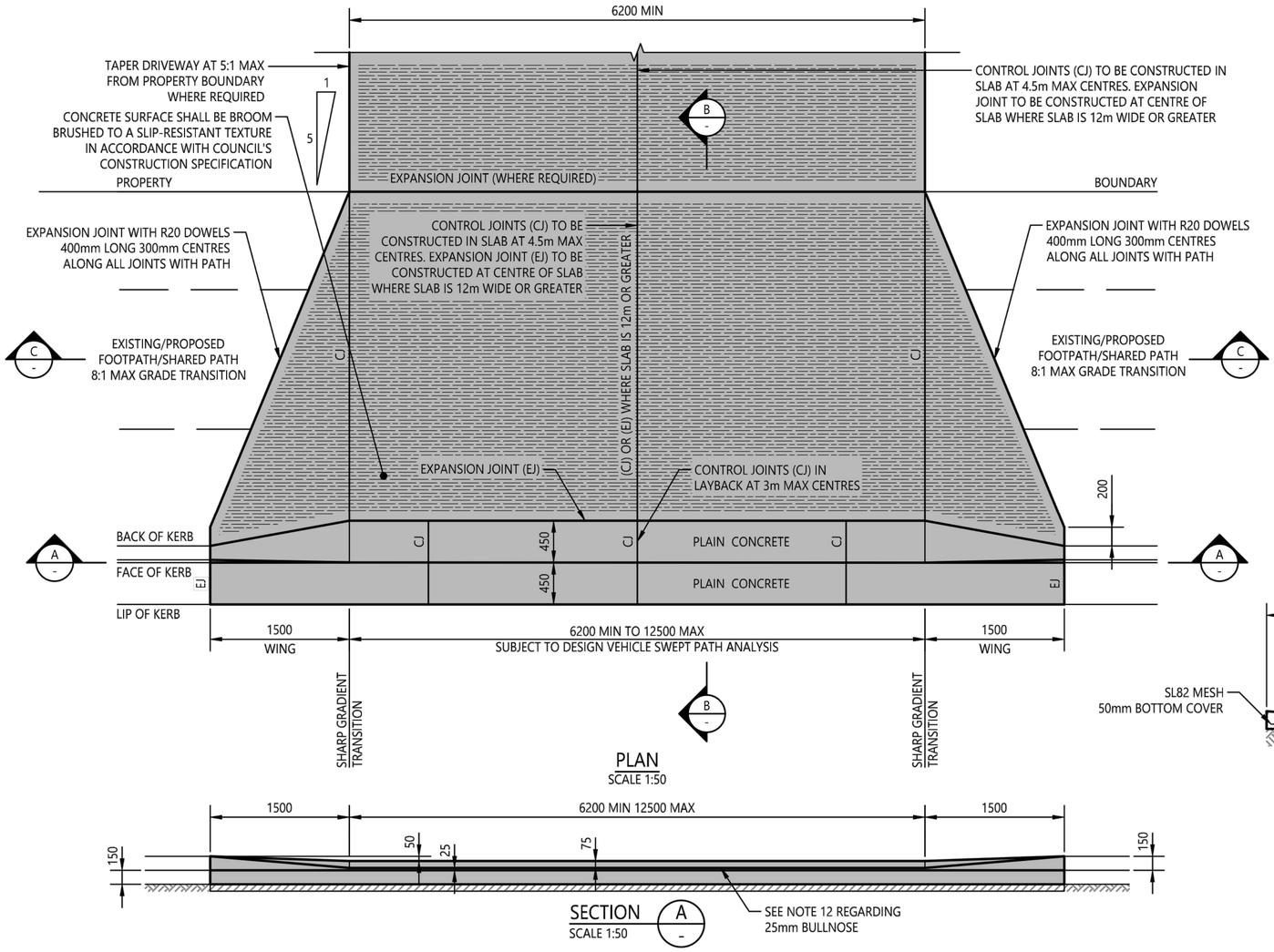
Project - Drawing No.: 22-1063-DAC014

Issue: A

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC014.dwg



SECTION C
NOT TO SCALE

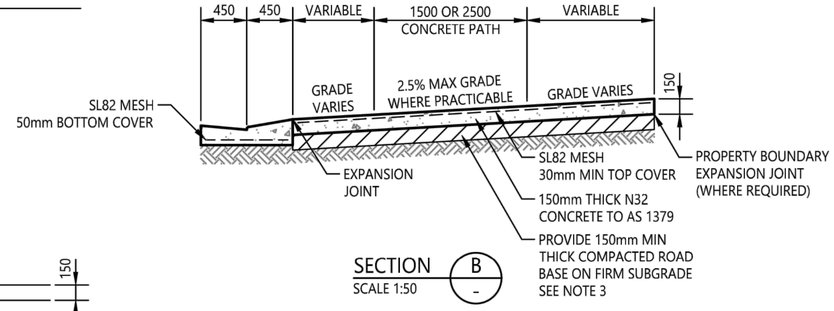


PLAN
SCALE 1:50

SECTION A
SCALE 1:50

NOTES:

1. THIS DRAWING IS TO BE USED AS A GUIDE ONLY. INDUSTRIAL AND COMMERCIAL DRIVEWAYS ARE TO BE DESIGNED AND CONSTRUCTED TO COMPLY WITH AS 2890.2 AND AS 3727.1 (GVM<10t) AS APPLICABLE.
2. SUITABLY COMPACT APPROVED SUBGRADE MATERIAL. PROVIDE REPLACEMENT SUBGRADE IF REQUIRED.
3. CONCRETE STRENGTH GRADE SHALL BE N32 UNLESS OTHERWISE SPECIFIED AND SHALL CONFORM TO AS 1379 SPECIFICATION AND SUPPLY OF CONCRETE.
4. EXPANSION JOINTS (EJ) IN SLAB SHALL BE 10mm WIDE AND FILLED WITH A PREFORMED COMPRESSIBLE BITUMEN-IMPREGNATED FILLER AT 12m CENTRES AS SHOWN ON SHEET 2.
5. CONTROL JOINTS (CJ) SHALL BE FORMED AS SHOWN ON SHEET 2.
6. SAWN CONTROL JOINTS SHALL BE CUT AS SOON AS SURFACE IS HARD ENOUGH THAT IT WILL NOT CHIP, SPALL AND COLLAPSE ON THE CUTTING BLADE. GENERALLY, THIS SHOULD BE WITHIN 24 HOURS OF CONCRETE PLACEMENT.
7. REINFORCING MESH SHALL BE FABRICATED TO AS/NZS 4671 STEEL REINFORCING MATERIALS.
8. REINFORCING MESH IN SLABS SHALL BE PLACED WITH 30mm MINIMUM TOP COVER.
9. DOWELS SHALL BE GALVANISED AND INSTALLED PARALLEL TO EACH OTHER AND PARALLEL TO FINISHED SURFACE.
10. DOWELS SHALL BE INSTALLED WITH DOWEL SLEEVE AND GREASED AT ONE END WITH A 10mm FREE MOVEMENT GAP AT THE GREASED END, UNLESS OTHERWISE NOTED.
11. WHERE VEHICULAR ACCESS CROSSINGS ARE ALSO USED AS KERB RAMPS, THE LAYBACK SHALL BE MODIFIED TO OMIT THE 25mm BULLNOSE AND A KERB RAMP PROFILE AND SHAPE INTEGRATED WITH THE WHOLE VEHICULAR ACCESS CROSSING.
12. WIDTH OF VEHICULAR ACCESS CROSSING TO BE DETERMINED BY SWEPT PATH ANALYSIS OF THE RELEVANT DESIGN VEHICLE.
13. REFER TO SD0508 FOR APPROPRIATE DRIVEWAY PROFILE CONFIGURATION.
14. ALL SERVICES UNDER VEHICLE ACCESS CROSSING SHALL BE LOCATED BY POTHOLING AND RELOCATED WHERE REQUIRED PRIOR TO COMMENCEMENT OF CONSTRUCTION.



SECTION B
SCALE 1:50

REV	AMENDMENT	DATE	DRAWN	APRVD

SCALE ON ORIGINAL A3 SIZE DRAWING
0 500 1000 1500 2000 2500
1:50

ALL DIMENSIONS IN mm UNLESS OTHERWISE SHOWN

DRAWN	T WILLIS
CHECKED	M BAMBER
DATE	28/4/20

UNIT MANAGER APPROVAL

ASSETS PLANNING AND DESIGN

Central Coast Council

ROADS TRANSPORT DRAINAGE AND WASTE

Central Coast Council

KERB AND CHANNEL SERIES
INDUSTRIAL AND COMMERCIAL VEHICLE ACCESS CROSSING FOR ROADS WITH KERB AND CHANNEL

STANDARD DRAWING

DRAWING NUMBER	REV
SD0506	-
SHEET 1 OF 2	A3

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

Client: WALUYA PTY LTD

Scales	NTS	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: SITEWORKS DETAILS SHEET 1

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ABN 96 130 882 405

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

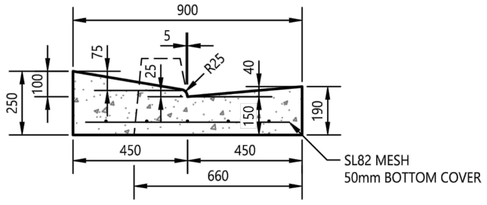
A1

Project - Drawing No.: 22-1063-DAC021

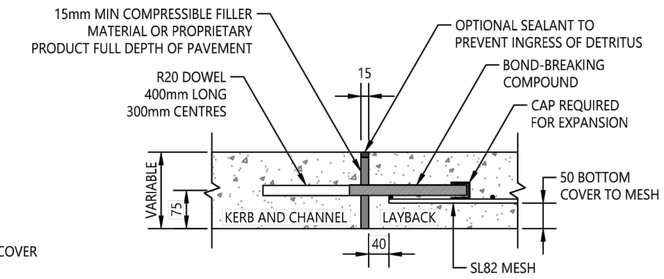
Issue: A

100mm on Original

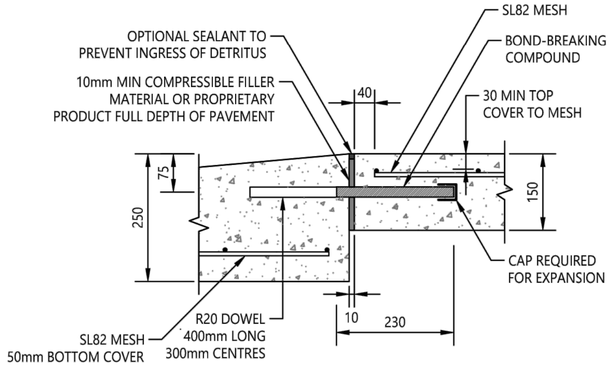
F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC021.dwg



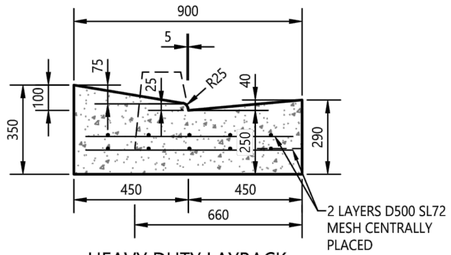
STANDARD LAYBACK
SCALE 1:20



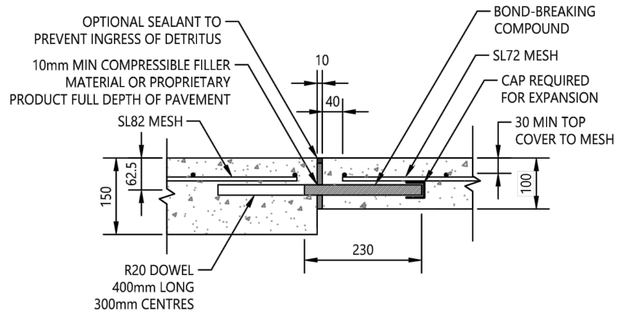
EXPANSION JOINT (EJ) KERB AND CHANNEL TO LAYBACK
SCALE 1:10



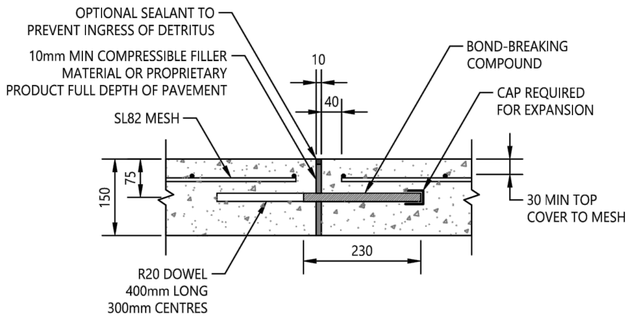
EXPANSION JOINT (EJ) 250mm TO 150mm
LAYBACK TO VEHICLE ACCESS CROSSING
SCALE 1:10



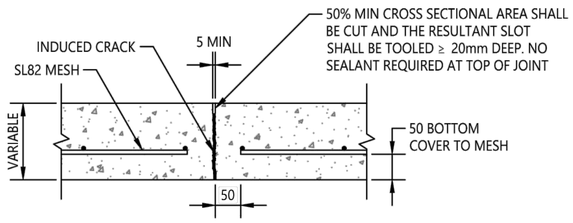
HEAVY DUTY LAYBACK
SCALE 1:20



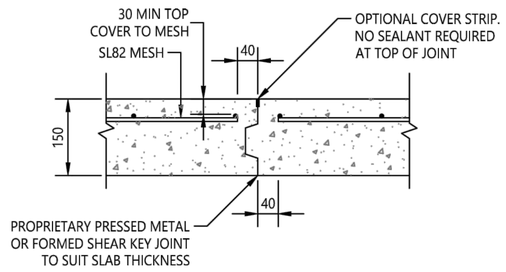
EXPANSION JOINT (EJ) 150mm TO 100mm
VEHICLE ACCESS CROSSING TO FOOTPATH
SCALE 1:10



