

# Ordinary Council Meeting

## Notice of Meeting | 14th December 2023


I respectfully advise that the ORDINARY COUNCIL MEETING will be held in the Council Chambers, 10 Jennaberring Road, Quairading, WA on 14th December 2023 commencing at 2.00pm

Public are able to attend this meeting.

Public questions may be submitted electronically to this meeting. Please click on the link for further information <https://www.quairading.wa.gov.au/documents/1150/public-question-time-form>

Alternatively, Questions may be asked in Person.

MEETING AGENDA ATTACHED



**Natalie Ness**  
CHIEF EXECUTIVE OFFICER

Date: 08 December 2023

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### Disclaimer

Members of the public should note that in any discussion regarding any planning or other application that any statement or intimation of approval made by any member or officer of the Shire of Quairading during the course of any meeting is not intended to be and is not to be taken as notice of approval from the Shire of Quairading. No action should be taken on any item discussed at a Council meeting prior to written advice on the resolution of the Council being received.

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**ITEM 14 MATTERS FOR CONSIDERATION – WORKS & SERVICES****14.3 Light Industrial Area, Rear Lot/s**

**Responsible Officer** Natalie Ness, Chief Executive Officer

**Reporting Officer** Sarah Caporn, Executive Manager, Works & Services

**Attachments** 1. Review of Stage 2 of Quairaidng LIA by Porter Engineering  

**Voting Requirements** Simple Majority

**Disclosure of Interest** Reporting Officer: Nil

Responsible Officer: Nil

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**OFFICER RECOMMENDATIONS**

1. That Council authorise the CEO to proceed with Stage 2 of the Light Industrial Area development for the purposes of connecting utilities to proposed rear Lot to meet the WA Planning Commission Planning Application expiry of July 2024.
2. That Council defer a decision on the final design of the Lots until the next meeting in February 2024.

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**IN BRIEF**

Council has considered several different iterations of how best to progress the Light Industrial Area development. Officers have sought further information from the initial consultants regarding the Stage 2 development.

The main cost was a road connection from Hinkley Way to the York-Merredin Road.

Several options are provided with different estimated development costs.

Although Option 3 is close to what Council would be considering, final designs and costings will be developed and presented to Council at their next meeting.

Regardless of the final design, should Council wish to proceed with Stage 2, the Shire needs to proceed with an application to Western Power and Water Corporation to extend utility access to the proposed rear Lot prior to the Planning Commission's Development Application expiring in July 2024.

**MATTER FOR CONSIDERATION**

Following the last time Council considered this project in September 2023, a review of the development proposal has been provided by Porter Engineering (Attachment 1).

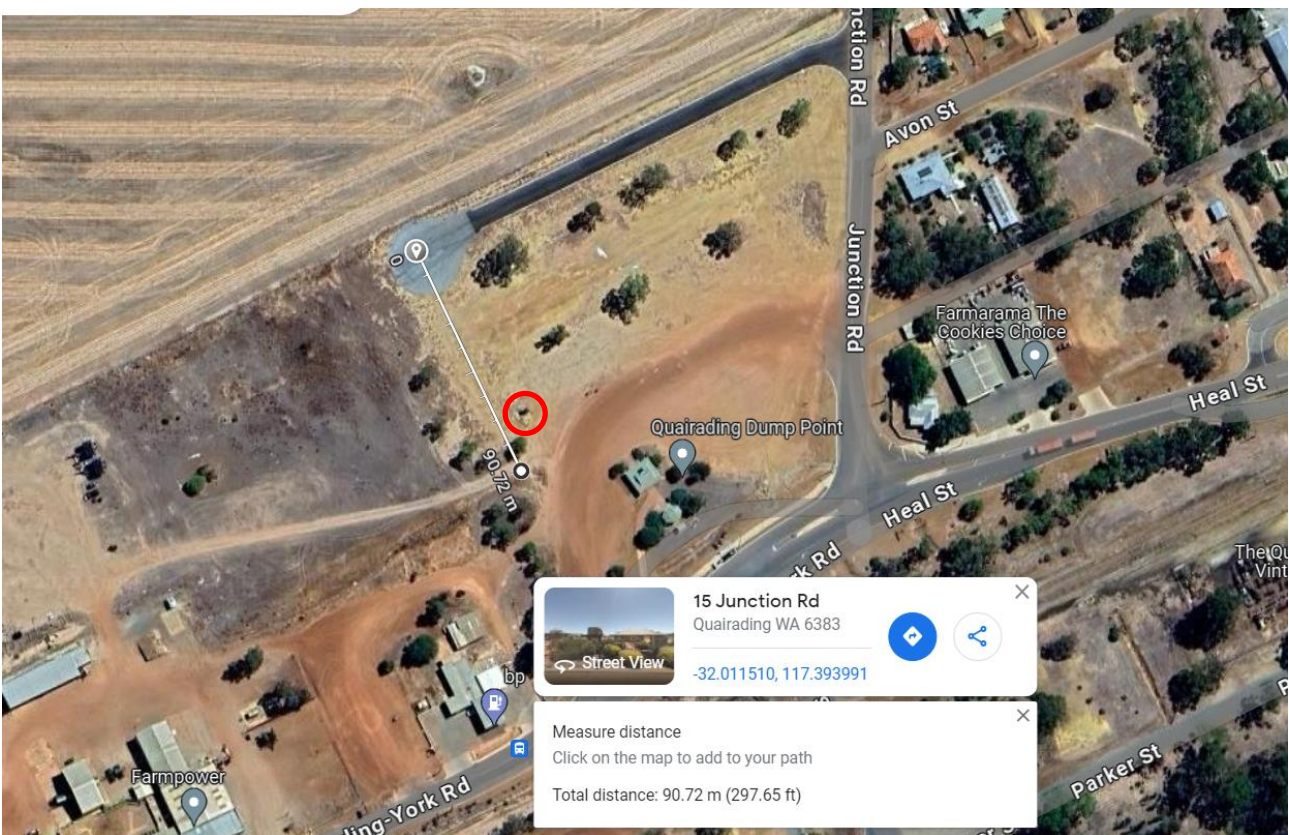
The review considered the following three options:

1. Proceed with the previously planned Stage 2 – 4 lot subdivision, including 3 light industrial lots and 1 reserve for recreation (current layover bay), and including the extension of Hinkley Way to connect with Quairading-York Road;
2. As above, with four lots, however stopping the extension of Hinkley Way short of Quairading-York Road; and
3. Proceed with a 2-lot subdivision, including 1 large light industrial lot and 1 reserve for recreation with the existing Hinkley Way cul-de-sac remaining as is.

Option 3 (single lot) subdivision is the lowest cost option – estimated at \$314,801 (as per page 27 of Attachment 1). The estimated costs of Option 1 are \$640,503 and Option 2 is \$583,603.

Option 3 costs currently includes some site works and perimeter fencing to allow the lot to be presented ready for sale. However, the EMWS would suggest modifying this design to include converting the existing bitumen cul-de-sac to asphalt and adding another 90m to the south to enable better access to the rear of the recreation reserve. Further advice would be sought on how to formally describe the end of Hinkley Way and if a further cul-de-sac would be needed.

If Council are wanting to progress any of the options for Stage 2 then Officers will need to progress with an application for the power design and lodgement with Western Power. Even if staff commence this immediately, the Shire still may not make the WA Planning Commission (WAPC) expiry deadline. If this is the case Officers will approach the WAPC to see if there are options to extend.





Existing electrical connections circled in red above, both in the aerial view and within landscape. They'll need to be extended across to the rear lot.

### **BACKGROUND**

In 2020, the then Council decided to develop six Light Industrial Area lots on Winmar Road, Quairading. Council knew at the time that this would be a long-term investment in Quairading to ensure the long-term sustainability of the Shire, and that the financial return on investment may not come into fruition for upwards of a decade.

Stage 1 of the development has been fully completed and in December 2022 the CEO sold Lot 4 and Lot 5, Winmar Road for \$35,000 plus GST for each lot. Stage 1 cost \$850,000 to develop. Council's intent has always been long-term investment and development across the Shire.

The proposed Stage 2 subdivision would see the creation of four lots, with four of these lots becoming new Light Industrial Area lots and the sixth lot remaining as a Reserve for Recreation to be maintained as an information area, toilet block and potential truck parking area.

On 8 August 2022, the CEO received correspondence from Porter Consulting Engineers (via Development WA) confirming the development cost for Stage 2 of the light industrial area is \$590,810. Development WA paid for the quote to ensure it was based on a comprehensive assessment of the works required.

Following the Concept Forum in October 2023, Council asked Officers to seek further information with regards to the proposed road design and if any rear blocks of the LIA could be serviced without needing to generate an intersection with the York-Merredin Road.

### **STATUTORY ENVIRONMENT**

*Local Government Act 1995*

### *Planning and Development Act 2005*

*Section 6.20 (1) Local Government Act – Subdivision 3 - Power to Borrow - allows a local government to borrow money or obtain credit to perform its functions*

#### **POLICY IMPLICATIONS**

Nil

#### **FINANCIAL IMPLICATIONS**

As per the agenda paper from September 2023, the financial implications are still significant with the estimated cost to complete Option 3 as our preferred Stage 2 development being approximated at \$314,801 ex GST.

Council has allocated \$350,000 to building a residence in Edwards Way (BC9114) that could be reallocated and utilised for this project. Particularly now that the lots are being offered to existing local residents under a new strategy for that development.

There may also be funds available under Phase 4 of the Local Roads and Community Infrastructure programme once confirmed grants and costs become clearer from the Basketball/Netball Courts redevelopment.

#### **ALIGNMENT WITH STRATEGIC PRIORITIES**

- 2.1 Economy:** Promote the Economic and Business Growth Strategy for current businesses and the sustainable attraction of new industry (Small Business Friendly Local Government and Action Plan)
- 2.3 Economy:** Shire engages stakeholders and partners to help capture local economic development initiatives
- 5.3 Governance & Leadership:** Provide informed and transparent decision making that, meets our legal obligations, and the needs of our diverse community

#### **CONSULTATION**

Council would be required to advertise its intention to borrow for a period of 1 month. Any submissions would be considered by Council.

Up to this point, advice has been sought from the following organisations:

- Porter Engineers
- Joe Douglas (Town Planner)
- Development WA
- Wheatbelt Development Commission
- Regional Development Australia
- Potential buyers
- WA Treasury Corporation.

#### **RISK MANAGEMENT PRIORITIES**

This report addresses the following identified Strategic Risk Management Priorities:

Uncertainty of Quairading’s long-term future results in the further attenuation and closure of local businesses.