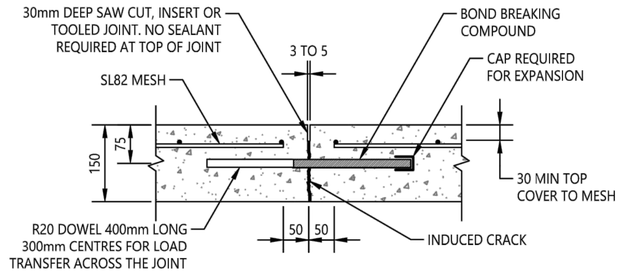
EXPANSION JOINT (EJ) 150mm
SCALE 1:10



CONTROL JOINT (CJ) IN LAYBACK
SCALE 1:10



CONTROL JOINT (CJ) 150mm - TYPE 1
SCALE 1:10



CONTROL JOINT (CJ) - TYPE 2
SCALE 1:10

REV	AMENDMENT	DATE	DRAWN	APRVD

ALL DIMENSIONS IN mm UNLESS OTHERWISE SHOWN

SCALE ON ORIGINAL A3 SIZE DRAWING: AS SHOWN

DRAWN	T WILLIS
CHECKED	M BAMBER
DATE	28/4/20

UNIT MANAGER APPROVAL

ASSETS PLANNING AND DESIGN

Central Coast Council

ROADS TRANSPORT DRAINAGE AND WASTE

Central Coast Council

KERB AND CHANNEL SERIES
INDUSTRIAL AND COMMERCIAL VEHICLE ACCESS CROSSING FOR ROADS WITH KERB AND CHANNEL

STANDARD DRAWING

DRAWING NUMBER	REV
SD0506	-
SHEET 2 OF 2	A3

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

100mm on Original

Bar Scales

Client: WALUYA PTY LTD

Scales	NTS	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: SITEWORKS DETAILS SHEET 2

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Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC022

Issue: A

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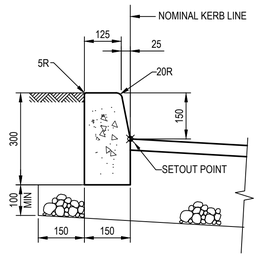
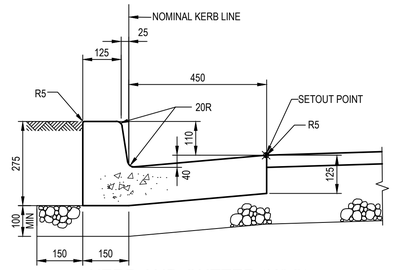


KERB ONLY (KO)

SCALE 1:10



KERB AND GUTTER (K&G)

SCALE 1:10

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

100mm on Original

Bar Scales

0 100 200 400 600 800 1000mm

1 : 10 @ A1 1 : 20 @ A3

Client

WALUYA PTY LTD

Scales		Drawn	CK
	AS SHOWN	Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project

TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title

SITEWORKS
DETAILS
SHEET 3

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www.atl.net.au
ABN 96 130 882 405

Status

FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

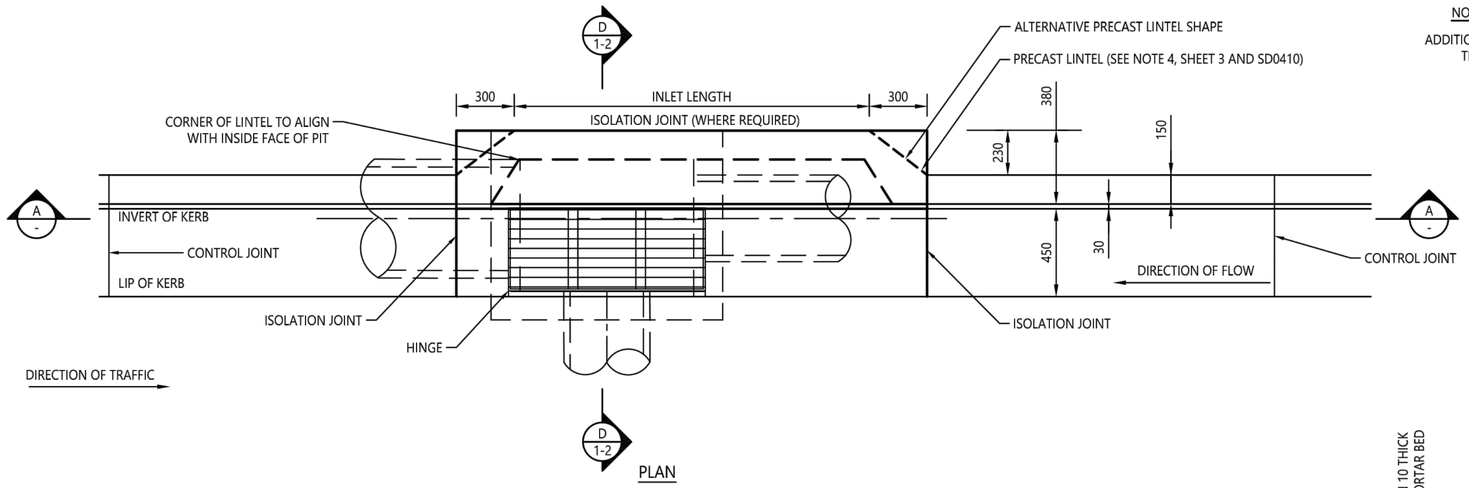
Project - Drawing No.

22-1063-DAC023

Issue

A

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC023.dwg



PLAN

STANDARD PIT (ON GRADE)

SCALE 1:25

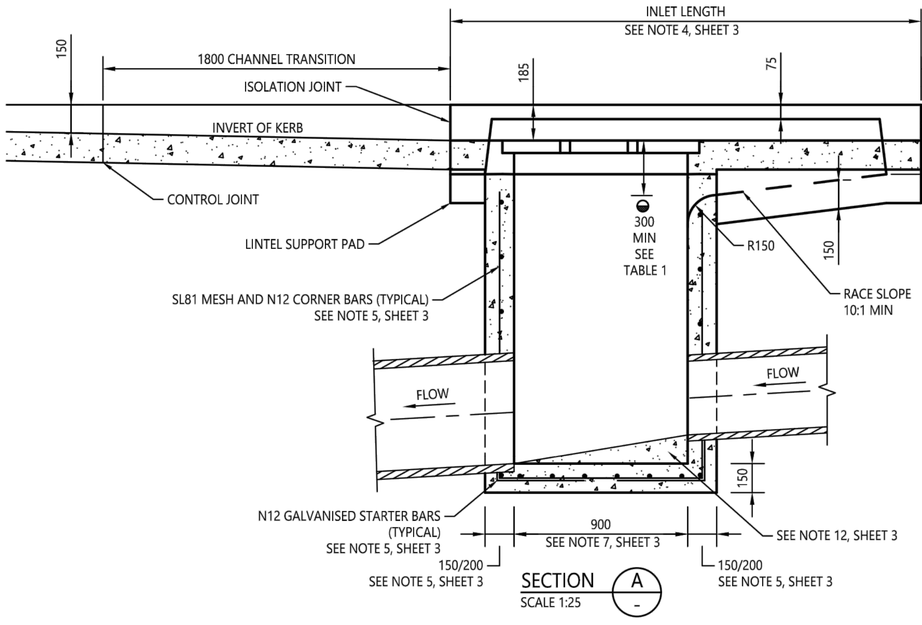
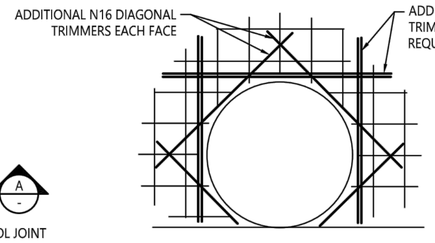


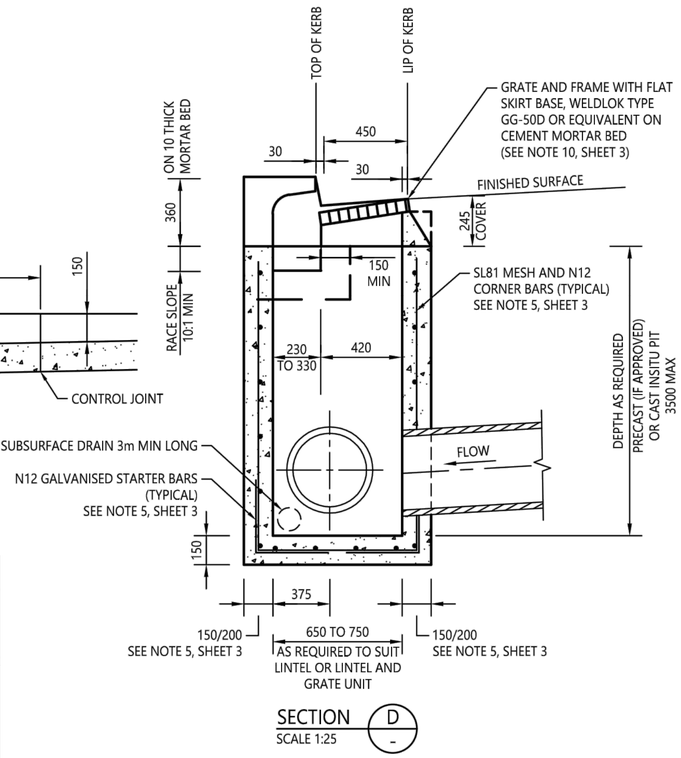
TABLE 1	
LINTEL LENGTH	RACE DEPTH AT ⌀
1800	300
2400	300
3000	345
3600	405
4200	465

NOTE: TRIMMERS TO COG INTO INTERSECTING WALLS WHERE NECESSARY.



TRIMMER DETAIL DIAGRAM

NOT TO SCALE



FOR PIPE DIAMETER UP TO 525mm

					SCALE ON ORIGINAL A3 SIZE DRAWING	DRAWN	C SHEPPEARD
					0 250 500 750 1000 1250	CHECKED	M BAMBER
					1:25	DATE	28/4/20
						UNIT MANAGER APPROVAL	
REV	AMENDMENT	DATE	DRAWN	APRVD	ALL DIMENSIONS IN mm UNLESS OTHERWISE SHOWN	ASSETS PLANNING AND DESIGN	ROADS TRANSPORT DRAINAGE AND WASTE

Central Coast Council

STORMWATER DRAINAGE SERIES
STANDARD GRATED GULLY PIT

STANDARD DRAWING

DRAWING NUMBER SD0401 | REV -

SHEET 1 OF 3 | A3

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

100mm on Original

Client: WALUYA PTY LTD

Scales	NTS	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: STORMWATER DRAINAGE DETAILS SHEET 1

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ABN 96 130 882 405

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No. 22-1063-DAC025

Issue A

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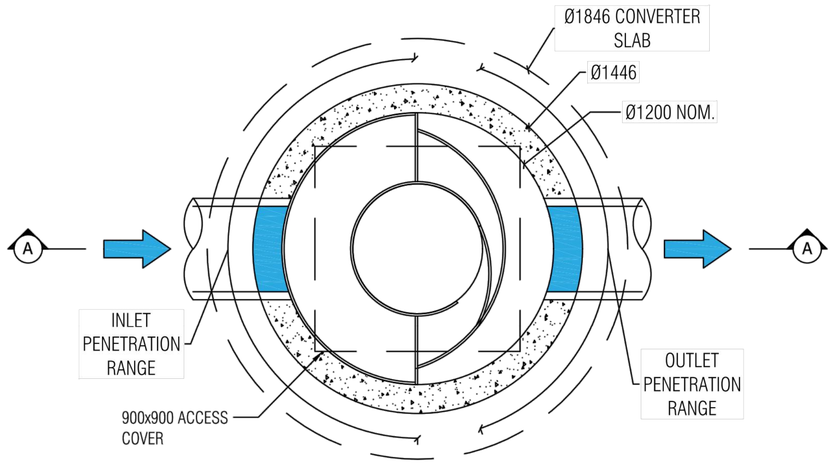
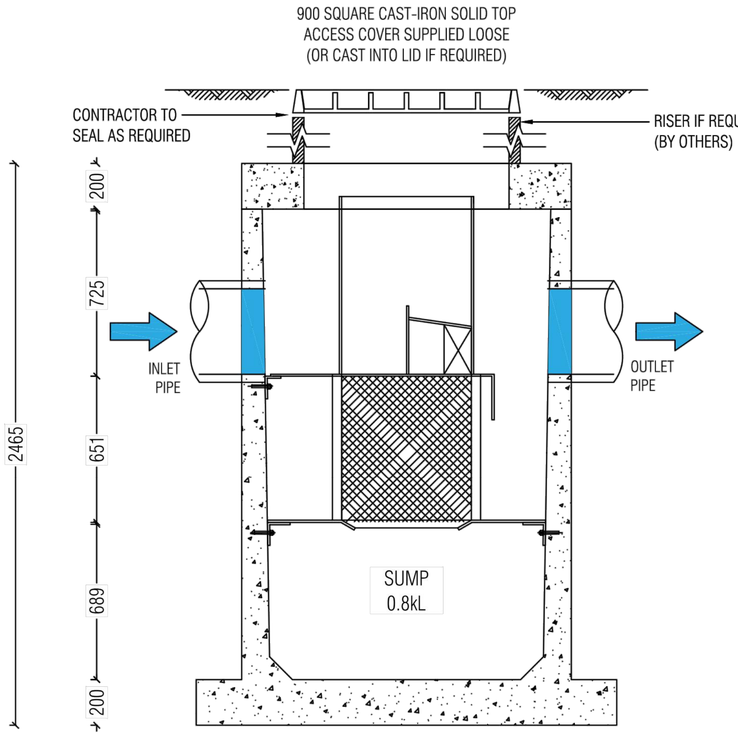
NOT FOR CONSTRUCTION



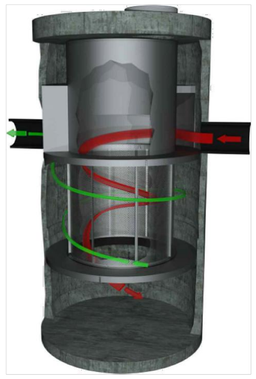
OCEANSAVE PLAN



OCEANSAVE DESIGN TABLE

TO BE INSTALLED ONLINE THE TOTAL INLET PIPE FLOW RATE MUST BE LESS THAN THE SPECIFIED UNITS LISTED MAXIMUM TOTAL FLOW RATE; THE UNIT MUST BE PLACED OFFLINE WHERE THE INLET FLOW RATE EXCEEDS THIS VALUE.