**RISK ASSESSMENT**

	Option 1
Financial	<p>High</p> <p><i>The financial implications are significant, and decision-making must be relevant, informed and considered once all options and recommendations are tabled. At this juncture, approximately \$850,000 has been expended with an additional \$315,000 required to complete the project. There is currently no external grant funding available, and it is unlikely that any will become available.</i></p> <p><i>There is already a buyer interested in Stage 2 Lot/s but the blocks are not worth enough to recoup the Shire’s development costs.</i></p>
Health	N/A
Reputation	<p>High</p> <p><i>To date 100% of the project has been funded internally by the Shire with no contribution from external funding sources.</i></p>
Operations	<p>Low</p> <p><i>There is little to no impact on Shire operations.</i></p>
Natural Environment	N/A

	Consequence				
Likelihood	Insignificant	Minor	Moderate	Major	Critical
Rare	LOW Accept the risk Routine management	LOW Accept the risk Routine management	LOW Accept the risk Routine management	MEDIUM Specific responsibility and treatment	HIGH Quarterly senior management review
Unlikely	LOW Accept the risk Routine management	LOW Accept the risk Routine management	MEDIUM Specific responsibility and treatment	MEDIUM Specific responsibility and treatment	HIGH Quarterly senior management review
Possible	LOW Accept the risk Routine management	MEDIUM Specific responsibility and treatment	MEDIUM Specific responsibility and treatment	HIGH Quarterly senior management review	HIGH Quarterly senior management review
Likely	MEDIUM Specific responsibility and treatment	MEDIUM Specific responsibility and treatment	HIGH Quarterly senior management review	HIGH Quarterly senior management review	EXTREME Monthly senior management review
Almost certain	MEDIUM Specific responsibility and treatment	MEDIUM Specific responsibility and treatment	HIGH Quarterly senior management review	EXTREME Monthly senior management review	EXTREME Monthly senior management review

**COMMENT**

Nil



Our Ref: JK/L248.23.docx  
Job No: 23-11-134



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12 December 2023

Shire of Quairading  
PO Box 38  
QUAIRADING WA 6383

**Attention: Sarah Caporn**

Dear Sarah,

**LOT 1 & LOT 75 WINMAR ROAD, QUAIRADING  
PROPOSED LIGHT INDUSTRIAL SUBDIVISION – STAGE 2**

Porter Consulting Engineers has been engaged by the Shire of Quairading to review opinion of probable costs for Stage 2 of the above light industrial subdivision. This review includes the following three options:

1. Proceed with the previously planned Stage 2 – 4 lot subdivision, including 3 light industrial lots and 1 reserve for recreation, and including the extension of Hinkley Way to connect with Quairading-York Road;
2. As above, however stopping the extension of Hinkley Way short of Quairading-York Road; and
3. Proceed with a 2-lot subdivision, including 1 large light industrial lot and 1 reserve for recreation.

Lot 1 and Lot 75 Winmar Road, Quairading (the site) is bound by Winmar Road (also known as Junction Road) to the east, the Quairading-York Road to the south, agricultural land to the north and a BP service station and industrial land to the west. There is an existing road train truck layby parking facility (including toilets) and an information bay located in the south-east corner of the Site. The Quairading-York Road is under the control of Main Roads WA (MRWA).



**Figure 1: Lot 1 & Lot 75 Winmar Road (prior to Stage 1 completion)**

Tusno Pty Ltd ACN 070 097 148 as trustee for the Consulting Engineering Unit Trust trading as Porter Consulting Engineers ABN 78 636 396 385

The Shire completed Stage 1 of the works in early 2022 which saw the creation of 2 light industrial lots, with the balance remaining for Stage 2. A copy of the deposited plan is included at **Attachment 1**.

The proposed Stage 2 subdivision options are shown in **Attachment 2**.

### Landform

The Site is generally clear of vegetation other than a limited number of isolated trees. Parts of the Site (future Lot 6) are used for truck laydown and storage. The site is predominately flat with a very minor grade of 0.8% fall to the south east.

The geological survey mapping<sup>1</sup> for the area notes ‘colluvium and minor alluvium - silt, sand and gravel derived from underlying and adjacent laterite and bedrock’. This was what was experienced in Stage 1, with part of the gravelly/clay road subgrade area in cut becoming difficult to construct on when it became wet during the winter months.

### Siteworks/Earthworks

Generally, for light industrial lots the expectation is for relatively flat sites that are suitable for large workshops, sheds, and hardstands, and as such no earthworks or fill is assumed to be required since the site is predominately flat. Allowance has been made for minor grading of the new industrial lots to provide an even and neat finish to the lots, as was done in Stage 1. Should there be a need for any further topsoil stripping to facilitate the built form structures on the lots, it is recommended that the stripping takes place as necessary with the built form, as a measure to limit dust nuisance.

An allowance for the removal of any remnant fencing and trees which may impact on road and service installation has been included.

A search on the Contaminated Site Database<sup>2</sup> of the Department of Environment Regulations webpage did not identify any known contamination on the site.

### Roads

The Quairading-York Road to the south has been recently upgraded in 2020 by MRWA, which has included the provision of an intersection to this development. Previous discussions held and advice from MRWA officers is that no further upgrade is required to the new intersection if Hinkley Way is extended to connect (Option 1).

Stage 1 of the LIA development, the Shire requested the road width to be 7.4m in width. This is considered the absolute minimum road width for light industrial traffic, but was initially done so in order to keep costs down and because the road only services a few lots. No Allowance was made for RAV network vehicles, although MRWA has advised that the new intersection sweep has been designed to accommodate a RAV7 network. Given the Stage 1 lots are created, it is unlikely any road widening will be undertaken to accommodate larger vehicles.

No new footpaths were required in Stage 1 or expected in Stage 2 or allowed for.

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<sup>1</sup> Geological Survey of Western Australia, Department of Mines, Corrigin, Seet SI 50-3, First Edition 1985

<sup>2</sup> Department of Water and Environmental Regulation, *Contaminated Sites Database*, <https://www.der.wa.gov.au/your-environment/contaminated-sites/58-finding-information-on-contaminated-sites-in-western-australia>

In Stage 1, a new road (Hinkley Way) from Winmar Road along the full frontage of Lots 97 and 98 with a temporary cul-de-sac turnaround was constructed. In Stage 2 Option 1, the temporary cul-de-sac will be removed and the road will be extended through to the Quairading-York Road, providing connectivity between Winmar Road and Quairading-York Road. Option 2 allows for a shorter road extension and relocation of the temporary cul-de-sac to provide access to each of the new lots, however with no connection to Quairading-York Road. Option 3 allows for no additional roadworks.

It is understood from previous investigations that MRWA had sought to improve the truck laydown area and its interface with the Quairading-York Road and Lot 6. MRWA has undertaken these intersection upgrades but have not completed the road widening required to accommodate the new road alignment. This has previously been raised with MRWA and they are investigating the road widening requirements. It is understood that this widening could be accommodated in any future Stage 2 boundary adjustment of Lot 6 as required.

A copy of the Stage 1 project drawings is included in **Attachment 3**.

### Drainage

Roadside drains along Winmar Road and the Quairading-York Road drain southwards via a road culvert to Ashton Street which flows to a dam located at the corner of Parker Street and Ashton Street. It is assumed that no drainage upgrades or improvements to these existing roads is required. As part of Stage 1 piped drainage was installed in Winmar Rd that was piped to the open drain in Lot 6.

In Stage 1, the Shire required the road to be kerbed (mountable kerbing) and drainage inlet pit at the end of the road (near Winmar Rd) to collect this drainage. Whilst the overland drainage length at 120m is quite long, it is not uncommon in regional areas to use the road as part of the drainage system and therefore it is assumed this would be permitted in Stage 2 also, where the existing SEP installed by MRWA at the intersection would collect the stormwater from the road prior to Quairading-York Road. Therefore no, further piped drainage is considered warranted.

In Stage 1, a roadside swale drain was installed on the northern boundary to collect overland flow from the agricultural property to the north. This may be warranted to extend along the northern boundary of Lot 96 as a cut off drain for this catchment to prevent water entering the new industrial lot. Whether this is located within the new LIA lot or agricultural property will be discussed with the Shire, as it should be located on the lot that is creating the drainage issue. A small allowance for either a shallow swale or bund along this lot boundary has been allowed.

### Water

There is an existing 100mm diameter asbestos cement water main along the eastern verge of Winmar Road and 250mm diameter asbestos cement main in the southern verge of the Quairading-York Road that fronts the Site near the intersection of Winmar Road. In Stage 1, a new 150mm water main was installed that was also extended to cover the extent of Stage 2 lots.

The Water Corporation has indicated that its preference would have been to connect the new 150mm main to the existing 250mm main in the Quairading-York Road. However, as the water main was allowed to be built as it was in Stage 1 which can cater for the new lots, they are unable to force the extension of this water main as part of these works.

Therefore, the water servicing to these industrial lots will simply only require a deferred water service to be paid for by the Developer as part of the service agreement with the Water Corporation. The installation of the water service to the Lot will take place after an application for water supply as part of the built form.

Should the future industrial lots require a dedicated fire service, application can be made with the Water Corporation as part of the built-form.

#### **Sewer**

Sewer servicing was installed in Stage 1 with a design and additional works such that no further sewer works are required in Stage 2 other than payment of sewer headworks costs.

The Water Corporation has previously indicated that the existing sewer infrastructure has sufficient capacity to accept the proposed development, however they have advised that whilst the Site can be connected, the sewer is not capable of accepting trade waste and will only accept wastewater from offices/amenities.

#### **Fencing**

The site is presently unfenced except for a 1.2m high rural style agriculture fence along the northern and western boundary. Fencing is not a condition of subdivision, however the Shire may wish to consider fencing at least the external boundaries of the 3 lots to provide security and offset Lot purchaser costs and also to prevent vehicles access across the site from the service station that currently occurs.

Internal fencing will be installed as part of the built form works, so no allowances have been made.

#### **Electrical**

As part of the Stage 1 works, extensive power infrastructure was installed, with a decision undertaken to upgrade external HV feed to the site and install a transformer that would service the whole development. Therefore, it is expected that each lot would only require the installation of a uni-pillar and connection back to the existing transformer with new low voltage cabling. Future conduit provision to the transformer was included in Stage 1.

Lot 6 (toilet site) currently has an existing aerial connection to a uni-pillar in the middle of the site. It is expected that as part of the subdivision process, these aerials will need to be removed and the uni-pillar relocated to the boundary. An allowance has been included in the Contractor scope and Western Power costs for these works.

As the proposed site is light industrial, Western Power's Gifted Asset Tax of 13.9% of the power costs will be applicable to this development and is included in the Western Power portion of the indicative costings.

UPD were previously engaged for the power design works in Stage 1. UPD therefore have a good understanding of the Stage 2 power servicing requirements. It is recommended that UPD prepare the power design for the nominated subdivision option, and lodge with Western Power as soon as possible. The Western Power Design Conformance Review (DCR) process is currently taking an average of 7 months.

There remains a risk that additional network reinforcement works may be required, however this will remain unknown until the DCR process has been completed.

Whilst the risk of any further reinforcement works being required appears to be low, changes within the Western Power network can occur at any time. No allowances have been included for any reinforcement works.

### **Communications**

Telstra infrastructure was installed in Stage 1 which connected back Avon Street near Winmar Road which is suitable for voice telemetry. Allowances have been made for a small extension of new Telstra conduit to service Lot 96 and connections into Lots from pits installed in Stage 1.

For internet broadband telemetry, the Site is able to be serviced by NBN Co's Sky Muster satellite technology which is available to the area.

### **Gas Supply**

Based on the Dial Before You Dig (DBYD) information, no gas reticulation network exists within the vicinity of the site and therefore no allowance to service the development with reticulated gas has been made.

### **Landscaping**

No additional costs have been included for any landscaping works.