TREATABLE FLOWRATE [L/s]	28
MAXIMUM TOTAL FLOWRATE [L/s]	228
WEIR HEIGHT [mm]	300



SITE SPECIFIC DATA REQUIREMENTS

TOTAL FLOWRATE THROUGH INLET [L/S]	[ ]

PIPE DATA:	I.L.	MATERIAL	DIAMETER
INLET PIPE	[ ]	[ ]	[ ]
OUTLET PIPE	[ ]	[ ]	[ ]

UPPER TANK WEIGHT	TBA
LOWER TANK WEIGHT	TBA

NOTE: TANK SUPPLIED IN TWO PARTS; PARTS A & B TO BE JOINED ON SITE

GENERAL NOTES

1. OCEANSAVE WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF THE PROJECT.
2. PRECAST STRUCTURE SUPPLIED WITH CORE HOLES TO SUIT OUTER DIAMETER OF NOMINATED PIPE SIZE / MATERIAL.
3. PRECAST STRUCTURE SHALL MEET W80 WHEEL LOAD RATING ASSUMING A MAXIMUM EARTH COVER OF 2.0m AND A GROUND WATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER TO CONFIRM ACTUAL GROUNDWATER ELEVATION.PRECAST STRUCTURE SHALL BE IN ACCORDANCE WITH AS3600.
4. ALL WATER QUALITY TREATMENT DEVICES REQUIRE PERIODIC MAINTENANCE. REFER TO OPERATION AND MAINTENANCE MANUAL FOR GUIDELINES AND ACCESS REQUIREMENTS.
5. SITE SPECIFIC PRODUCTION DRAWING WILL BE PROVIDED ON PLACEMENT OF ORDER.
6. DRAWING NOT TO SCALE.

INSTALLATION NOTES

A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE SPECIFIC DESIGN CONSIDERATION AND SHALL BE SPECIFIED BY THE SITE CIVIL ENGINEER.

B. CONTRACTOR TO PROVIDE ALL EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING DETAIL PROVIDED SEPARATELY).

C. CONTRACTOR TO INSTALL AND LEVEL THE STRUCTURE, APPLY SEALANT TO ALL JOINTS AND TO PROVIDE, INSTALL AND GROUT INLET AND OUTLET PIPES.

D. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT SCREEN & SEPARATION CYLINDER COMPONENTS DURING INSTALLATION

OCEAN PROTECT
PHONE: 1300 354 722 www.oceanprotect.com.au

OCEAN PROTECT
OCEANSAVE 0606
SPECIFICATION DRAWING

LAST MODIFIED: 25-02-19

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

Client: WALUYA PTY LTD

Scales	NTS	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: STORMWATER DRAINAGE DETAILS SHEET 2

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Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

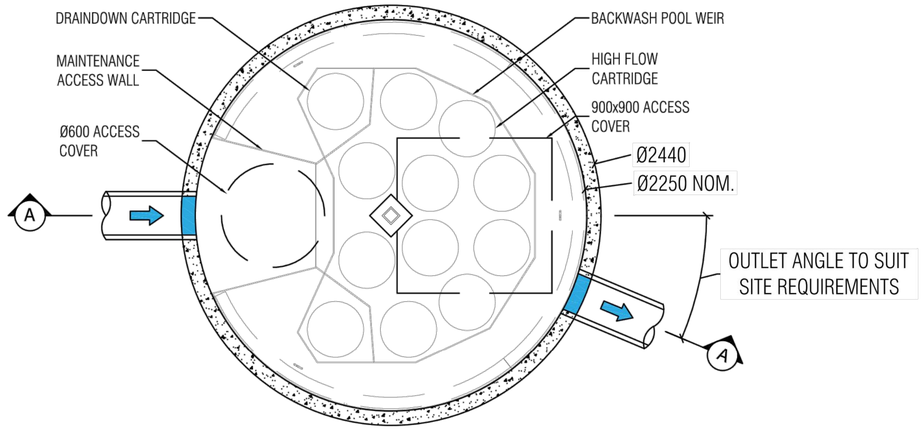
Project - Drawing No.: 22-1063-DAC026

Issue: A

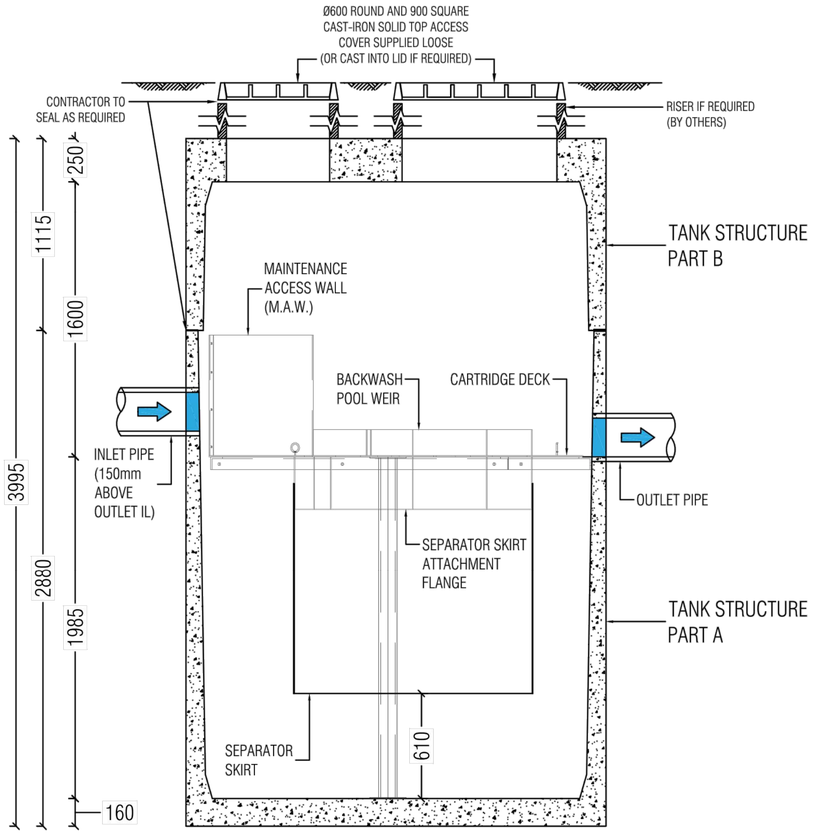
100mm on Orgs\

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC026.dwg

NOT FOR CONSTRUCTION



JELLYFISH PLAN



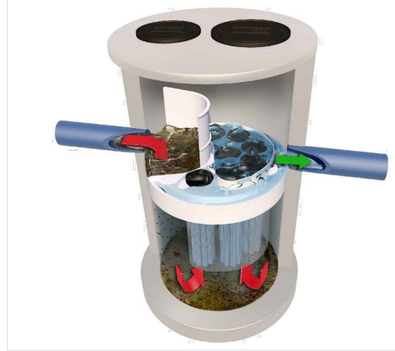
JELLYFISH SECTION

LAST MODIFIED: 25-02-19

JELLYFISH DESIGN TABLE

JELLYFISH TREATMENT FLOW IS A FUNCTION OF THE NUMBER OF CARTRIDGES AND THE DEVICE TOTAL HEAD DIFFERENTIAL. IF THE PIPE FLOW EXCEEDS THE TREATMENT FLOW THEN AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

REQUIRED DEVICE TOTAL HEAD DIFFERENTIAL [mm]	460	230
CARTRIDGE FLOW RATE FOR HIGH-FLOW / DRAINDOWN [L/s]	5 / 2.5	2.5 / 1.25
CARTRIDGE LENGTH [mm]	1375	1375
OUTLET INVERT TO STRUCTURE INVERT [mm])	1985	1985



SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	[ ]
WATER QUALITY FLOW RATE (L/S)	[ ]
# OF CARTRIDGES REQUIRED (HF - DD)	[-]
CARTRIDGE SIZE	1375

PIPE DATA:	I.L.	MATERIAL	DIAMETER
INLET PIPE	[ ]	[ ]	[ ]
OUTLET PIPE	[ ]	[ ]	[ ]

UPPER TANK WEIGHT	4,050kg
LOWER TANK WEIGHT	6,350kg

NOTE: TANK SUPPLIED IN TWO PARTS; PARTS A & B TO BE JOINED ON SITE

GENERAL NOTES

1. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF THE PROJECT.
2. PRECAST STRUCTURE SUPPLIED WITH CORE HOLES TO SUIT OUTER DIAMETER OF NOMINATED PIPE SIZE / MATERIAL.
3. PRECAST STRUCTURE SHALL MEET W80 WHEEL LOAD RATING ASSUMING A MAXIMUM EARTH COVER OF 2.0m AND A GROUND WATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER TO CONFIRM ACTUAL GROUNDWATER ELEVATION.PRECAST STRUCTURE SHALL BE IN ACCORDANCE WITH AS3600.
4. IF THE PEAK FLOW RATE, AS DETERMINED BY THE SITE CIVIL ENGINEER, EXCEEDS THE TREATMENT FLOW RATE OF THE SYSTEM, AN UPSTREAM BYPASS STRUCTURE IS REQUIRE.
5. ALL WATER QUALITY TREATMENT DEVICES REQUIRE PERIODIC MAINTENANCE. REFER TO OPERATION AND MAINTENANCE MANUAL FOR GUIDELINES AND ACCESS REQUIREMENTS.
6. SITE SPECIFIC PRODUCTION DRAWING WILL BE PROVIDED ON PLACEMENT OF ORDER.
7. DRAWING NOT TO SCALE.

INSTALLATION NOTES

A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE SPECIFIC DESIGN CONSIDERATION AND SHALL BE SPECIFIED BY THE SITE CIVIL ENGINEER.

B. CONTRACTOR TO PROVIDE ALL EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING DETAIL PROVIDED SEPARATELY).

C. CONTRACTOR TO INSTALL AND LEVEL THE STRUCTURE, APPLY SEALANT TO ALL JOINTS AND TO PROVIDE, INSTALL AND GROUT INLET AND OUTLET PIPES.

D. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

E. CARTRIDGE INSTALLATION, BY OCEANPROTECT, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT OCEAN PROTECT TO COORDINATE CARTRIDGE INSTALLATION WITH SITE COMPLETION.

OCEAN PROTECT
PHONE: 1300 354 722 www.oceanprotect.com.au

OCEAN PROTECT
JELLYFISH 2250
STANDARD PRODUCT DRAWING

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

Client: WALUYA PTY LTD

Scales	NTS	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: STORMWATER DRAINAGE DETAILS SHEET 3

Civil Engineers and Project Managers
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www.atl.net.au
ABN 96 130 882 405

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC027

Issue: A

100mm on Original

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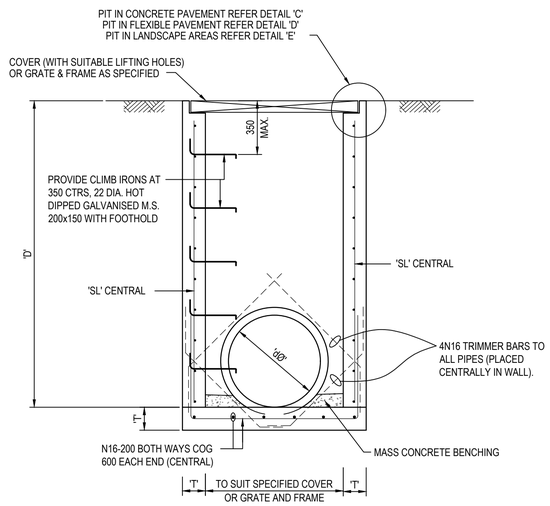
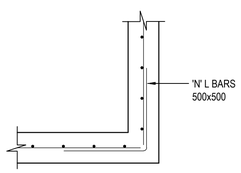


PIT TYPE 'A' DETAIL
SURFACE INLET PIT
FOR PIPES UP TO 525Ø

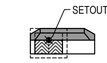
SCALE: 1:20

PIPE DIA. 'dØ'	WIDTH 'W'	DEPTH 'D'	WALL 'T'	FABRIC/COV 'SL'
375	AS3500.3	800	150	SL72
	AS3500.3	1200	150	SL72
	AS3500.3	1600	150	SL72
	AS3500.3	2000	150	SL72
	AS3500.3	2400	150	SL72
450	AS3500.3	800	150	SL72
	AS3500.3	1200	150	SL72
	AS3500.3	1600	150	SL72
	AS3500.3	2000	150	SL72
	AS3500.3	2400	150	SL72
525	AS3500.3	800	150	SL72
	AS3500.3	1200	150	SL72
	AS3500.3	1600	150	SL72
	AS3500.3	2000	150	SL72
	AS3500.3	2400	150	SL72