### **Preliminaries**

Allowance has been made for the Contractor's costs for supervision, mobilisation, site facilities, insurances, locating existing services and preparation of management plans and dilapidation surveys where required. The construction period has been adjusted for each of the three Stage 2 options. These works would be undertaken by a civil contractor. Ringa Civil are a Toodyay based Contractor who undertook the Stage 1 works.

### **Local Government Fees**

Local Government supervision fees are usually expected to be payable, which is typically 1.5% of the total road and drainage construction costs. However, as this is a Local Government initiated project, no allowance has been made for any fees.

### **Professional Costs**

Costs have been included to cover professional fees such as engineering (civil and electrical) and survey services. These have been set to a nominal 12% given the extent of design works previously undertaken and geotechnical report already completed, with the majority of the proposed costs being in contract administration due to travel requirements.

### **Contingency**

A 20% contingency of construction costs is included, due to the preliminary nature of the works and current escalation in the market and in particular variability in the regional project tenders based on Contractor and resource availability. A 5% administration contingency is also included.

### Indicative Development Costs

The indicative development costs for the three options are summarised in **Attachment 4**.

### Conclusion

Based on the information available, there does not appear to be any significant factor that would prevent Stage 2 of the light industrial development to Lot 1 and Lot 75 Winmar Road proceeding, with significant works undertaken in Stage 1 and by Main Roads WA reducing what would have been significantly higher Stage 2 costs.

The WAPC subdivision approval is still current through to 22 July 2024 and with initial works done on Stage 1, the design stage could be undertaken quickly and ready to tender in a relatively short timeframe if required. The main issue remains that it is unlikely the Western Power DCR process and subsequent subdivisional clearance would be completed by WAPC expiry, though if the DCR process is commenced immediately, there is a chance (albeit slim) that the process may be fast-tracked as it is a relatively simple stage.

Porter Consulting Engineers stresses that indicative costs provided are an Opinion of Probable Costs and will require further review once more detailed designs and planning has been undertaken. The reader should be satisfied that they are appropriate for their use. Porter Consulting Engineers do not accept liability or responsibility for their interpretation or use.

Should you have any queries with regard to the indicative development costs or the contents of this letter, please contact the undersigned on 9315 9955.


Yours faithfully,



JAMIE KING  
**SENIOR PROJECT ENGINEER**

Enc.

**ATTACHMENT 1: Stage 1 Deposited Plan**

<p><b>Plan Information</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Tenure Type</td><td>Freehold</td></tr> <tr><td>Plan Type</td><td>Deposited Plan</td></tr> <tr><td>Plan Purpose</td><td>Subdivision</td></tr> </table> <p><b>Plan Heading</b></p> <p>LOTS 97-99, ROAD AND EASEMENT</p> <p><b>Locality and Local Government</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Locality</td><td>QUAIRADING</td></tr> <tr><td>Local Government</td><td>SHIRE OF QUAIRADING</td></tr> </table> <p><b>Planning Approval</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Planning Authority</td><td>Western Australian Planning Commission</td></tr> <tr><td>Reference</td><td>159178</td></tr> </table> <p><b>Roads</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>New Road or Extension (Road Name Approval)</td><td>Yes</td></tr> </table> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr><th>Road Name</th><th>Locality</th></tr> </thead> <tbody> <tr><td>HINKLEY WAY</td><td>QUAIRADING</td></tr> </tbody> </table>	Tenure Type	Freehold	Plan Type	Deposited Plan	Plan Purpose	Subdivision	Locality	QUAIRADING	Local Government	SHIRE OF QUAIRADING	Planning Authority	Western Australian Planning Commission	Reference	159178	New Road or Extension (Road Name Approval)	Yes	Road Name	Locality	HINKLEY WAY	QUAIRADING	<p><b>Survey Details</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Survey Method</td><td>Conventional Survey</td></tr> <tr><td>Field Records</td><td>156900</td></tr> <tr><td>Declared as Special Survey Area</td><td>No</td></tr> </table> <p><b>Survey Certificate - Regulation 54</b></p> <p>I hereby certify that this plan is accurate and is a correct representation of the:          (a) * survey; and/or          (b) * calculations and measurements;          [* delete if inapplicable]          undertaken for the purposes of this plan and that it complies with the relevant written law(s) in relation to which it is lodged.</p> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr><td>WILLIAM JAMES FRANCE</td><td>Date</td></tr> <tr><td>Licensed Surveyor</td><td></td></tr> </table> <p><b>Survey Organisation</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Name</td><td>BROOK &amp; MARSH</td></tr> <tr><td>Address</td><td>GOSNELLS 6110</td></tr> <tr><td>Phone</td><td>9398 2441</td></tr> <tr><td>Fax</td><td>9490 1313</td></tr> <tr><td>Email</td><td>admin@brookandmarsh.com.au</td></tr> <tr><td>Reference</td><td>BM20236</td></tr> </table>	Survey Method	Conventional Survey	Field Records	156900	Declared as Special Survey Area	No	WILLIAM JAMES FRANCE	Date	Licensed Surveyor		Name	BROOK & MARSH	Address	GOSNELLS 6110	Phone	9398 2441	Fax	9490 1313	Email	admin@brookandmarsh.com.au	Reference	BM20236	<p><b>Former Tenure</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr><th>New Lot / Land</th><th>Parent Plan Number</th><th>Parent Lot Number</th><th>Title Reference</th><th>Parent Subject Land Description</th></tr> </thead> <tbody> <tr><td>97-99</td><td>D17004</td><td>LOT 1</td><td>1760-370</td><td></td></tr> <tr><td></td><td>D96831</td><td>LOT 75</td><td>2208-464</td><td></td></tr> </tbody> </table> <p><b>New Interests</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr><th>Subject</th><th>Purpose</th><th>Statutory Reference</th><th>Origin</th><th>Land Burdened</th><th>Benefit To</th><th>Comments</th></tr> </thead> <tbody> <tr><td>(B)</td><td>RESTRICTIVE COVENANT</td><td>SEC. 129BA OF THE TLA 1893</td><td>DOC</td><td>LOT(S) 97, 99</td><td>ELECTRICITY NETWORKS CORPORATION</td><td></td></tr> <tr><td>(A)</td><td>EASEMENT (Sewerage)</td><td>SEC. 167 OF THE P&amp;D ACT 2005, REG. 33 (B)</td><td>THIS PLAN</td><td>LOT 99</td><td>WATER CORPORATION</td><td></td></tr> </tbody> </table>	New Lot / Land	Parent Plan Number	Parent Lot Number	Title Reference	Parent Subject Land Description	97-99	D17004	LOT 1	1760-370			D96831	LOT 75	2208-464		Subject	Purpose	Statutory Reference	Origin	Land Burdened	Benefit To	Comments	(B)	RESTRICTIVE COVENANT	SEC. 129BA OF THE TLA 1893	DOC	LOT(S) 97, 99	ELECTRICITY NETWORKS CORPORATION		(A)	EASEMENT (Sewerage)	SEC. 167 OF THE P&D ACT 2005, REG. 33 (B)	THIS PLAN	LOT 99	WATER CORPORATION	
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Subject	Purpose	Statutory Reference	Origin	Land Burdened	Benefit To	Comments																																																																										
(B)	RESTRICTIVE COVENANT	SEC. 129BA OF THE TLA 1893	DOC	LOT(S) 97, 99	ELECTRICITY NETWORKS CORPORATION																																																																											
(A)	EASEMENT (Sewerage)	SEC. 167 OF THE P&D ACT 2005, REG. 33 (B)	THIS PLAN	LOT 99	WATER CORPORATION																																																																											
	ADDITIONAL SHEETS ENDORSEMENT SHEET	<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>SHEET</td><td>SHEETS</td><td>VERSION NUMBER</td></tr> <tr><td style="text-align: center;">1</td><td style="text-align: center;">OF 3</td><td style="text-align: center;">1</td></tr> </table>	SHEET	SHEETS	VERSION NUMBER	1	OF 3	1	DEPOSITED PLAN <b>423078</b>																																																																							
SHEET	SHEETS	VERSION NUMBER																																																																														
1	OF 3	1																																																																														









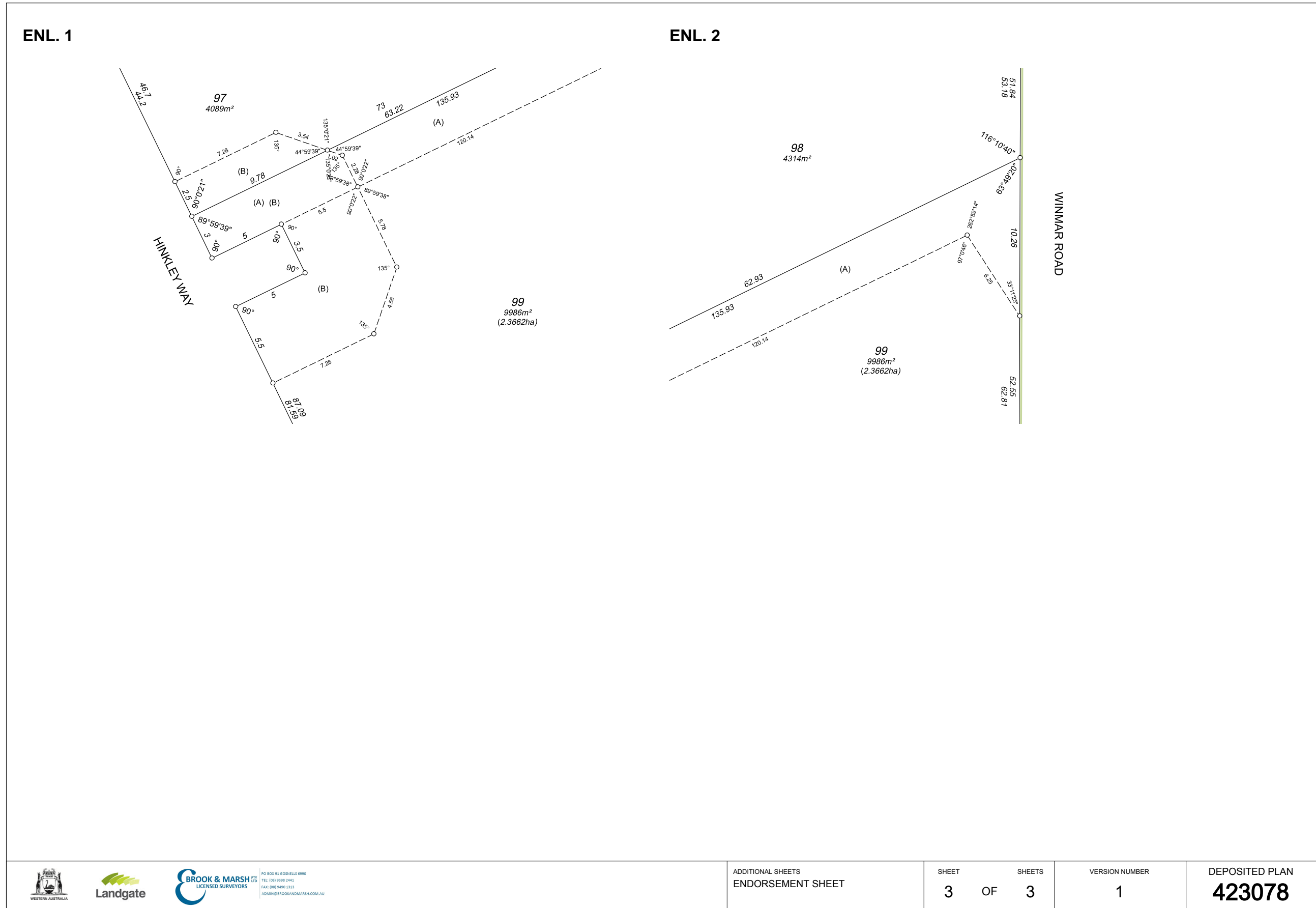
PO BOX 95 GOSWELLS 6990  
 TEL: (08) 9490 2442  
 FAX: (08) 9490 1313  
 ADMIN@BROOKANDMARSH.COM.AU

ADDITIONAL SHEETS  
ENDORSEMENT SHEET

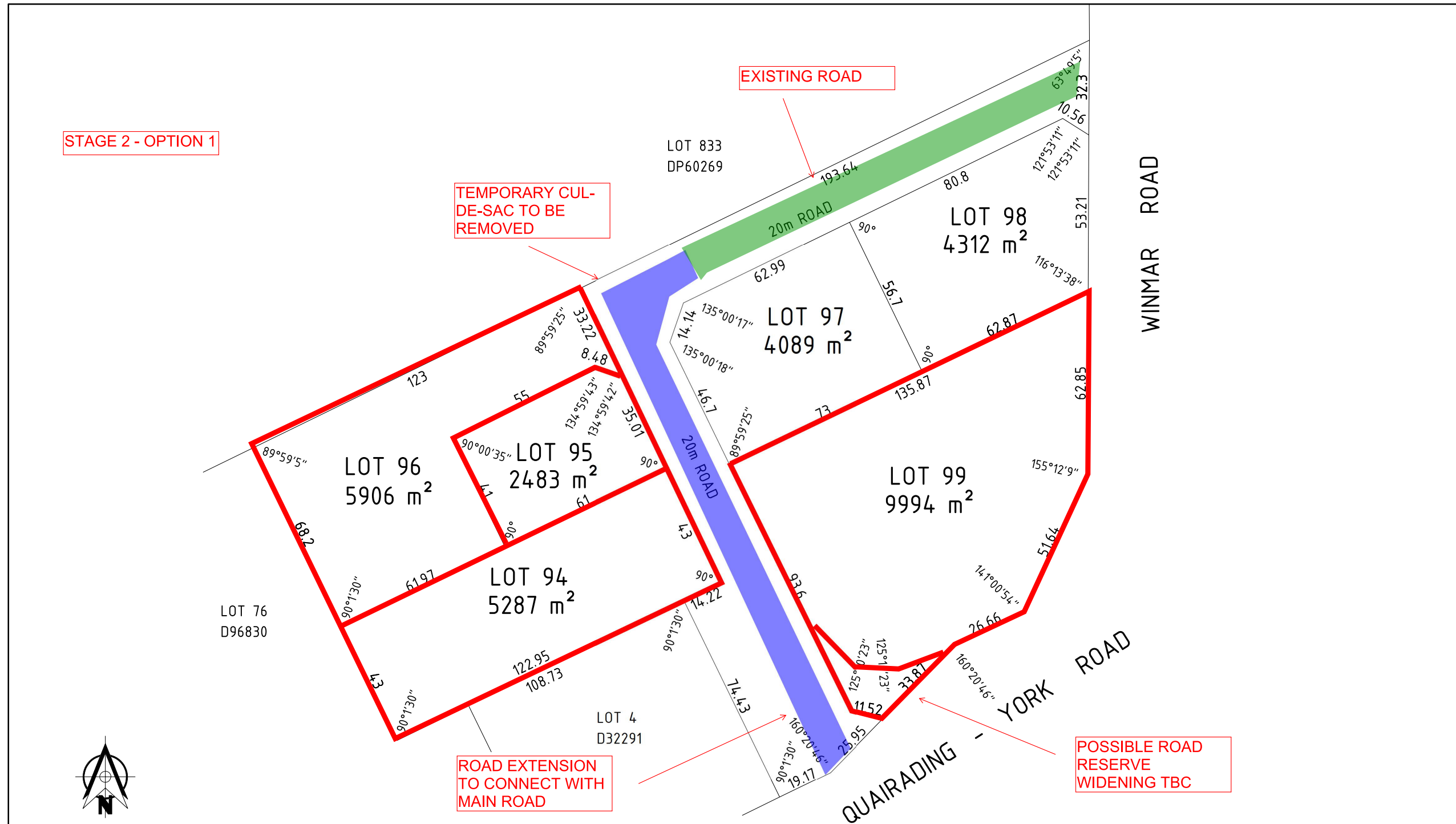
SHEET 2 OF 3 SHEETS

VERSION NUMBER 1

DEPOSITED PLAN  
**423078**



**ATTACHMENT 2: Stage 2 Options (1-3)**



STAGE 2 - OPTION 1

TEMPORARY CUL-DE-SAC TO BE REMOVED

EXISTING ROAD

ROAD EXTENSION TO CONNECT WITH MAIN ROAD

POSSIBLE ROAD RESERVE WIDENING TBC



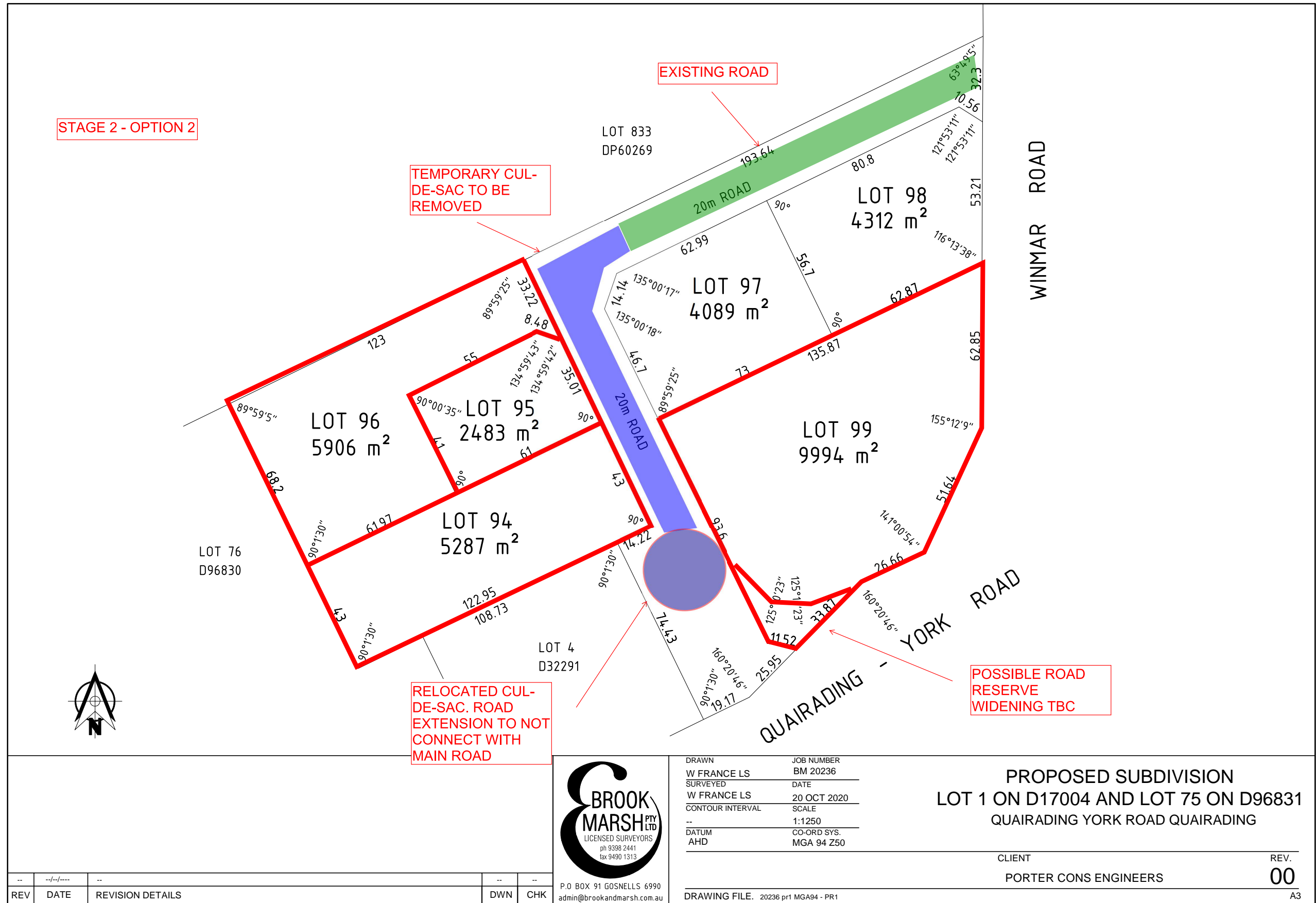
REV	DATE	REVISION DETAILS	DWN	CHK
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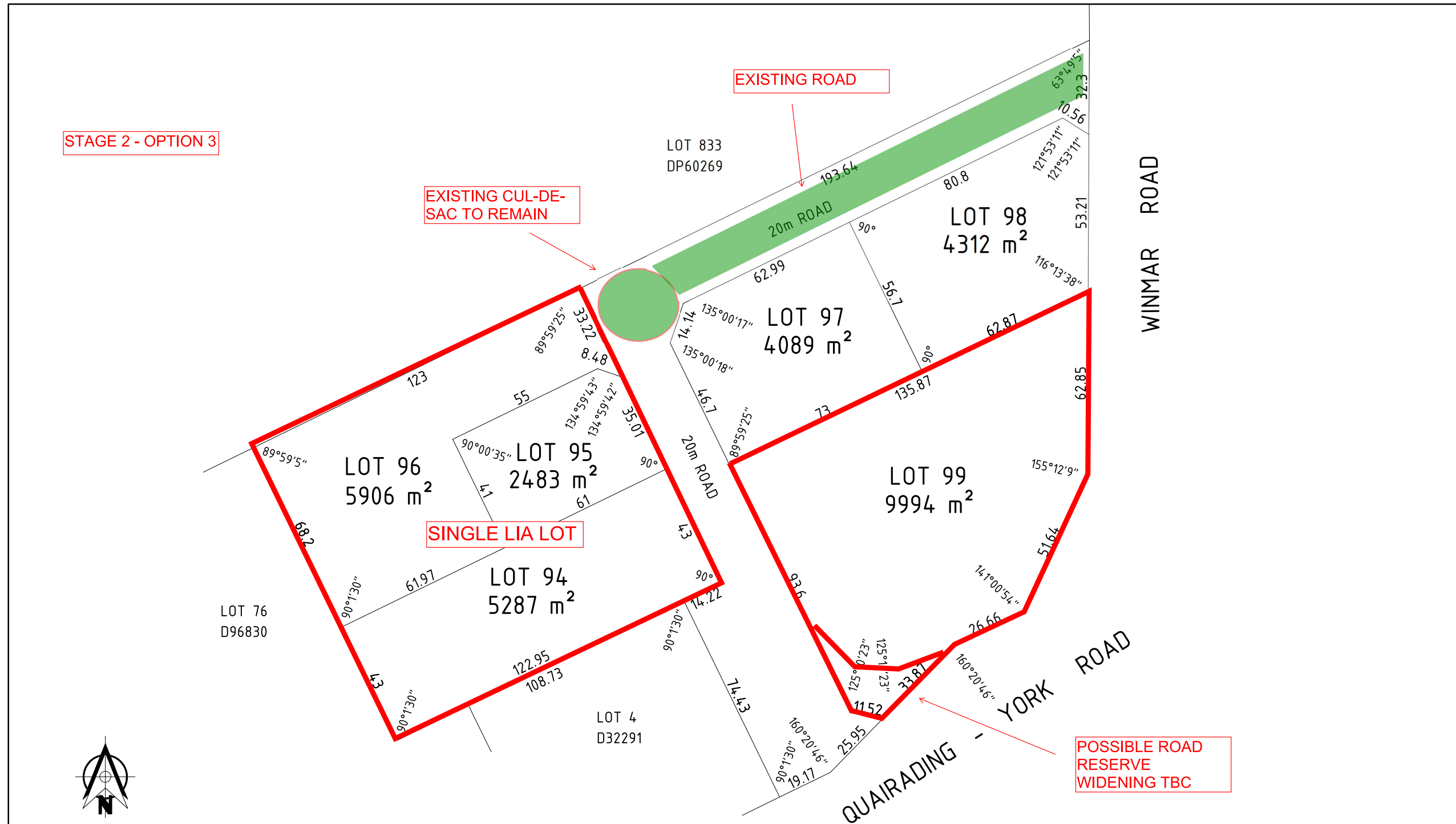