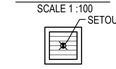
TYPICAL CORNER DETAIL

SCALE 1:20



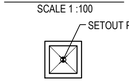
KERB INLET PIT

SCALE 1 :100



SURFACE INLET PIT

SCALE 1 :100



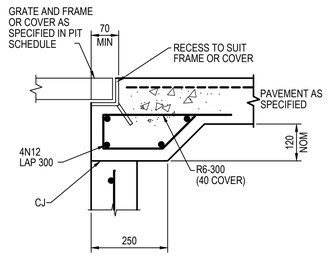
JUNCTION PIT

SCALE 1 :100

HEADWALL

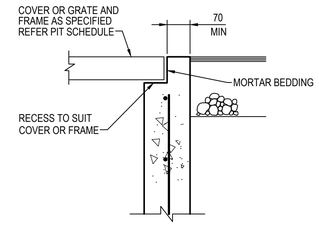
SCALE 1 :100

STORMWATER PIT
SETOUT POINTS



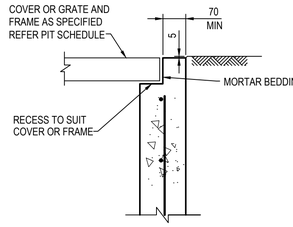
DETAIL "C"

SCALE 1:10



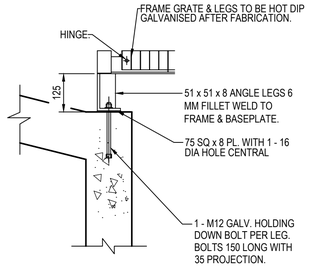
DETAIL "D"

SCALE 1:10



DETAIL "E"

SCALE 1:10



DETAIL "G"

SCALE 1:10

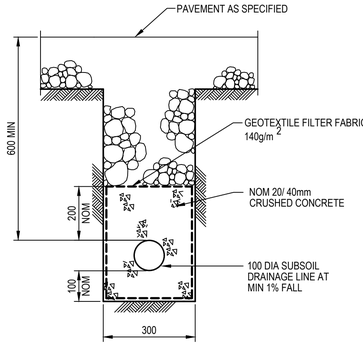
NOTE

1. FOR PIT SIZE REFER TO TABLE (900 MIN LONG).
2. REINFORCING MESH IS TO BE BENT TO LAP 300 AROUND ALL CORNERS. VERTICAL BARS ARE NOT TO BE CUT. ALTERNATELY PROVIDE N12 "L" BARS (500x500) AT 400 VERTICAL CTS.
3. COMPRESSIVE STRENGTH (F'c) FOR CAST IN SITU CONCRETE SHALL BE A MINIMUM 32 MPa AT 28 DAYS.
4. TOP OF BENCHING SHALL BE $\frac{1}{2}$ OF OUTLET PIPE DIAMETER.
5. 100mm SUBSOIL DRAINAGE PIPE 3000 LONG WRAPPED IN FABRIC SOCK TO BE PROVIDE ADJACENT TO INLET PIPES.
6. ALL PITS SHALL BE PROVIDED WITH A LOCKING CLIP.
7. PIT GRATE TO BE 'WELDLOK' GULLY GRATE GG 78-50 OR APPROVED EQUIVALENT.
8. DURING INSTALLATION OF GRATE AND FRAME CONTRACTOR IS TO ENSURE CLEARANCE BETWEEN LINTEL AND OPENED GRATE (REFER TO INSTALLATION TOLERANCE).
9. PROVIDE STEP IRONS AS INDICATED FOR PITS DEEPER THAN 1200.
10. N12 AT 200 CENTRAL MAY BE USED IN LIEU OF MESH. LAP 500 AT CORNERS
11. CONCRETE STRENGTH - UNLESS NOTED OTHERWISE

ELEMENT	f'c MPa (28 DAYS)	SLUMP	MAX AGG SIZE	CEMENT TYPE
PITS	32	80mm	20mm	GP

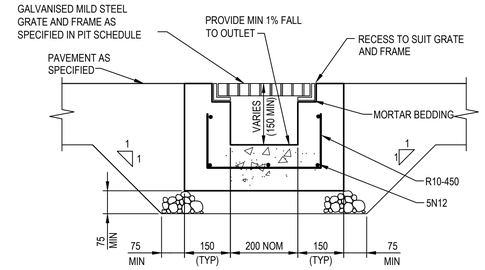
12. COVER - UNLESS NOTED OTHERWISE

ELEMENT	INTERIOR	EXTERIOR
PITS		45mm
SLAB TOP	45mm	45mm
SLAB BOTTOM	45mm	45mm
BEAM TOP		
BEAM BOTTOM		
BEAM SIDE		
COLUMNS		



SUBSOIL IN PAVED AREAS

SCALE 1:10



GRATED DRAIN (TD)

SCALE 1:10

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

0 100 200 400 600 800 1000mm
1 : 10 @ A1 1 : 20 @ A3
0 500 1000 1500 2000mm
1 : 20 @ A1 1 : 40 @ A3
0 2 4 6 8 10m
1 : 100 @ A1 1 : 200 @ A3

Client: WALUYA PTY LTD

Scales	AS SHOWN
Grid	MGA56
Height Datum	AHD
Drawn	CK
Designed	CK
Checked	GJ
Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: STORMWATER DRAINAGE DETAILS SHEET 4

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Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC028

Issue: A

100mm on Original

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LEGEND

PAVEMENT TYPE 1
HARD STAND
TBC AT DETAILED DESIGN STAGE

PAVEMENT TYPE 2
LANDSCAPE
REFER LANDSCAPE DRAWINGS FOR DETAILS

PAVEMENT TYPE 3
ROAD PAVEMENT RESTORATION
TBC AT DETAILED DESIGN STAGE

PAVEMENT TYPE 1
INDUSTRIAL VEHICULAR CROSSING
REFER CCC STD DWG SD0506 FOR DETAILS

ERINA STREET WEST

YOUNG STREET

FAUNCE STREET WEST

PROPOSED
TRANSPORT DEPOT

RACECOURSE ROAD

RACECOURSE ROAD

FAUNCE STREET WEST

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

100mm on Original

Bar Scales

0 10 20 30 40m

1 : 400 @ A1

Client
WALUYA PTY LTD

Scales	1:400	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project
TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title
PAVEMENT
PLAN

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ABN 96 130 882 405

Status
FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.
22-1063-DAC031

Issue
A

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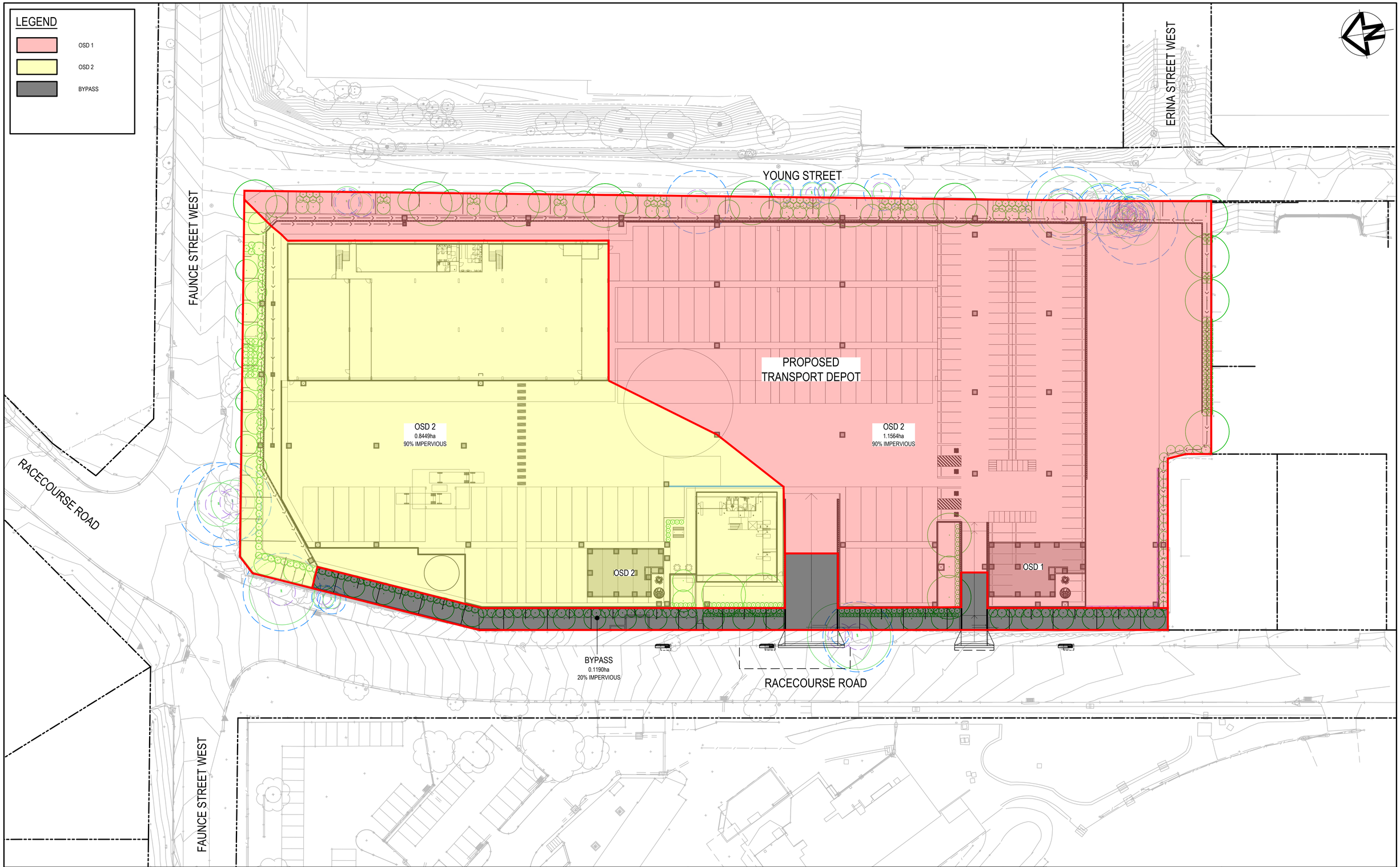

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

100mm on Original

Bar Scales

0 10 20 30 40m

1 : 400 @ A1

Client

WALUYA PTY LTD

Scales	1:400	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project

TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title

STORMWATER DRAINAGE
OSD CATCHMENT
PLAN

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Status

FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.

22-1063-DAC051

Issue

A

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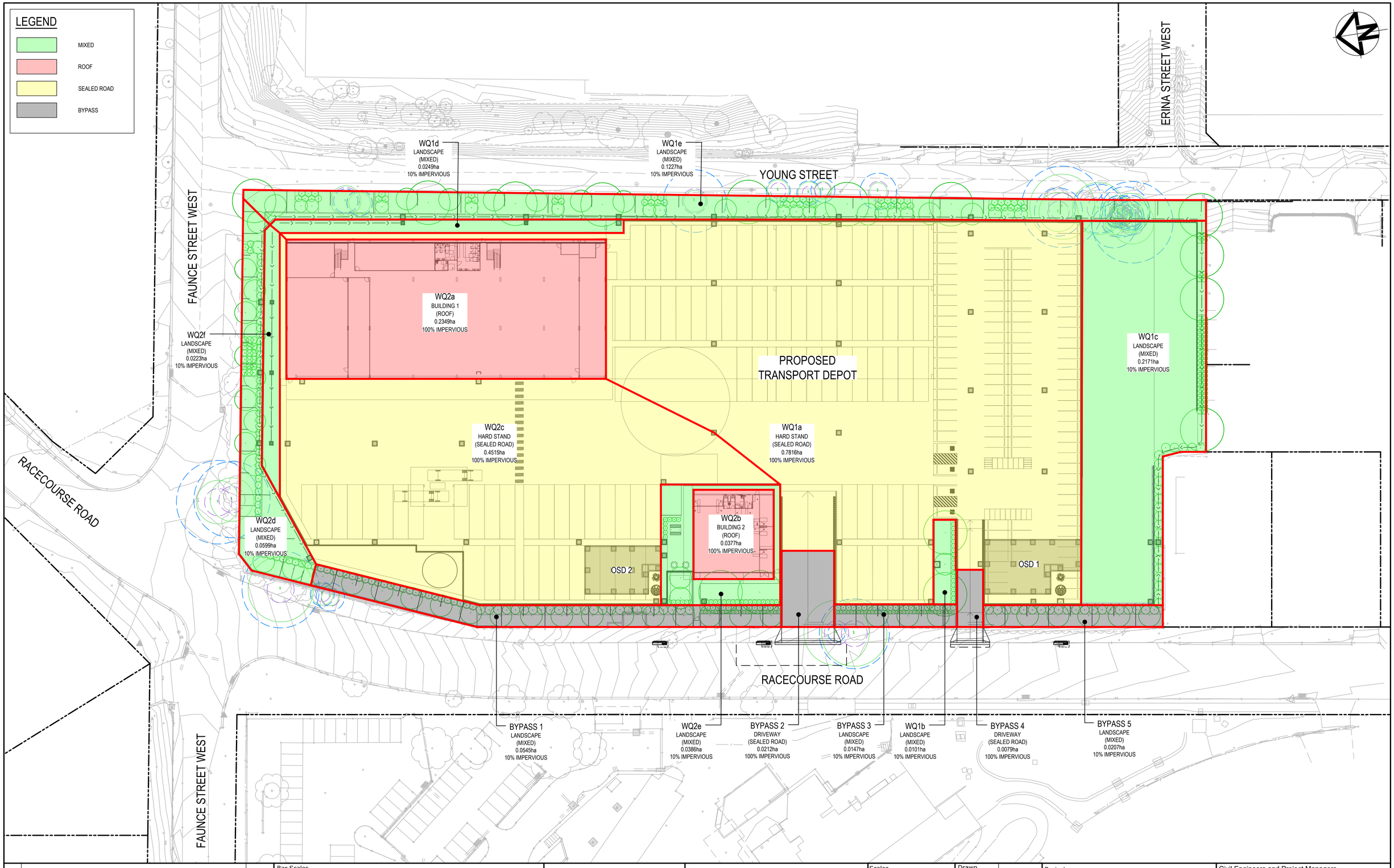

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

0 10 20 30 40m

1 : 400 @ A1

Client

WALUYA PTY LTD

Scales	1:400	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project

TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title

STORMWATER DRAINAGE
MUSIC CATCHMENT
PLAN

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ABN 96 130 882 405

Status

FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.

22-1063-DAC052

Issue

A

100mm on Original

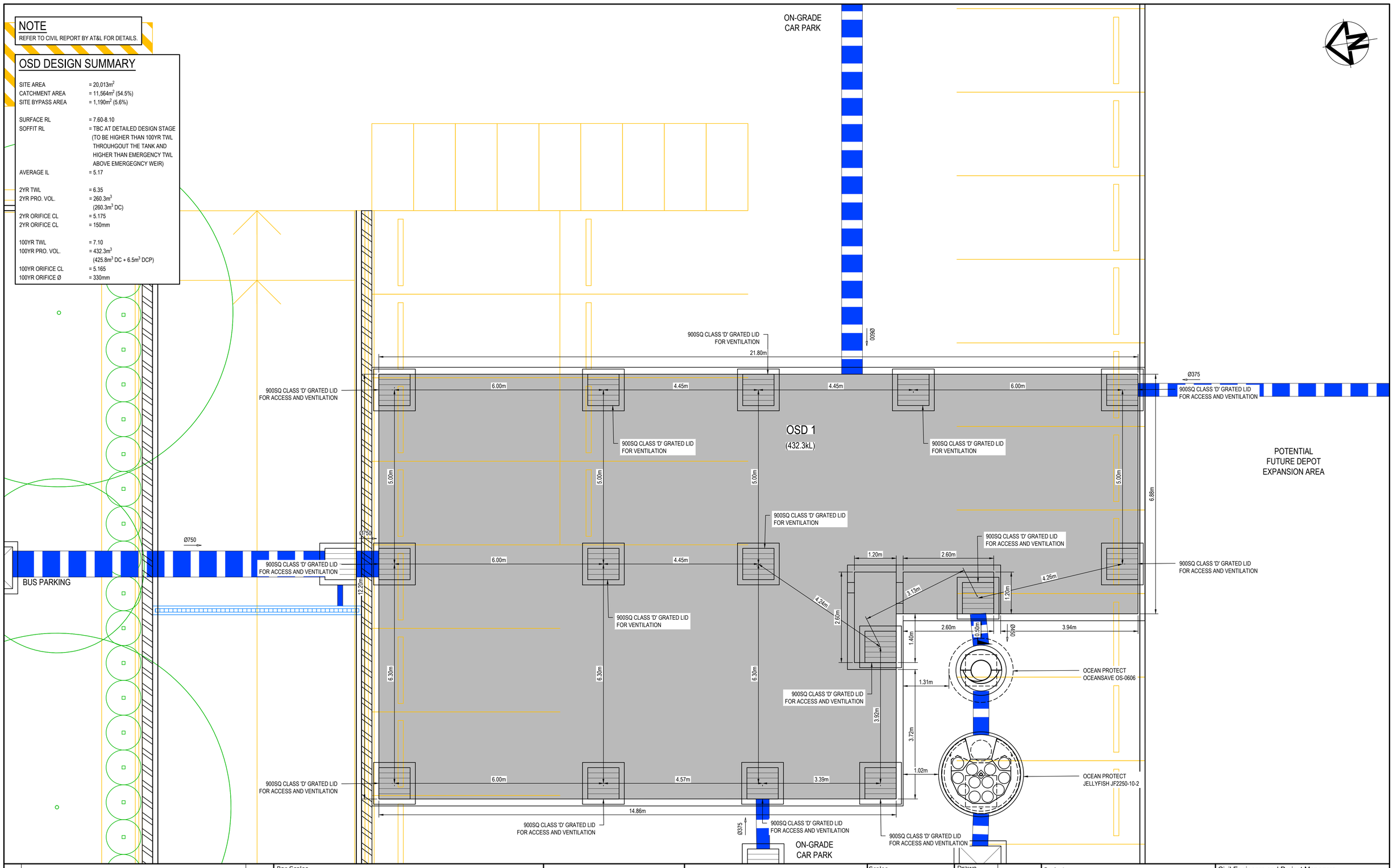
F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC052.dwg

NOTE

REFER TO CIVIL REPORT BY AT&L FOR DETAILS.

OSD DESIGN SUMMARY

SITE AREA	= 20,013m^2
CATCHMENT AREA	= 11,564m^2 (54.5%)
SITE BYPASS AREA	= 1,190m^2 (5.6%)
SURFACE RL	= 7.60-8.10
SOFFIT RL	= TBC AT DETAILED DESIGN STAGE (TO BE HIGHER THAN 100YR TWL THROUHGOUT THE TANK AND HIGHER THAN EMERGENCY TWL ABOVE EMERGEGNCY WEIR)
AVERAGE IL	= 5.17
2YR TWL	= 6.35
2YR PRO. VOL.	= 260.3m^3 (260.3m^3 DC)
2YR ORIFICE CL	= 5.175
2YR ORIFICE CL	= 150mm
100YR TWL	= 7.10
100YR PRO. VOL.	= 432.3m^3 (425.8m^3 DC + 6.5m^3 DCP)
100YR ORIFICE CL	= 5.165
100YR ORIFICE Ø	= 330mm



Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

0 1 2 3 4 5m

1 : 50 @ A1 1 : 100 @ A3

Client

WALUYA PTY LTD

Scales	1:50
Grid	MGA56
Height Datum	AHD
Drawn	CK
Designed	CK
Checked	GJ
Approved	AT

Project

TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title

STORMWATER DRAINAGE
OSD 1
ROOF PLAN

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www.atl.net.au
ABN 96 130 882 405

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC053

Issue: A

100mm on Original

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC053.dwg

NOTE

REFER TO CIVIL REPORT BY AT&L FOR DETAILS.

OSD DESIGN SUMMARY

SITE AREA	= 20,013m^2
CATCHMENT AREA	= 11,564m^2 (54.5%)
SITE BYPASS AREA	= 1,190m^2 (5.6%)
SURFACE RL	= 7.60-8.10
SOFFIT RL	= TBC AT DETAILED DESIGN STAGE (TO BE HIGHER THAN 100YR TWL THROUHGOUT THE TANK AND HIGHER THAN EMERGENCY TWL ABOVE EMERGEGNCY WEIR)
AVERAGE IL	= 5.17
2YR TWL	= 6.35
2YR PRO. VOL.	= 260.3m^3 (260.3m^3 DC)
2YR ORIFICE CL	= 5.175
2YR ORIFICE CL	= 150mm
100YR TWL	= 7.10
100YR PRO. VOL.	= 432.3m^3 (425.8m^3 DC + 6.5m^3 DCP)
100YR ORIFICE CL	= 5.165
100YR ORIFICE Ø	= 330mm

ON-GRADE CAR PARK

BUS PARKING

Ø750

Ø750

12.20m

21.80m

0600

F 5.24

F 5.21

Ø375

OSD 1

(432.3kL)

DETENTION CHAMBER 220.6m^2

1.0%

100YR ORIFICE PLATE (REFER DETAIL)

TRASH SCREEN (REFER DETAIL)

1200(L) x 1200(W) x 200(D) SUMP

OUTLET CHAMBER 3.1m^2

DENOTES WEIR WALL (TYP.)

DENOTES FULL HEIGHT WALL (TYP.)

6.88m

1.20m

2.60m

F 5.10

F 5.15

2YR ORIFICE PLATE (REFER DETAIL)

TRASH SCREEN (REFER DETAIL)

900(L) x 900(W) x 200(D) SUMP

TOW 6.35

TOW 7.10

F 4.90

F 4.80

F 5.02

F 5.00

F 5.17

2.80m

1.20m

DCP 3.1m^2

1.40m

0.50m

Ø150

3.94m

F 5.12

F 5.14

1.31m

OCEAN PROTECT OCEANSAVE OS-0606

3.72m

1.02m

OCEAN PROTECT JELLYFISH JF2250-10-2

STEP IRON @ 300 CTRS (TYP.)

F 5.16

14.86m

Ø375

ON-GRADE CAR PARK

POTENTIAL FUTURE DEPOT EXPANSION AREA

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

100mm on Original

Bar Scales

0 1 2 3 4 5m

1 : 50 @ A1 1 : 100 @ A3

Client

WALUYA PTY LTD

Scales	1:50	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project

TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title

STORMWATER DRAINAGE
OSD 1
BASE PLAN

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ABN 96 130 882 405

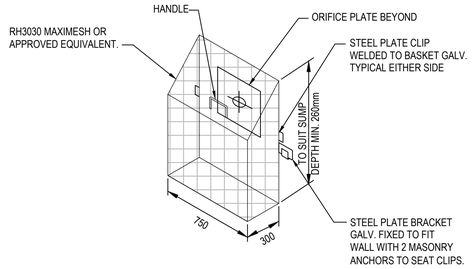
Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC054

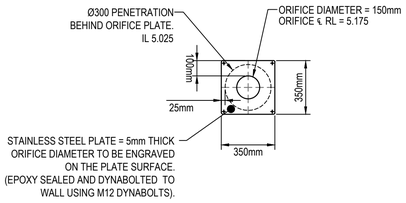
Issue: A

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC054.dwg



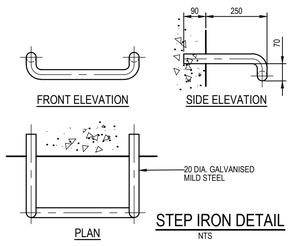
TRASH SCREEN DETAIL

N.T.S



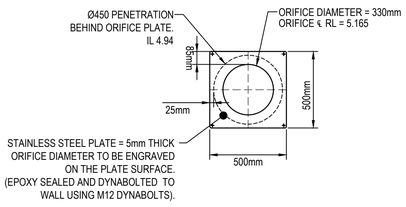
OSD 1 - 2YR ORIFICE PLATE DETAIL

1 : 20



STEP IRON DETAIL

NTS



OSD 1 - 100YR ORIFICE PLATE DETAIL

1 : 20

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

100mm on Original

Bar Scales

0 500 1000 1500 2000mm

1 : 20 @ A1 1 : 40 @ A3

Client: WALUYA PTY LTD

Scales: AS SHOWN

Grid: MGA56

Height Datum: AHD

Drawn	CK
Designed	CK
Checked	GJ
Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: STORMWATER DRAINAGE
OSD 1
SECTIONS AND DETAILS

Civil Engineers and Project Managers
at&l
Level 7, 153 Walker Street
North Sydney
NSW 2060
P 02 9439 1777
E info@atl.net.au
www.atl.net.au
ABN 96 130 882 405

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC055

Issue: A

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC055.dwg

NOTE

REFER TO CIVIL REPORT BY AT&L FOR DETAILS.

OSD DESIGN SUMMARY

SITE AREA	= 20,013m^2
CATCHMENT AREA	= 8,449m^2 (39.8%)
SITE BYPASS AREA	= 1,190m^2 (5.6%)
SURFACE RL	= 8.10-8.30
SOFFIT RL	= TBC AT DETAILED DESIGN STAGE (TO BE HIGHER THAN 100YR TWL THROUHGOUT THE TANK AND HIGHER THAN EMERGENCY TWL ABOVE EMERGEGNCY WEIR)
AVERAGE IL	= 6.17
2YR TWL	= 7.35
2YR PRO. VOL.	= 188.8m^3 (188.8m^3 DC)
2YR ORIFICE CL	= 6.20
2YR ORIFICE CL	= 200mm
100YR TWL	= 7.60
100YR PRO. VOL.	= 233.7m^3 (228.8m^3 DC + 4.9m^3 DCP)
100YR ORIFICE CL	= 6.265
100YR ORIFICE Ø	= 530mm

BUS PARKING

BUS PARKING

PROPOSED OFFICE
FFL 8.10

900SQ CLASS 'D' GRATED LID FOR ACCESS AND VENTILATION

900SQ CLASS 'D' GRATED LID FOR VENTILATION

OSD 2
(233.7kL)

17.10m
14.30m
10.70m
6.00m
4.20m
3.20m
3.35m
4.90m
4.48m
3.98m
3.92m
3.72m
1.20m
3.14m
2.60m
1.40m
0.50m
0.80m
Ø600

OCEAN PROTECT
OCEANSAVE OS-0606

OCEAN PROTECT
JELLYFISH JF2250-8-2

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

0 1 2 3 4 5m

1 : 50 @ A1 1 : 100 @ A3

Client

WALUYA PTY LTD

Scales	1:50
Grid	MGA56
Height Datum	AHD
Drawn	CK
Designed	CK
Checked	GJ
Approved	AT

Project

TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title

STORMWATER DRAINAGE
OSD 2
ROOF PLAN

Civil Engineers and Project Managers
at&l
Level 7, 153 Walker Street
North Sydney
NSW 2060
P 02 9439 1777
E info@atl.net.au
www.atl.net.au
ABN 96 130 882 405