DRAWN	W FRANCE LS	JOB NUMBER	BM 20236
SURVEYED	W FRANCE LS	DATE	20 OCT 2020
CONTOUR INTERVAL	--	SCALE	1:1250
DATUM	AHD	CO-ORD SYS.	MGA 94 Z50

PROPOSED SUBDIVISION  
 LOT 1 ON D17004 AND LOT 75 ON D96831  
 QUAIRADING YORK ROAD QUAIRADING

CLIENT	PORTER CONS ENGINEERS	REV.	00
DRAWING FILE. 20236 pr1 MGA94 - PR1			A3

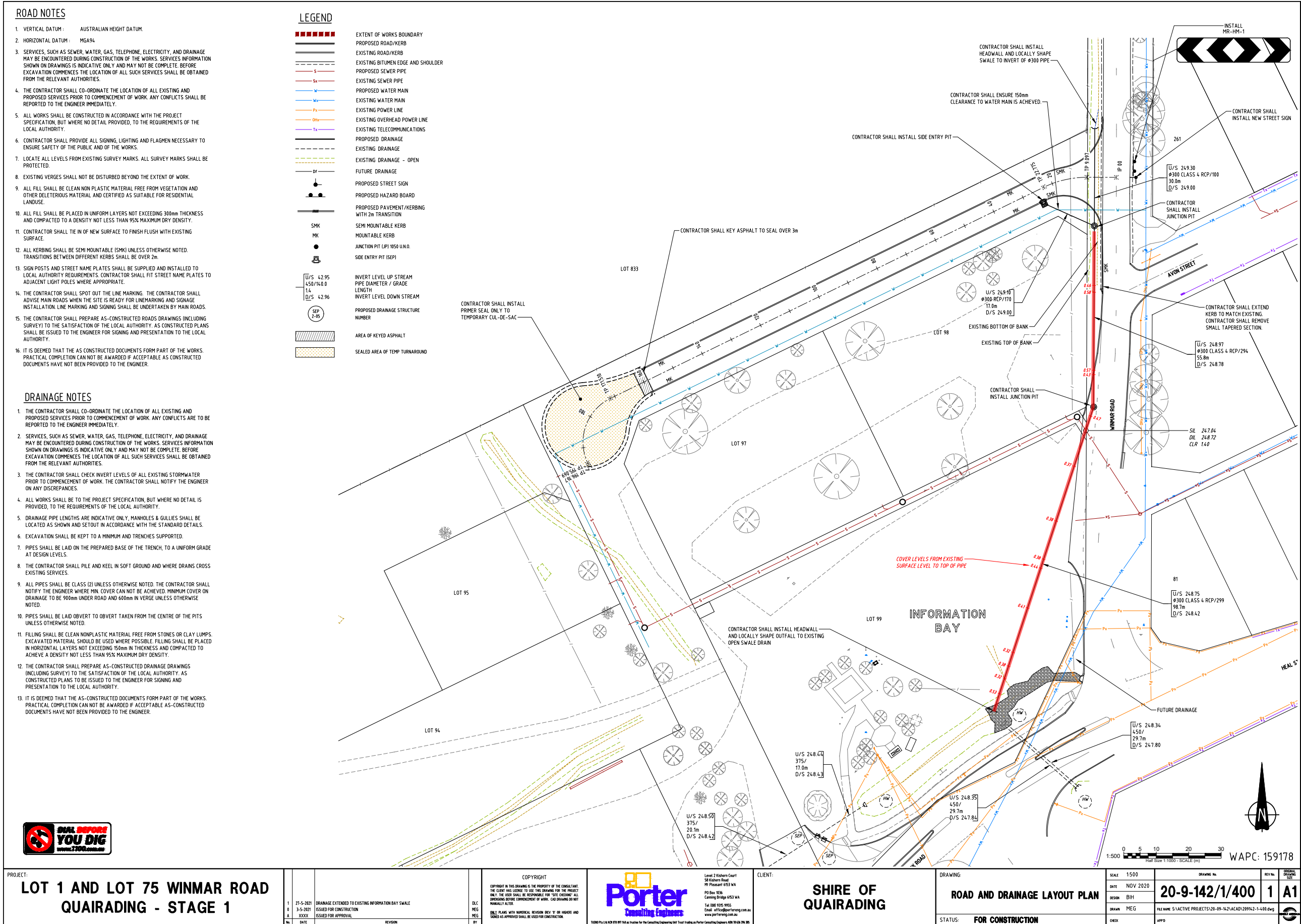




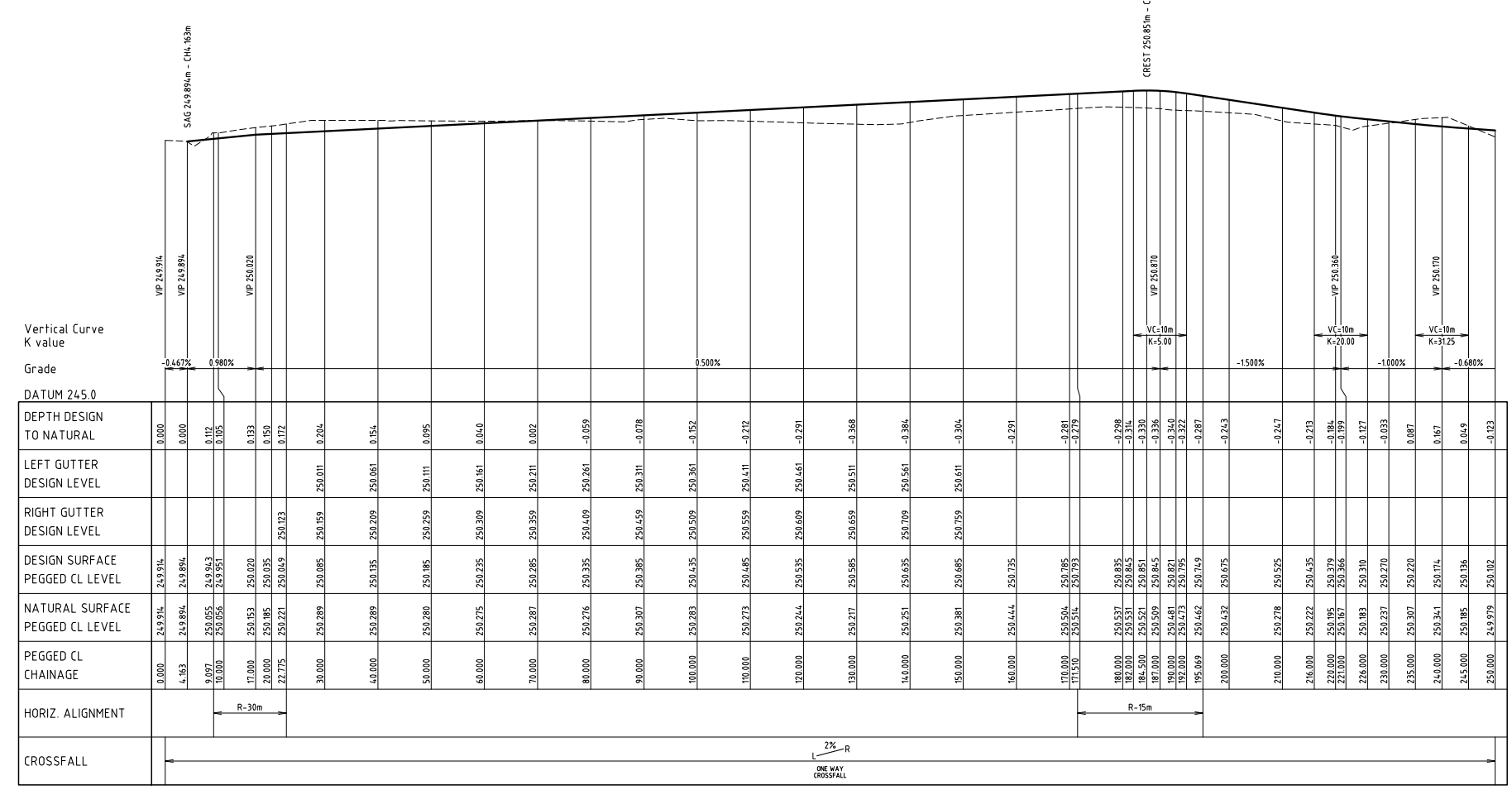
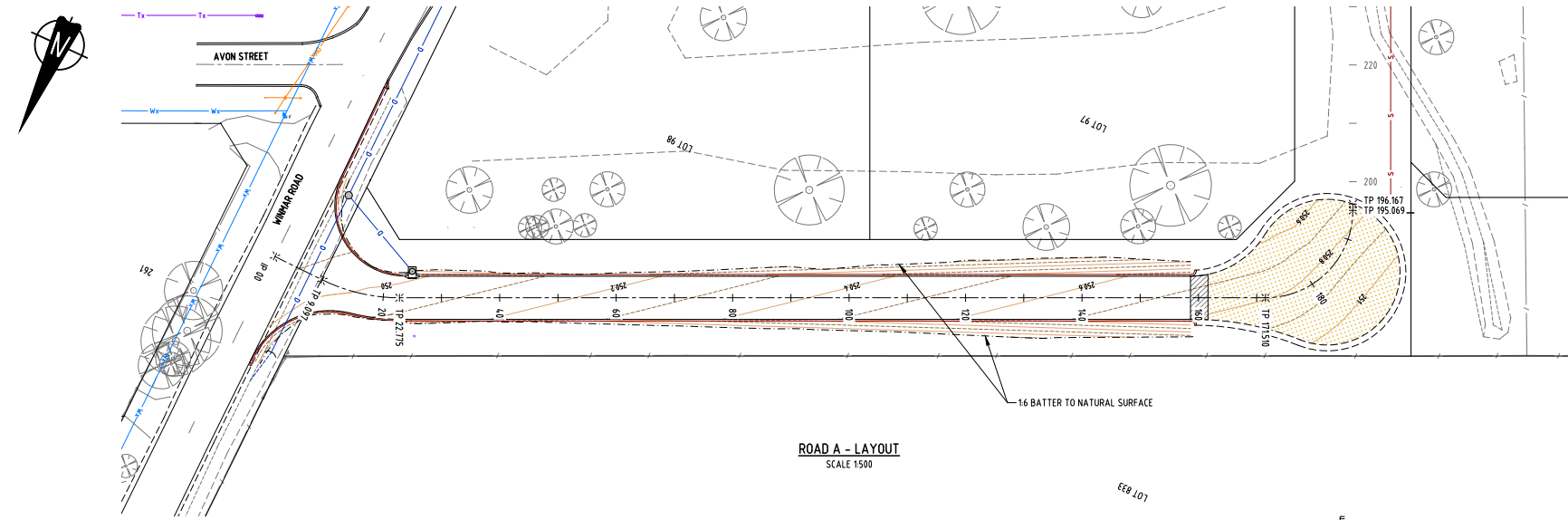
<p>STAGE 2 - OPTION 3</p>		<p>EXISTING ROAD</p>		<p>EXISTING CUL-DE-SAC TO REMAIN</p>		<p>SINGLE LIA LOT</p>		<p>POSSIBLE ROAD RESERVE WIDENING TBC</p>			
<p>LOT 96 5906 m<sup>2</sup></p>				<p>LOT 95 2483 m<sup>2</sup></p>				<p>LOT 94 5287 m<sup>2</sup></p>			
<p>LOT 97 4089 m<sup>2</sup></p>				<p>LOT 98 4312 m<sup>2</sup></p>				<p>LOT 99 9994 m<sup>2</sup></p>			
<p>LOT 76 D96830</p>				<p>LOT 833 DP60269</p>				<p>LOT 4 D32291</p>			
<p>WINMAR ROAD</p>				<p>YORK ROAD</p>				<p>QUAIRADING YORK ROAD</p>			
<p>PROPOSED SUBDIVISION LOT 1 ON D17004 AND LOT 75 ON D96831 QUAIRADING YORK ROAD QUAIRADING</p>				<p>CLIENT PORTER CONS ENGINEERS</p>				<p>REV. 00</p>			
<p>DRAWN W FRANCE LS</p>				<p>JOB NUMBER BM 20236</p>				<p>DATE 20 OCT 2020</p>			
<p>SURVEYED W FRANCE LS</p>				<p>SCALE 1:1250</p>				<p>CO-ORD SYS. MGA 94 Z50</p>			
<p>CONTOUR INTERVAL --</p>				<p>DATUM AHD</p>				<p>DRAWING FILE. 20236 pr1 MGA94 - PR1</p>			
<p>REV. 00</p>				<p>REV. 00</p>				<p>REV. 00</p>			
<p>REVISION DETAILS</p>				<p>DWN</p>				<p>CHK</p>			