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC056

Issue: A

100mm on Original

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC056.dwg

NOTE

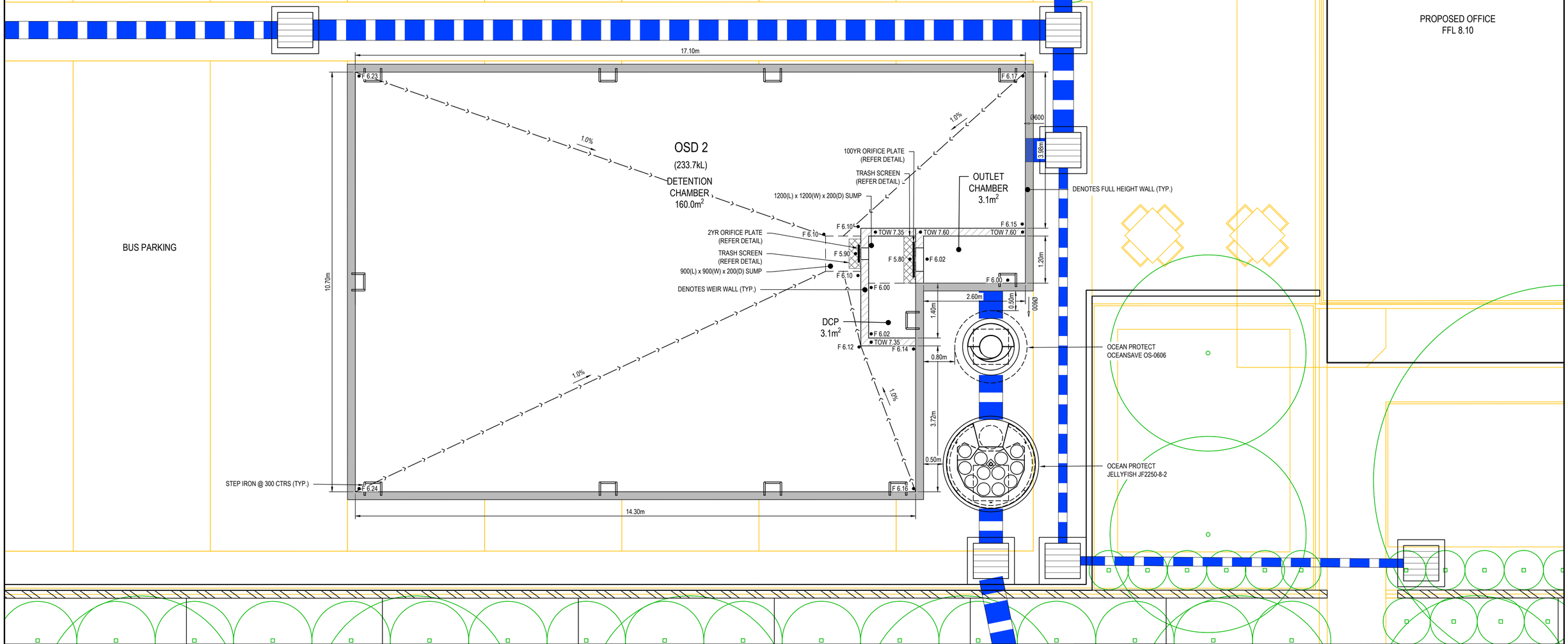
REFER TO CIVIL REPORT BY AT&L FOR DETAILS.

OSD DESIGN SUMMARY

SITE AREA	= 20,013m^2
CATCHMENT AREA	= 8,449m^2 (39.8%)
SITE BYPASS AREA	= 1,190m^2 (5.6%)
SURFACE RL	= 8.10-8.30
SOFFIT RL	= TBC AT DETAILED DESIGN STAGE (TO BE HIGHER THAN 100YR TWL THROUHGOUT THE TANK AND HIGHER THAN EMERGENCY TWL ABOVE EMERGEGNCY WEIR)
AVERAGE IL	= 6.17
2YR TWL	= 7.35
2YR PRO. VOL.	= 188.8m^3 (188.8m^3 DC)
2YR ORIFICE CL	= 6.20
2YR ORIFICE CL	= 200mm
100YR TWL	= 7.60
100YR PRO. VOL.	= 233.7m^3 (228.8m^3 DC + 4.9m^3 DCP)
100YR ORIFICE CL	= 6.265
100YR ORIFICE Ø	= 530mm

BUS PARKING

PROPOSED OFFICE
FFL 8.10



Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

0 1 2 3 4 5m

1 : 50 @ A1 1 : 100 @ A3

Client

WALUYA PTY LTD

Scales	1:50	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project

TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title

STORMWATER DRAINAGE
OSD 2
BASE PLAN

Civil Engineers and Project Managers
at&l
Level 7, 153 Walker Street
North Sydney
NSW 2060
P 02 9439 1777
E info@atl.net.au
www.atl.net.au
ABN 96 130 882 405

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

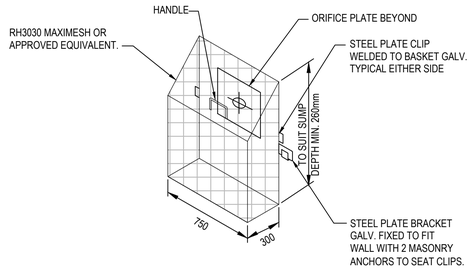
A1

Project - Drawing No.: 22-1063-DAC057

Issue: A

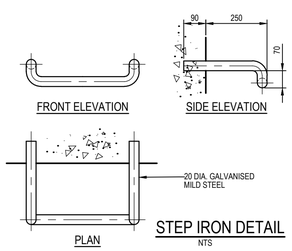
100mm on Original

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC057.dwg



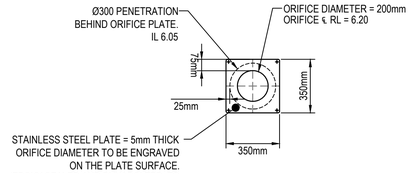
TRASH SCREEN DETAIL

N.T.S



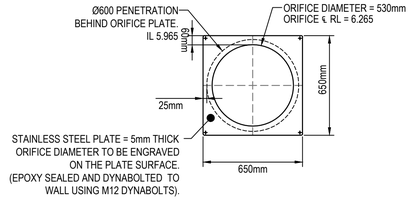
STEP IRON DETAIL

NTS



OSD 2 - 2YR ORIFICE PLATE DETAIL

1 : 20



OSD 2 - 100YR ORIFICE PLATE DETAIL

1 : 20

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

100mm on Original

Bar Scales

0 500 1000 1500 2000mm

1 : 20 @ A1 1 : 40 @ A3

Client: WALUYA PTY LTD

Scales	AS SHOWN	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: STORMWATER DRAINAGE
OSD 2
SECTIONS AND DETAILS

Civil Engineers and Project Managers
at&l
Level 7, 153 Walker Street
North Sydney
NSW 2060
P 02 9439 1777
E info@atl.net.au
www.atl.net.au
ABN 96 130 882 405

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC058

Issue: A

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC058.dwg

LEGEND

- SEDIMENT FENCE (SD 6-8)
- CATCH DRAIN
- BARRIER FENCE
- STRAW BALE FILTER (SD 6-7)
- MESH AND GRAVEL INLET FILTER (SD 6-11)
- GEOTEXTILE INLET (SD 6-12)
- STABILISED SITE ACCESS AND TRUCK WASH DOWN AREA (SD 6-14)
- PROPOSED SITE ACCESS GATE

ERINA STREET WEST

YOUNG STREET

PROVIDE CATCH DRAIN

PROVIDE CATCH DRAIN

FAUNCE STREET WEST

PROVIDE STRAW BALE FILTER

PROPOSED TRANSPORT DEPOT

SITE ACCOMODATION

SITE OFFICE AND SHEDS

STOCKPILE

PROVIDE GEOTEXTILE INLET

INDICATIVE STOCKPILE LOCATION AND SEDIMENT FENCE

RACECOURSE ROAD

PROVIDE CATCH DRAIN

STOCKPILE

PROVIDE GEOTEXTILE INLET ABOVE OSD LIDS

PROVIDE SHAKER GRID OR APPROVED EQUIVALENT

PROVIDE MESH AND GRAVEL INLET FILTER

PROVIDE BARRIER FENCE

PROVIDE SEDIMENT FENCE

PROVIDE GEOTEXTILE INLET ABOVE OSD LIDS

PROVIDE SITE ACCESS GATE

RACECOURSE ROAD

FAUNCE STREET WEST

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

100mm on Original

Bar Scales

0 10 20 30 40m

1 : 400 @ A1

Client

WALUYA PTY LTD

Scales	1:400	Drawn	CK
		Designed	CK
Grid	MGA56	Checked	GJ
Height Datum	AHD	Approved	AT

Project

TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title

EROSION AND SEDIMENT CONTROL PLAN

Civil Engineers and Project Managers
at&l
Level 7, 153 Walker Street
North Sydney
NSW 2060
P 02 9439 1777
E info@atl.net.au
www.atl.net.au
ABN 96 130 882 405

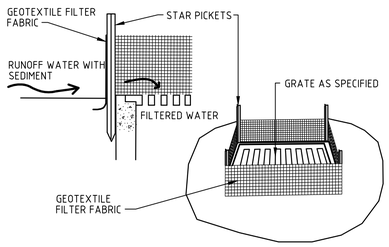
Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

A1

Project - Drawing No.: 22-1063-DAC071

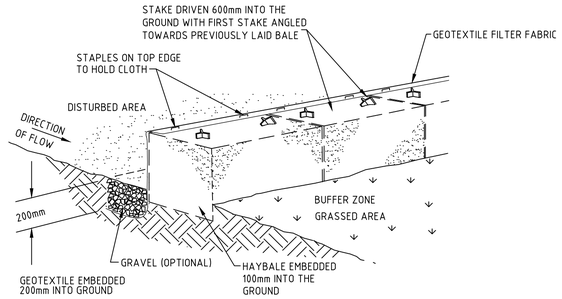
Issue: A

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC071.dwg

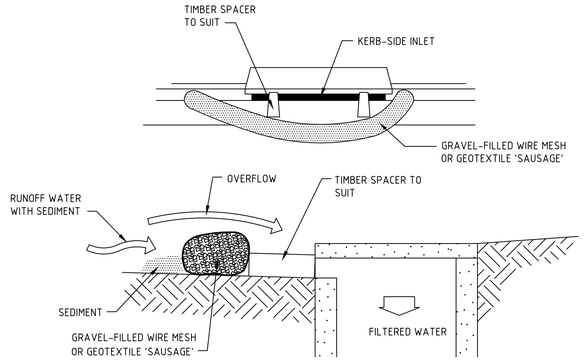


GEOTEXTILE FILTER PIT SURROUND

NTS

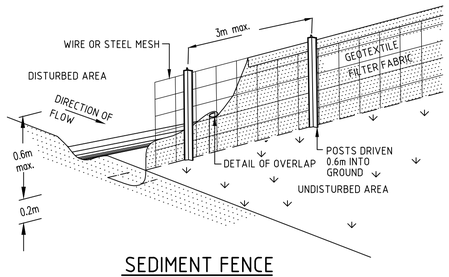


HAYBALE AND GEOTEXTILE SEDIMENT FILTER



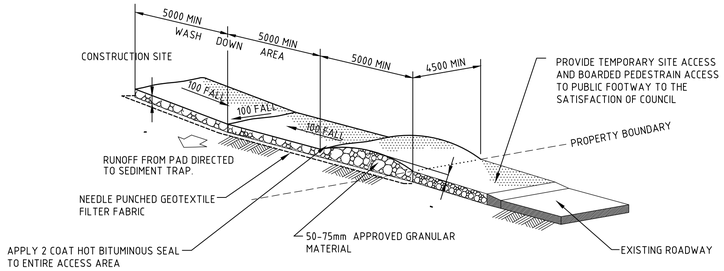
MESH AND GRAVEL INLET FILTER

NTS



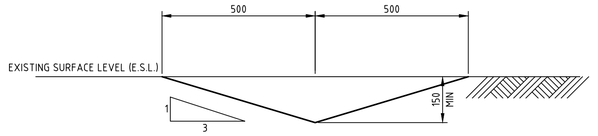
SEDIMENT FENCE

NTS



STABILISED SITE ACCESS AND TRUCK WASH DOWN AREA

NTS



TEMPORARY CATCH DRAIN

(MIN FALL 1%)

SCALE 1:10

Issue	Description	Date
A	ISSUE FOR APPROVAL	10-08-23

Bar Scales

0 100 200 400 600 800 1000mm

1 : 10 @ A1 1 : 20 @ A3

Client: WALUYA PTY LTD

Scales	AS SHOWN
Grid	MGA56
Height Datum	AHD
Drawn	CK
Designed	CK
Checked	GJ
Approved	AT

Project: TRANSPORT DEPORT
7A-11 RACECOURSE RD
5-9 FAUNCE ST & YOUNG ST
WEST GOSFORD

Title: EROSION AND SEDIMENT CONTROL DETAILS

Civil Engineers and Project Managers
at&l
Level 7, 153 Walker Street
North Sydney
NSW 2060
P 02 9439 1777
E info@atl.net.au
www.atl.net.au
ABN 96 130 882 405

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

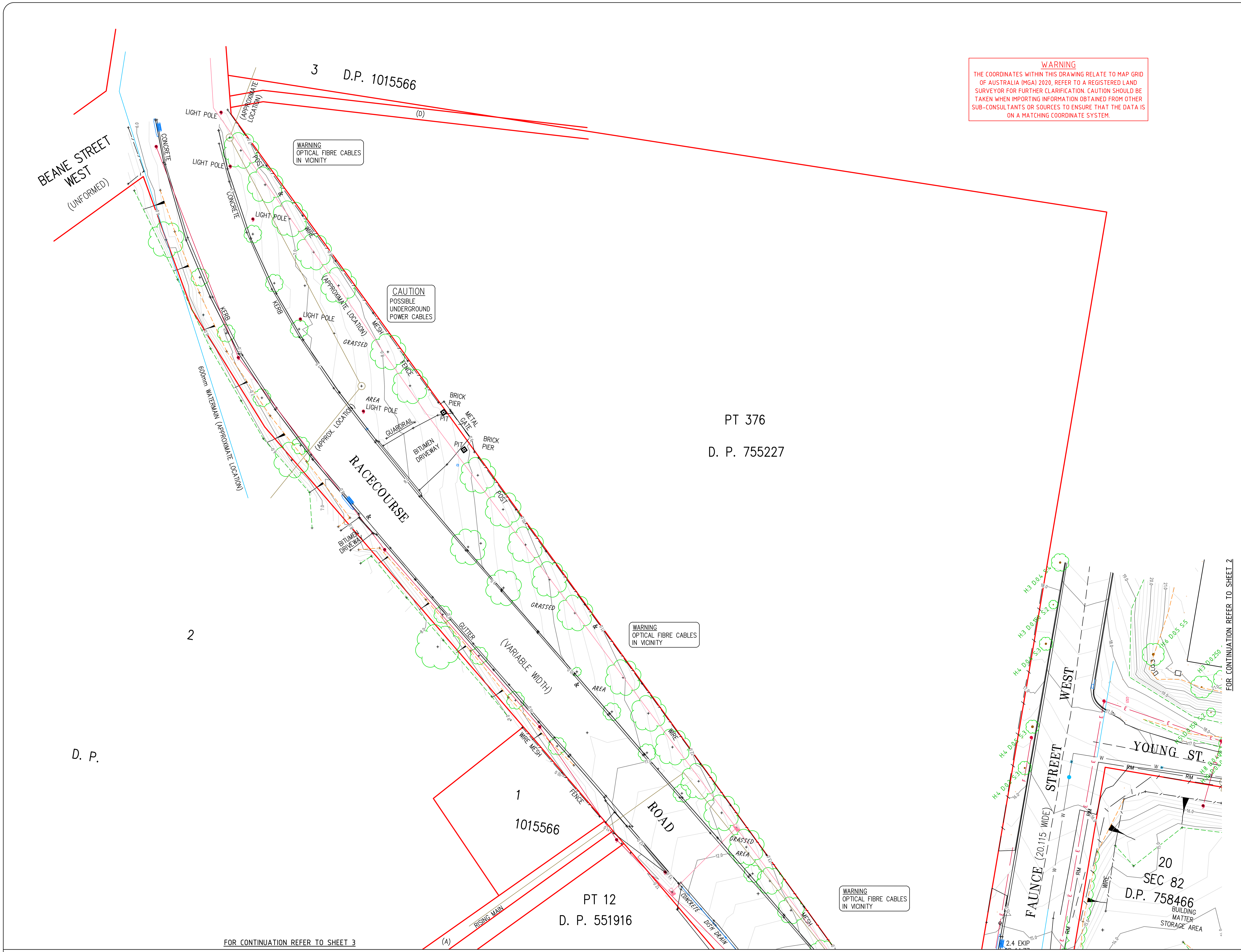
A1

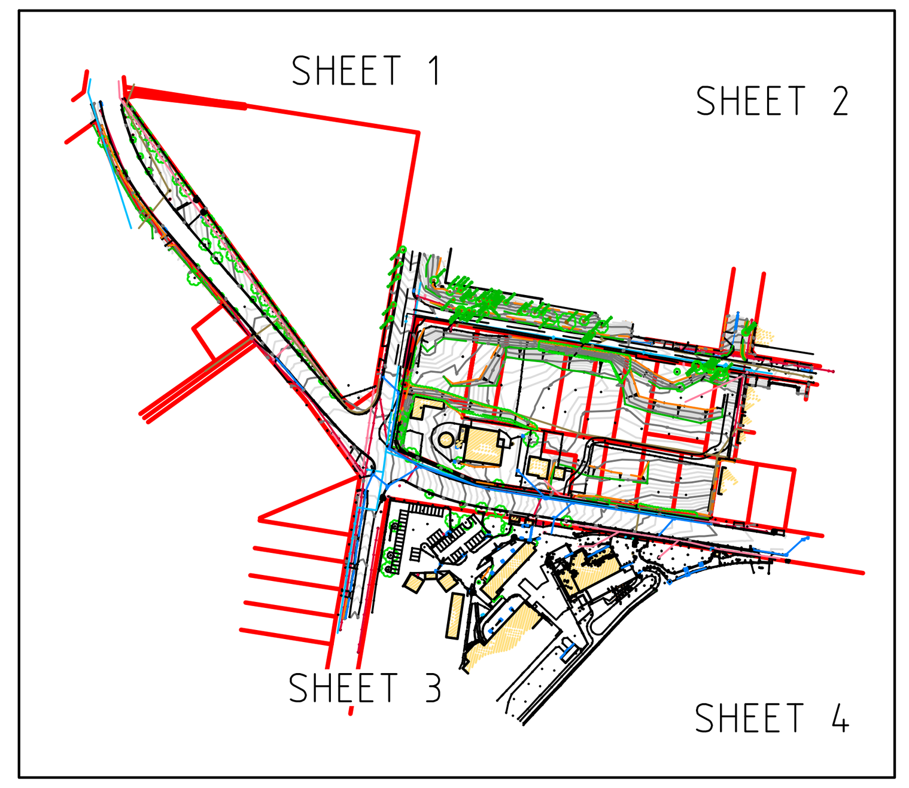
Project - Drawing No.: 22-1063-DAC075

Issue: A

100mm on Original

F:\22-1063 West Gosford\6.0 Drgs\Civil\Final\22-1063-DAC075.dwg





KEY PLAN

LEGEND

- Bench Mark
- Comms Underground
- Comms Pit/Manhole
- Comms Pillar
- Drainage Grated Pit
- Drainage Kerb Inlet Pit
- Electrical Power Pole
- Electrical Underground Cable
- Fence
- Gate
- Road Bollard
- Sewer Manhole
- Sewer Pipe
- Sign Post
- Tree (Height, Trunk Diameter, Spread)
- Water Meter
- Water Tap
- Water Stop Valve
- Water Hydrant
- Bottom of Bank
- Top of Bank

NOTES:

1. HISTORICAL SURVEY DATA USED FROM SURVEY "19881A01L" DATED "23.05.2005".
2. BOUNDARIES ARE NOT FINAL AND FURTHER INVESTIGATION REQUIRED FOR BOUNDARIES IF THEY ARE REQUIRED FOR ANY DESIGN PURPOSES.
3. THESE NOTES AND LEGEND (IF SHOWN) FORM PART OF THE PLAN AND SURVEY AND MUST REMAIN WITH THE PLAN IN ANY REPRODUCTION IN WHOLE OR PART.
4. THE CAD FILE USES METRES AS ITS BASE UNIT AND IS IN A "GROUND" COORDINATE SYSTEM. IF THE SURVEY IS STATED AS MGA, ANY POINT IN THE FILE WILL BE AN APPROXIMATE MGA COORDINATE.
5. SOME SYMBOLS REPRESENTING PHYSICAL STRUCTURES SUCH AS POWER POLES AND PITS ARE DIAGRAMMATIC ONLY AND DO NOT NECESSARILY REPRESENT THE ACTUAL SIZE AND EXTENT OF THESE FEATURES.
6. THE SURVEY INFORMATION SHOWN HERE WAS PREPARED FOR A SPECIFIC PURPOSE FOR THE CLIENT SHOWN. THIS INFORMATION IS NOT INTENDED TO BE USED FOR ANY OTHER PURPOSE OR BY ANYONE NOT AUTHORISED BY THIS CLIENT.
7. BOUNDARY DIMENSIONS AND AREAS HAVE BEEN DETERMINED BY CURRENT CADASTRAL SURVEY AND THE BOUNDARY AND EASEMENT LINES IN THE ELECTRONIC FILE HAVE BEEN INCLUDED USING THOSE SURVEYED DIMENSIONS. THE TITLE DIMENSIONS SHOWN ON THE HARD COPY PLAN TAKE PRECEDENCE OVER THE LINES IN THE ELECTRONIC FILE.
8. THE TITLE/S TO THE SUBJECT LAND HAS BEEN REVIEWED AND THE POSITION OF ALL EASEMENTS AFFECTING THE LAND ARE SHOWN. THE TERMS OF ANY EASEMENT, RESTRICTION ON THE USE OF LAND OR COVENANT AFFECTING THE LAND HAVE NOT BEEN INVESTIGATED. LEASES AND OTHER NOTATIONS MAY ALSO EXIST WHICH AFFECT THE LAND.
9. UNDERGROUND SERVICES OTHER THAN THOSE SHOWN HAVE NOT BEEN INVESTIGATED. PRIOR TO DEMOLITION, EXCAVATION OR CONSTRUCTION WORK ON THE SITE, THE RELEVANT SERVICE AUTHORITY SHOULD BE CONTACTED TO ESTABLISH DETAILED LOCATION AND DEPTH.
10. THIS SURVEY IS LIMITED TO IMPROVEMENTS AND OTHER DETAIL WHICH WERE VISIBLE AND ACCESSIBLE AT THE TIME OF SURVEY. THE LOCATION OF DETAIL SUCH AS PRIVATE UNDERGROUND SERVICE LINES AND BUILDING FOUNDATIONS WITHIN THE SITE IS UNKNOWN.
11. THE COORDINATES WITHIN THIS DRAWING RELATE TO THE DATUM SHOWN IN THE TITLE BLOCK. REFER TO A REGISTERED LAND SURVEYOR FOR FURTHER CLARIFICATION. CAUTION SHOULD BE TAKEN WHEN IMPORTING INFORMATION OBTAINED FROM OTHER SUB-CONSULTANTS OR SOURCES TO ENSURE THAT THE DATA IS ON A MATCHING COORDINATE SYSTEM.
12. CONTOURS SHOWN HEREON DEPICT THE GENERAL TOPOGRAPHY ONLY. EXCEPT AT SPOT LEVELS SHOWN, THEY DO NOT NECESSARILY REPRESENT THE EXACT LEVEL AT ANY PARTICULAR POINT.
13. ANY GUTTER, RIDGE, ROOF AND WINDOW DETAILS AND LEVELS SHOWN HAVE BEEN OBTAINED VIA INDIRECT SURVEY METHODS WHERE VISIBLE FROM GROUND LEVEL AND ARE SHOWN ON THIS PLAN IN THEIR APPROXIMATE LOCATION FOR THE PURPOSE OF GENERAL SITE ANALYSIS ONLY.
14. ANY TREE CANOPIES, TRUNK DIAMETERS AND HEIGHTS SHOWN ARE APPROXIMATE ONLY AND SHOULD BE VERIFIED BY FURTHER SURVEY WORKS IF CRITICAL TO DESIGN OR SITE ANALYSIS.
15. SMALL TREES, SHRUBS, GARDEN FEATURES, PATHWAYS AND OTHER MINOR DETAIL MAY NOT BE SHOWN ON THIS PLAN, FOR THE PURPOSES OF THIS SURVEY.

ORIGIN OF LEVELS: PM 19232 R.L. 14.428 (AHD)

VER	BY	AMENDMENTS	DATE
A	M.W.	NEW DETAIL ADDED TO EXISTING SURVEY	08.12.22
B	M.W.	ADDITIONAL DRAINAGE ADDED	21.07.23
C			
D			
E			
F			
G			

- THE POSITION OF SERVICES SHOWN ON THIS DRAWING ARE INDICATIVE ONLY AND HAVE BEEN PLOTTED FROM PLANS AND DRAWINGS SUPPLIED BY RELEVANT AUTHORITIES.
- SERVICE AUTHORITY PITS, MANHOLES, POLES, MARKER POSTS, ETC., WHERE SIGHTED AT TIME OF SURVEY, HAVE BEEN LOCATED. THE SURVEY DOES NOT INCLUDE INVESTIGATION OR LOCATION OF UNDERGROUND INFRASTRUCTURE.
- SERVICES INFORMATION SHOWN ON THIS DRAWING HAS BEEN OBTAINED THROUGH A DIAL BEFORE YOU DIG SEARCH AND IS VALID FOR THE PERIOD OF TIME FROM THE DATE OF ISSUE NOMINATED BY THE AUTHORITY.
- PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON OR ADJACENT TO THE SITE IT IS THE RESPONSIBILITY OF THE DEVELOPER AND CONTRACTORS TO APPLY FOR AND OBTAIN UP TO DATE PLANS THROUGH A NEW DIAL BEFORE YOU DIG SEARCH AND TO CONTACT ALL THE RELEVANT AUTHORITIES TO ESTABLISH AND CONFIRM THE DETAILED LOCATION AND DEPTH OF ALL UNDERGROUND SERVICES.

www.dialbeforeyoudig.com.au DIAL 1100 BEFORE YOU DIG

CLIENT:
BUSWAYS GROUP PTY LTD

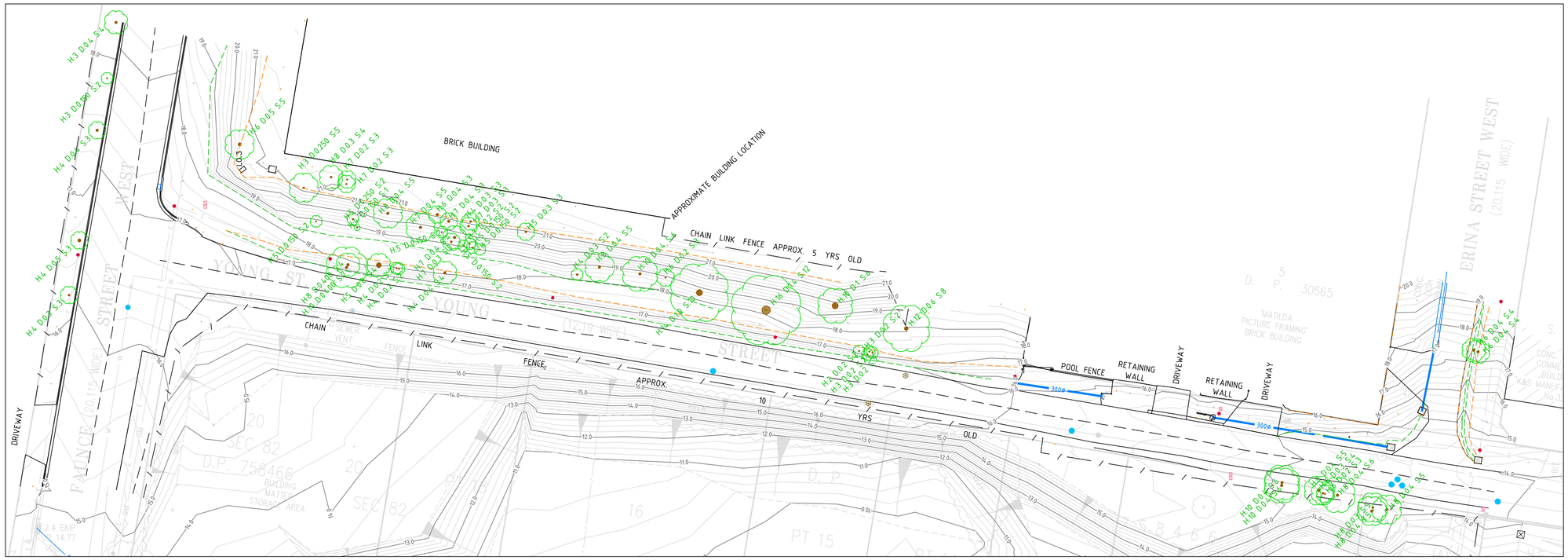
Beveridge Williams
Land Development Consultants
Registered Surveyors
Central Coast (02) 4351 2233 www.beveridgewilliams.com.au