**ATTACHMENT 3: Stage 1 Project Drawings**





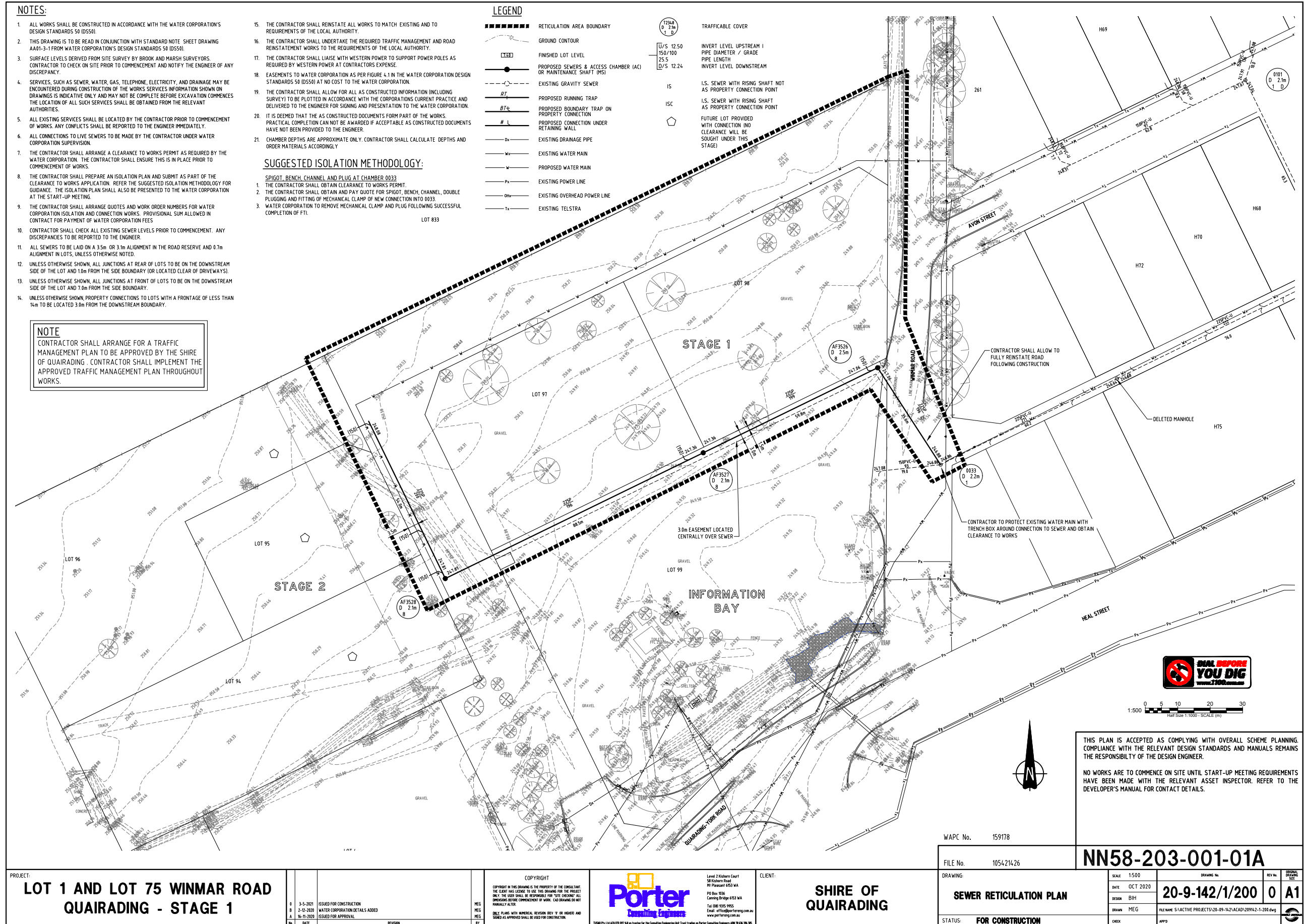


ROAD A - LONGITUDINAL SECTION  
SCALE HORIZONTAL - 1500  
VERTICAL - 150



WAPC: 159178

<b>PROJECT:</b> LOT 1 AND LOT 75 WINMAR ROAD QUAIRADING - STAGE 1		<b>COPYRIGHT:</b> COPYRIGHT IN THIS DRAWING IS THE PROPERTY OF THE CONSULTANT. THE CLIENT HAS LICENSE TO USE THIS DRAWING FOR THE PROJECT ONLY. THE USER SHALL BE RESPONSIBLE FOR "SITE CHECKING" ALL DIMENSIONS BEFORE COMMENCEMENT OF WORK. LOG DRAWING OR NOT NORMALLY ALTER. ONLY PLANS WITH IMPERIAL REVISION (REV. 1) OR HIGHER AND SIGNED AS APPROVED SHALL BE USED FOR CONSTRUCTION.		<b>CLIENT:</b> SHIRE OF QUAIRADING		<b>DRAWING:</b> ROAD LAYOUT AND LONGITUDINAL SECTION PLAN		<b>SCALE:</b> AS SHOWN	
<b>REVISION:</b> 1 27-5-2023 ROAD A VERTICAL PROFILE AMENDED 2 3-5-2023 ISSUED FOR CONSTRUCTION 3 XXXX ISSUED FOR APPROVAL		DDC MEG BY		Level 2 Fishburn Court 58 Fishburn Road PO Box 4553 WA Perth WA 6003 Canopy Bridge 4553 WA Tel 081 925 9555 Email info@portercan.com.au www.portercan.com.au		STATUS: <b>FOR CONSTRUCTION</b>		DATE: NOV 2020 DESIGN: BIH DRAWN: MEG CHECK:	
FILE NAME: S:\ACTIVE PROJECTS\20-09-142\ACAD\20PH2-1-10.dwg		15000 Pty Ltd AIN 877 881 Ltd is a provider for the Consulting Engineering Unit Trading as Porter Consulting Engineers AIN 78 028 396 385		DRAWING No: <b>20-9-142/1/410</b>		REV No: <b>1</b>		ORIGINAL SCALE: <b>A1</b>	



- NOTES:**
- ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE WATER CORPORATION'S DESIGN STANDARDS 50 (DS50).
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH STANDARD NOTE SHEET DRAWING AA01-3-1 FROM WATER CORPORATION'S DESIGN STANDARDS 50 (DS50).
  - SURFACE LEVELS DERIVED FROM SITE SURVEY BY BROOK AND MARSH SURVEYORS. CONTRACTOR TO CHECK ON SITE PRIOR TO COMMENCEMENT AND NOTIFY THE ENGINEER OF ANY DISCREPANCY.
  - SERVICES, SUCH AS SEWER, WATER, GAS, TELEPHONE, ELECTRICITY, AND DRAINAGE MAY BE ENCOUNTERED DURING CONSTRUCTION OF THE WORKS. SERVICES INFORMATION SHOWN ON DRAWINGS IS INDICATIVE ONLY AND MAY NOT BE COMPLETE BEFORE EXCAVATION COMMENCES. THE LOCATION OF ALL SUCH SERVICES SHALL BE OBTAINED FROM THE RELEVANT AUTHORITIES.
  - ALL EXISTING SERVICES SHALL BE LOCATED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS. ANY CONFLICTS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
  - ALL CONNECTIONS TO LIVE SEWERS TO BE MADE BY THE CONTRACTOR UNDER WATER CORPORATION SUPERVISION.
  - THE CONTRACTOR SHALL ARRANGE A CLEARANCE TO WORKS PERMIT AS REQUIRED BY THE WATER CORPORATION. THE CONTRACTOR SHALL ENSURE THIS IS IN PLACE PRIOR TO COMMENCEMENT OF WORKS.
  - THE CONTRACTOR SHALL PREPARE AN ISOLATION PLAN AND SUBMIT AS PART OF THE CLEARANCE TO WORKS APPLICATION. REFER THE SUGGESTED ISOLATION METHODOLOGY FOR GUIDANCE. THE ISOLATION PLAN SHALL ALSO BE PRESENTED TO THE WATER CORPORATION AT THE START-UP MEETING.
  - THE CONTRACTOR SHALL ARRANGE QUOTES AND WORK ORDER NUMBERS FOR WATER CORPORATION ISOLATION AND CONNECTION WORKS. PROVISIONAL SUM ALLOWED IN CONTRACT FOR PAYMENT OF WATER CORPORATION FEES.
  - CONTRACTOR SHALL CHECK ALL EXISTING SEWER LEVELS PRIOR TO COMMENCEMENT. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
  - ALL SEWERS TO BE LAID ON A 3.5m OR 3.1m ALIGNMENT IN THE ROAD RESERVE AND 0.7m ALIGNMENT IN LOTS, UNLESS OTHERWISE NOTED.
  - UNLESS OTHERWISE SHOWN, ALL JUNCTIONS AT REAR OF LOTS TO BE ON THE DOWNSTREAM SIDE OF THE LOT AND 1.0m FROM THE SIDE BOUNDARY (OR LOCATED CLEAR OF DRIVEWAYS).
  - UNLESS OTHERWISE SHOWN, ALL JUNCTIONS AT FRONT OF LOTS TO BE ON THE DOWNSTREAM SIDE OF THE LOT AND 7.0m FROM THE SIDE BOUNDARY.
  - UNLESS OTHERWISE SHOWN, PROPERTY CONNECTIONS TO LOTS WITH A FRONTAGE OF LESS THAN 14m TO BE LOCATED 3.0m FROM THE DOWNSTREAM BOUNDARY.