DETAILS:
DETAIL SURVEY PLAN FOR DEVELOPMENT APPLICATION PURPOSES
RACECOURSE ROAD
WEST GOSFORD

ORIGINAL SCALE 1:400 SHEET SIZE A1
CAD REFERENCE: 2202624-DET-001-B
0 8 16 24
SCALE ON ORIGINAL DRAWING AT 1:400

SURVEYOR:	J.C. & P.K.
DRAWN:	C.A. & M.W.
CHECKED:	R.P.
SURVEY DATE:	23.09.05 & 06.12.22
VERTICAL DATUM:	AHD
HORIZONTAL DATUM:	MGA

PROJECT No. 2202624
DRAWING REF. DET-001
VERSION B
SHEET 1 OF 4



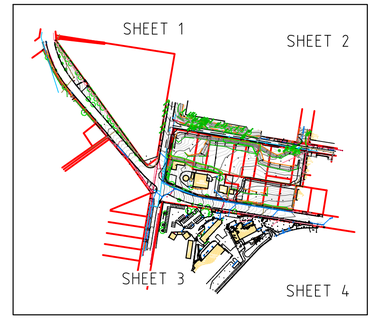
DETAIL SHOWING ADDITION SURVEY DECEMBER 2022

SCALE: 1:400

FOR CONTINUATION REFER TO SHEET 1

FOR CONTINUATION REFER TO SHEET 4

MGA



KEY PLAN

LEGEND

- Bench Mark
- Comms Underground (UC)
- Comms Pit/Manhole
- Comms Pillar
- Drainage Grated Pit
- Drainage Kerb Inlet Pit
- Electrical Power Pole
- Electrical Underground Cable (UE)
- Fence
- Gate
- Road Bollard
- Sewer Manhole
- Sewer Pipe (S)
- Sign Post
- Tree (Height, Trunk Diameter, Spread)
- Water Meter
- Water Tap
- Water Stop Valve
- Water Hydrant
- Bottom of Bank
- Top of Bank

NOTES:

1. HISTORICAL SURVEY DATA USED FROM SURVEY "19881A01L" DATED "23.05.2005".
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ORIGIN OF LEVELS: PM 19232
R.L. 14.428 (AHD)

VER	BY	AMENDMENTS	DATE
A	M.W.	NEW DETAIL ADDED TO EXISTING SURVEY	08.12.22
B	M.W.	ADDITIONAL DRAINAGE ADDED	21.07.23
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www.dialbeforeyoudig.com.au DIAL 1100 BEFORE YOU DIG

CLIENT: BUSWAYS GROUP PTY LTD

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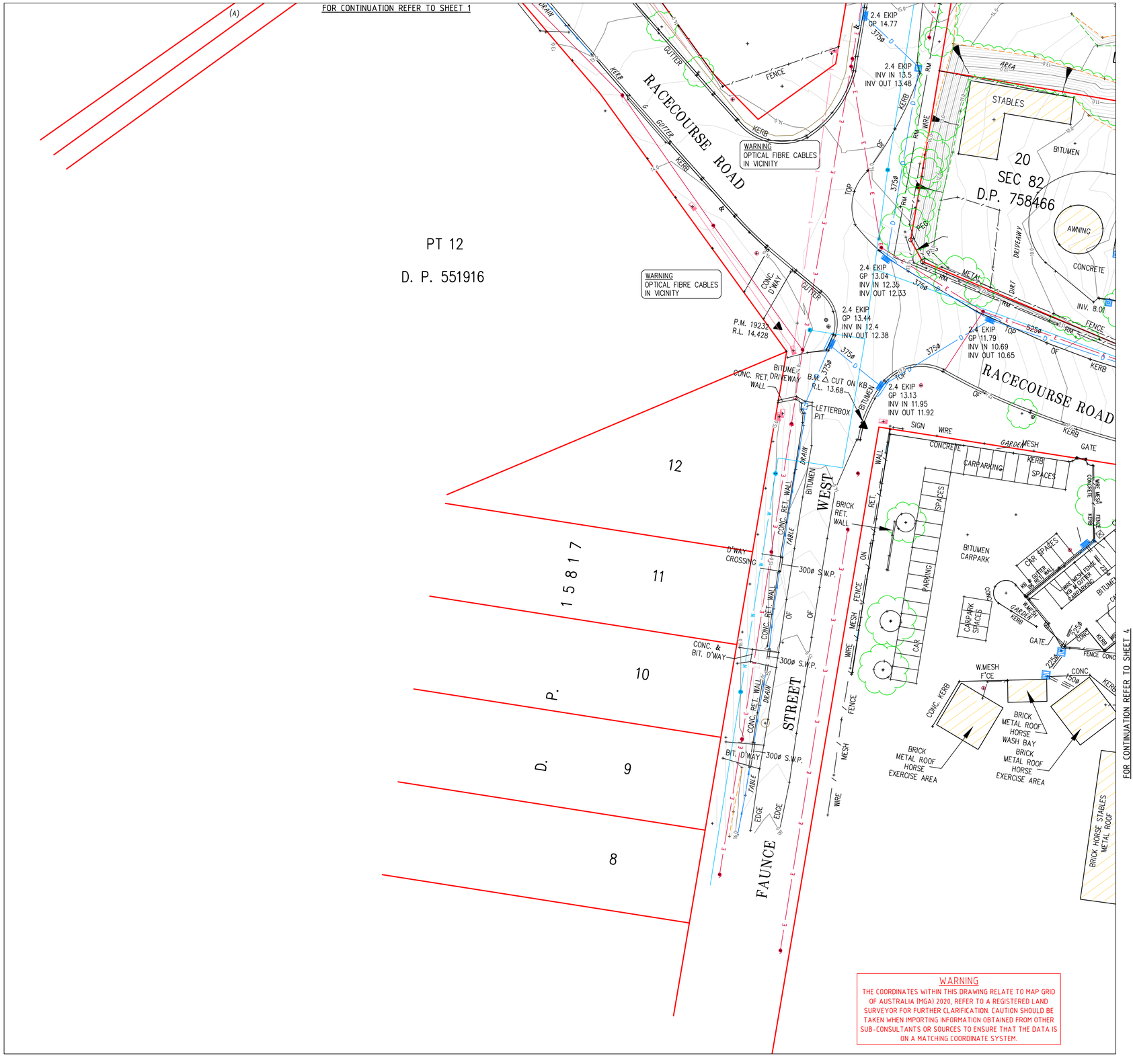
DETAILS:
DETAIL SURVEY PLAN FOR
DEVELOPMENT APPLICATION PURPOSES
RACECOURSE ROAD
WEST GOSFORD

ORIGINAL
SCALE 1:400 SHEET SIZE A1
CAD REFERENCE: 2202624-DET-001-B
0 8 16 24
SCALE ON ORIGINAL DRAWING AT 1:400

SURVEYOR:	J.C. & P.K.
DRAWN:	C.A. & M.W.
CHECKED:	R.P.
SURVEY DATE:	23.09.05 & 06.12.22
VERTICAL DATUM:	AHD
HORIZONTAL DATUM:	MGA

PROJECT No. 2202624
DRAWING REF. DET-001
VERSION B
SHEET 2 OF 4



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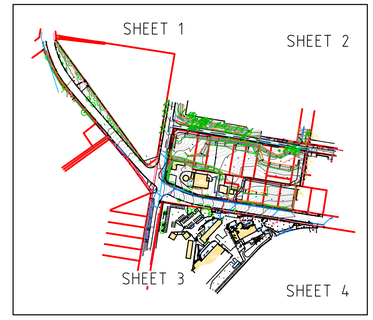

KEY PLAN

LEGEND

- Bench Mark
- Comms Underground (UC)
- Comms Pit/Manhole
- Comms Pillar
- Drainage Grated Pit
- Drainage Kerb Inlet Pit
- Electrical Power Pole
- Electrical Underground Cable (UE)
- Fence
- Gate
- Road Bollard
- Sewer Manhole
- Sewer Pipe (S)
- Sign Post
- Tree (Height, Trunk Diameter, Spread)
- Water Meter
- Water Tap
- Water Stop Valve
- Water Hydrant
- Bottom of Bank
- Top of Bank

NOTES:

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DETAILS:
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ORIGINAL
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PROJECT No. 2202624
DRAWING REF. DET-001
VERSION B
SHEET 3 OF 4

FOR CONTINUATION REFER TO SHEET 2

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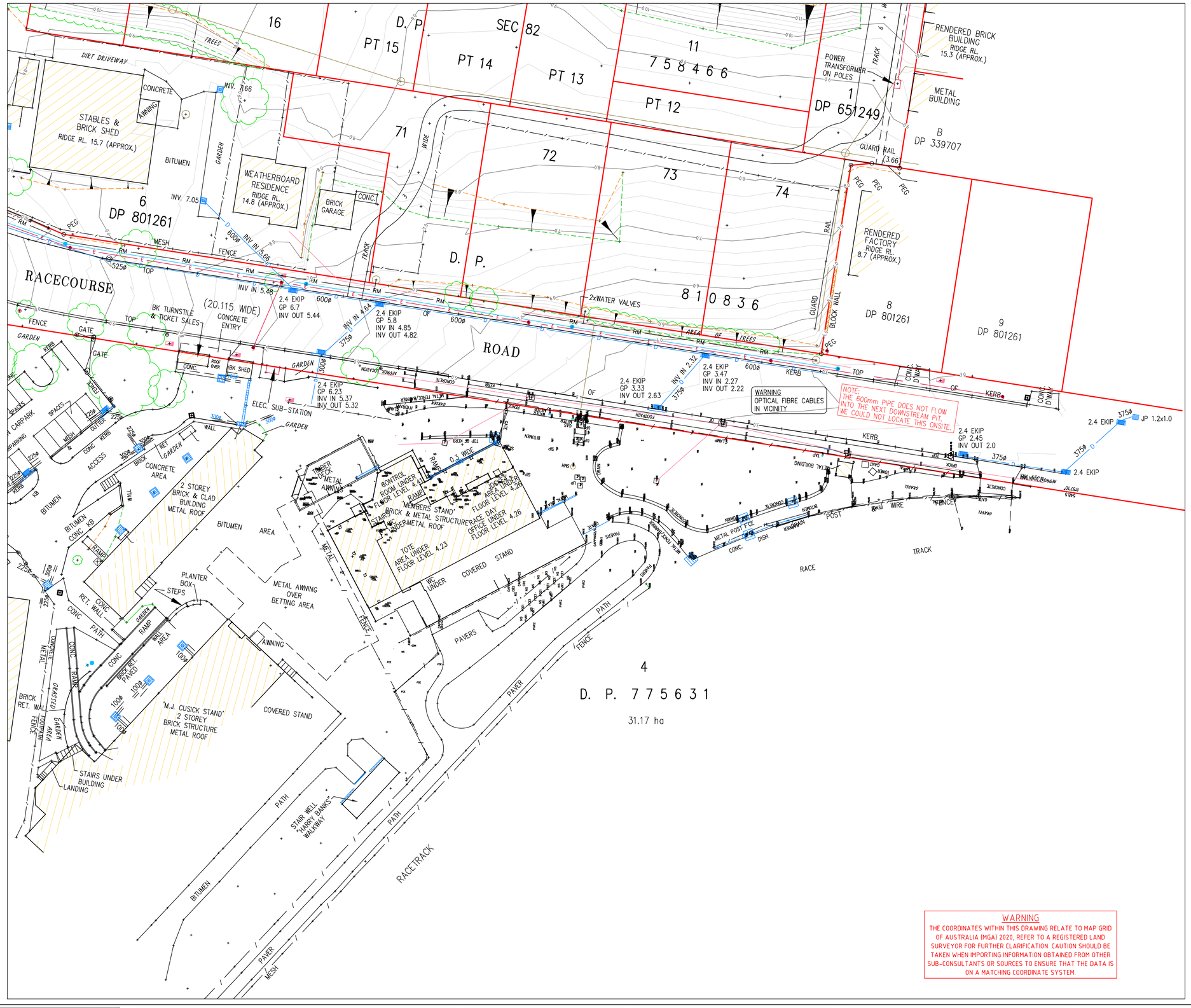

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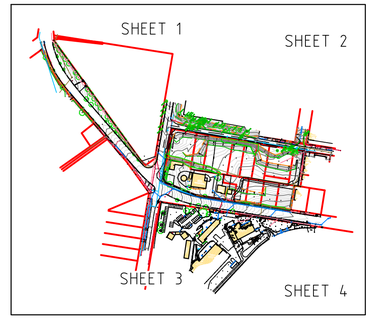

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SHEET 4 OF 4