- LEGEND**
- RETIKULATION AREA BOUNDARY
  - GROUND CONTOUR
  - FINISHED LOT LEVEL
  - PROPOSED SEWERS & ACCESS CHAMBER (AC) OR MAINTENANCE SHAFT (MS)
  - EXISTING GRAVITY SEWER
  - PROPOSED RUNNING TRAP
  - PROPOSED BOUNDARY TRAP ON PROPERTY CONNECTION
  - PROPOSED CONNECTION UNDER RETAINING WALL
  - EXISTING DRAINAGE PIPE
  - EXISTING WATER MAIN
  - PROPOSED WATER MAIN
  - EXISTING POWER LINE
  - EXISTING OVERHEAD POWER LINE
  - EXISTING TELSTRA
- SUGGESTED ISOLATION METHODOLOGY:**
- SPIGOT, BENCH, CHANNEL AND PLUG AT CHAMBER 0033
  - THE CONTRACTOR SHALL OBTAIN CLEARANCE TO WORKS PERMIT.
  - THE CONTRACTOR SHALL OBTAIN AND PAY QUOTE FOR SPIGOT, BENCH, CHANNEL, DOUBLE PLUGGING AND FITTING OF MECHANICAL CLAMP OF NEW CONNECTION INTO 0033.
  - WATER CORPORATION TO REMOVE MECHANICAL CLAMP AND PLUG FOLLOWING SUCCESSFUL COMPLETION OF FTL.

**NOTE**  
CONTRACTOR SHALL ARRANGE FOR A TRAFFIC MANAGEMENT PLAN TO BE APPROVED BY THE SHIRE OF QUAIRADING. CONTRACTOR SHALL IMPLEMENT THE APPROVED TRAFFIC MANAGEMENT PLAN THROUGHOUT WORKS.

THIS PLAN IS ACCEPTED AS COMPLYING WITH OVERALL SCHEME PLANNING COMPLIANCE WITH THE RELEVANT DESIGN STANDARDS AND MANUALS REMAINS THE RESPONSIBILITY OF THE DESIGN ENGINEER.

NO WORKS ARE TO COMMENCE ON SITE UNTIL START-UP MEETING REQUIREMENTS HAVE BEEN MADE WITH THE RELEVANT ASSET INSPECTOR. REFER TO THE DEVELOPER'S MANUAL FOR CONTACT DETAILS.

**PROJECT:**  
**LOT 1 AND LOT 75 WINMAR ROAD QUAIRADING - STAGE 1**

NO.	DATE	REVISION
1	3-5-2021	ISSUED FOR CONSTRUCTION
2	2-10-2020	WATER CORPORATION DETAILS ADDED
3	16-11-2020	ISSUED FOR APPROVAL

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ONLY PLANS WITH NUMERICAL REVISION ONLY IF OR HIGHER AND SIGNED AS APPROVED SHALL BE USED FOR CONSTRUCTION.

MEG  
MEG  
MEG  
BY

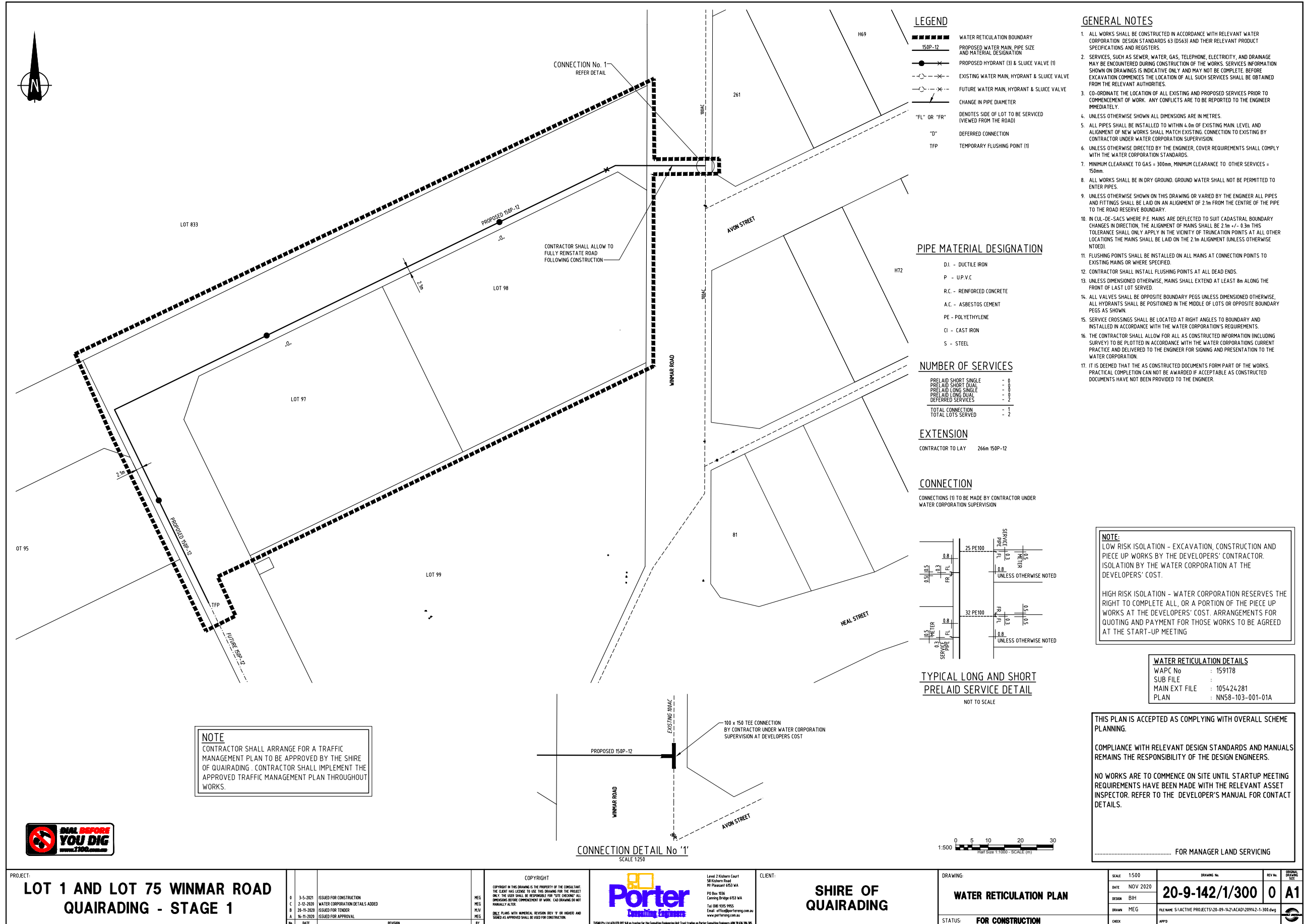


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10100 Perth  
Canberra Highway 4533 WA  
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Email: office@portereng.com.au  
www.portereng.com.au

**CLIENT:**  
**SHIRE OF QUAIRADING**

WAPC No. 159178  
FILE No. 105421426  
DRAWING: **SEWER RETICULATION PLAN**  
STATUS: **FOR CONSTRUCTION**

<b>NN58-203-001-01A</b>	
SCALE: 1:500	DRAWING No.
DATE: OCT 2020	REV No. <b>0</b>
DESIGN: BIH	<b>A1</b>
DRAWN: MEG	FILE NAME: S:\ACTIVE PROJECTS\20-09-14\ACAD\2091A2-1-200.dwg
CHECK:	APPD:



PROJECT:  
**LOT 1 AND LOT 75 WINMAR ROAD  
QUAIRADING - STAGE 1**

No.	DATE	REVISION
1	3-5-2021	ISSUED FOR CONSTRUCTION
2	2-12-2020	WATER CORPORATION DETAILS ADDED
3	28-11-2020	ISSUED FOR TENDER
4	16-11-2020	ISSUED FOR APPROVAL

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ONLY PLANS WITH NUMERICAL REVISION (REV) '1' OR HIGHER AND SIGNED AS APPROVED SHALL BE USED FOR CONSTRUCTION.

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Perth WA 6000  
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Tel: (08) 9375 9955  
Email: office@portereng.com.au  
www.portereng.com.au

CLIENT:  
**SHIRE OF QUAIRADING**

DRAWING:  
**WATER RETICULATION PLAN**

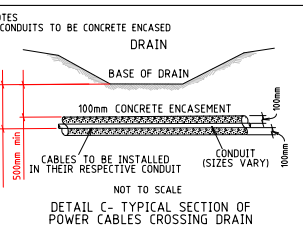
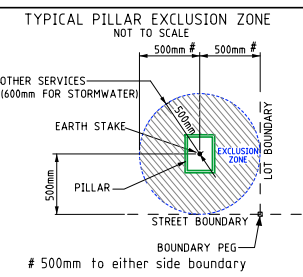
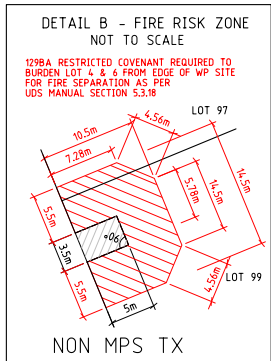
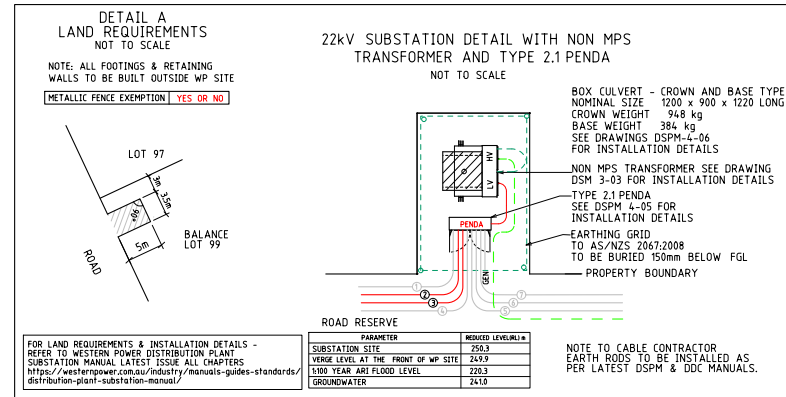
STATUS: **FOR CONSTRUCTION**

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DATE	NOV 2020		
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DRAWN	MEG		
CHECK	APPD		
FILE NAME	S:\ACTIVE PROJECTS\20-09-142\ACAD\209142-1-300.dwg		

**SAFETY - MAKE IT YOUR PRIMARY VALUE**



CONTRACTOR TO REFER TO ALL NOTES AND DETAILS ON PLAN FOR INSTALLATION REQUIREMENTS



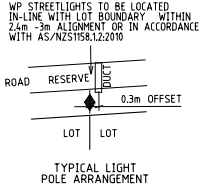
STREET LIGHTING

POLE TYPE	OUTREACH	LUMINAIRE/WATTAGE	No.
◇ SL8 2L 6.5m STANDARD	SOR	1E 20W LED	2
◆ SL8 2L 6.5m STANDARD	SOR	3E 36W LED	1

COLOUR: GALVANISED

INSTALL SL WITHIN THE 2.4m TO 3m ALIGNMENT & OFFSET FROM FOOTPATHS OR POSITION MARKED AS INDICATED. NO STREETLIGHT POLE PERMITTED IN ZONE 1 (REFER TO WP MANUAL).

ROAD LIGHTING COMPLIES TO AS/NZS1158.3:2005 ROAD LIGHTING STD'S UNLESS OTHERWISE INDICATED



**LEGEND**

SCHEME BDY. ---  
 RETAINING WALL ---  
 RESTRICTED ZONE ---  
 EASEMENT ---

**HV CABLES**

- CNS3 - 400mm2 (3X1c)
- CNS4 - 240mm2 (3X1c)
- CNS8 - 185mm2 (3X1c)
- CNS0 - 95mm2 (3X1c)
- CNS1 - 50mm2 (3X1c)
- CNS2 - 50mm2 (1c)
- CNS4 - 35mm2 (3X1c)
- CNS7 - 35mm2 (1c)
- EXISTING HV CABLES (SIZE AND TYPE INDICATED)

**LV-SL CABLES**

- CNS5 - 240mm2 (1c)
- CNS4 - 185mm2 (1c)
- CNS3 - 120mm2 (1c)
- CNS2 - 35mm2 (1c)
- CNS1 - 16mm2 SL (1c)
- 40 C PILOT
- EXISTING LV CABLES (SIZE AND TYPE INDICATED)

**STREET LIGHTS** EXISTING

- ◇ 20W LED
- ◆ 36W LED
- 20W HPS
- 36W HPS
- 50W HPS
- 250W HPS
- 250W HPS AERODROME
- 4 LED
- 2 LED
- 1 LED
- 1 LED
- 1 LED
- 1 LED
- 1 LED
- 1 LED

**LEGEND DEFINES TYPE & WATTAGE - NOT COLOUR**

**PILLARS / PITS ETC**

- HMI WORKING END
- UNIVERSAL
- HMI
- LINK
- SERVICE MARKER U/V
- UNCOVERED DE-ENERGISED LOT
- UTILITIES PIT
- BOSP PIT
- 100/200AMP OUTPUT
- CONDUIT / POLY PIPE

**TRANSFORMER EXISTING SWITCHGEAR**

- AERIAL CONDUCTORS AND POLES
- NEW POLE ANY TYPE AS INDICATED
- EXISTING POLE ANY TYPE AS INDICATED
- EXISTING AERIAL CONDUCTORS (SIZE AND TYPE INDICATED)
- REFER TO 2 LAYER TRENCH DETAILS OR TRENCHES WITH CONDUIT
- DEEPENED WALL FOOTINGS REQUIRED

- NOTES:**
- DRAWING & CONSTRUCTION OF THIS PROJECT TO BE READ & BUILT IN CONJUNCTION WITH WESTERN POWER'S LATEST UDS MANUAL, WA DISTRIBUTION CONNECTION MANUAL, DISTRIBUTION CONSTRUCTION STANDARD & DISTRIBUTION DESIGN CATALOGUE. CIVIL CONTRACTOR & CABLE CONTRACTOR TO ADVISE UPD & CONTRACT SUPERINTENDENT OF ANY CONSTRUCTION ISSUES THAT DON'T COMPLY TO WP REQUIREMENTS FOR INSTALLATION OF WP EQUIPMENT.
  - UPD TEXT FILES ARE TO BE USED AS A GUIDE ONLY. ORDERING OF MATERIALS ARE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE SUCCESSFUL COMPLETION OF THE PROJECT.
  - CABLE CONTRACTOR TO INSTALL ALL CABLES & DUCTS IN ACCORDANCE WITH THE LATEST UDS MANUAL SECTION 5. CABLES TO BE INSTALLED IN CONDUIT ALONG RETAINING WALLS. CONDUIT TO EXTEND 2M PAST END OF WALL ONE CABLE PER CONDUIT SIZED TO SUIT. CONDUITS TO BE INSTALLED ALONG ALL WALLS WHETHER THEY ARE SHOWN ON DRAWING OR NOT. CABLE MARKERS ARE TO BE INSTALLED WHEN CABLE IS OFF STANDARD WP ALIGNMENT. EACH MARKER IS TO BE VISIBLE FROM THE NEXT WITH A MAXIMUM SPACING BETWEEN MARKERS OF 150M. CONTRACTOR TO SUPPLY & INSTALL 63mm HD CONDUIT WITH DRAW ROPE FOR BATTLE AXE LOT METER LOCATION & CONSUMER MAINS TO END OF DRIVEWAY & ACROSS DRIVEWAY TO COMPLY WITH THE LATEST ISSUE OF WADCM.
  - CONDUITS TO BE INSTALLED UNDER/ THROUGH ALL WALLS FOR CABLES FROM ROAD RESERVES TO WP PILLARS. ALONG WITH CONDUIT WITH DRAW ROPE FOR CONSUMERS MAINS CABLE FOR ADJOINING LOTS THROUGH SIDE LOT WALLS. SERVICE CABLES TO BE JOINED BEFORE RETAINING WALLS COMPLETED. SLABS ARE NOT REQUIRED IF CABLES ARE IN CONDUIT.
  - STREET LIGHTS TO BE INSTALLED CLEAR OF FOOTPATHS, FRAM RAMP & ALL SERVICES WITHIN THE 2.4m TO 3m ALIGNMENT. THE 2.7m ALIGNMENT IS PREFERABLE. FINAL POSITIONS TO BE DETERMINED ON SITE & MARKED UP ON AS CONSTRUCTED PLAN.
  - SL POLE TO BE POSITIONED IN LINE WITH LOT BOUNDARY. WHEN DUCT CROSSING TO SAME BOUNDARY AS SL POLE TO BE INSTALLED. DUCTS TO BE OFFSET BY MINIMUM 300mm TO ALLOW FOR SL POLE OFFSET DISTANCE TO BE SHOWN ON AS CONSTRUCTED PLAN.
  - CONTRACTOR TO ENSURE THERE ARE NO OTHER SERVICES IN THE WP 2.7m ALIGNMENT. CONTRACTOR TO ADVISE UPD/ CIVIL ENGINEER OR SUPERINTENDENT OF ANY CLASHES.
  - NO OTHER UTILITY SERVICES SHALL PASS THROUGH OR BE LOCATED WITHIN THE SERVICE PILLAR EXCLUSION ZONE AS DEFINED IN AS/NZS 3000:2007 TABLE 3.7 REFER UDS MANUAL SECTION 5.3.5.2. ALL PILLARS TO BE INSTALLED 0.5m ABOVE 100 YEAR FLOOD LEVEL.
  - CABLE CONTRACTOR TO ARRANGE WITH UPD ONLY TO COMPLETE AS CONSTRUCTED DWG FOR ELECTRONIC SUBMISSION TO WP. THIS DRAWING REMAINS THE PROPERTY OF UPD P/L. NO UNAUTHORISED REVISIONS PERMITTED. CABLE CONTRACTOR TO SUPPLY A LETTER OF COMPLIANCE TO SECTION 6.2.2.7 & 6.2.2.8 OF THE LATEST UDS MANUAL WHEN SENDING TO THE AS CONSTRUCTED DRAWING FOR SUBMISSION TO WP.
  - IF ACID SOILS ARE PRESENT CLEAN NEUTRAL BACK FILL IS TO BE USED AROUND THE CABLES.
  - CABLE CONTRACTOR TO CAP & BURY/COIL HV/LV/SL CABLES & LEAVE SUFFICIENT CABLE FOR WP TO JOINT/TERMINATE TO EXIST WP ASSET.
  - CABLE CONTRACTOR TO LOCATE EXIST LIVE END SEALS FROM PREVIOUS STAGE AND LEAVE SUFFICIENT NEW CABLE TO ALLOW WP TO JOINT ONTO EXISTING CABLE. REFER TO UDS MANUAL.
  - WP SITE TO BE INCORPORATED EITHER AS AN EXTENSION OF THE ROAD RESERVE OR POS. NO PIPES, DRAINS OR OTHER SERVICES ARE PERMITTED BENEATH SUBSTATION. SITE IF ANY SUBSTATION LIES WITHIN THE 100 YEAR FLOOD ZONE THE SUBSTATION MUST BE 0.5m ABOVE THE FLOOD ZONE LEVEL. CABLE CONTRACTOR TO ARRANGE FOR EARTHING TEST SHEET TO BE SENT TO UPD & CONTRACT SUPERINTENDENT AT COMPLETION OF EARTHING SYSTEM INSTALLATION.
  - CABLE CONTRACTOR TO ENGAGE SUITABLY QUALIFIED ELECTRICAL PERSON DURING CONSTRUCTION WHEN INSTALLING NEW CABLES/ EQUIPMENT IN THE VICINITY OF EXISTING LIVE WP ASSETS IN ACCORDANCE WITH WORKSAFE POLICY.

**WP SCOPE OF WORKS**

A1. WP TO CARRY OUT CABLE TERMINATION INCLUDING EXCAVATION & REINSTATEMENT & SUPPLY ALL MATERIALS

**CONTRACTORS TO NOTE**

DRAWING & CONSTRUCTION OF THIS PROJECT TO BE READ & BUILT IN CONJUNCTION WITH WESTERN POWER'S LATEST UDS MANUAL, WA DISTRIBUTION CONNECTION MANUAL, DISTRIBUTION CONSTRUCTION STANDARD & DISTRIBUTION DESIGN CATALOGUE. CIVIL CONTRACTOR & CABLE CONTRACTOR TO ADVISE UPD & CONTRACT SUPERINTENDENT OF ANY CONSTRUCTION ISSUES THAT DON'T COMPLY TO WP REQUIREMENTS FOR INSTALLATION OF EQUIPMENT.

**WARNING**

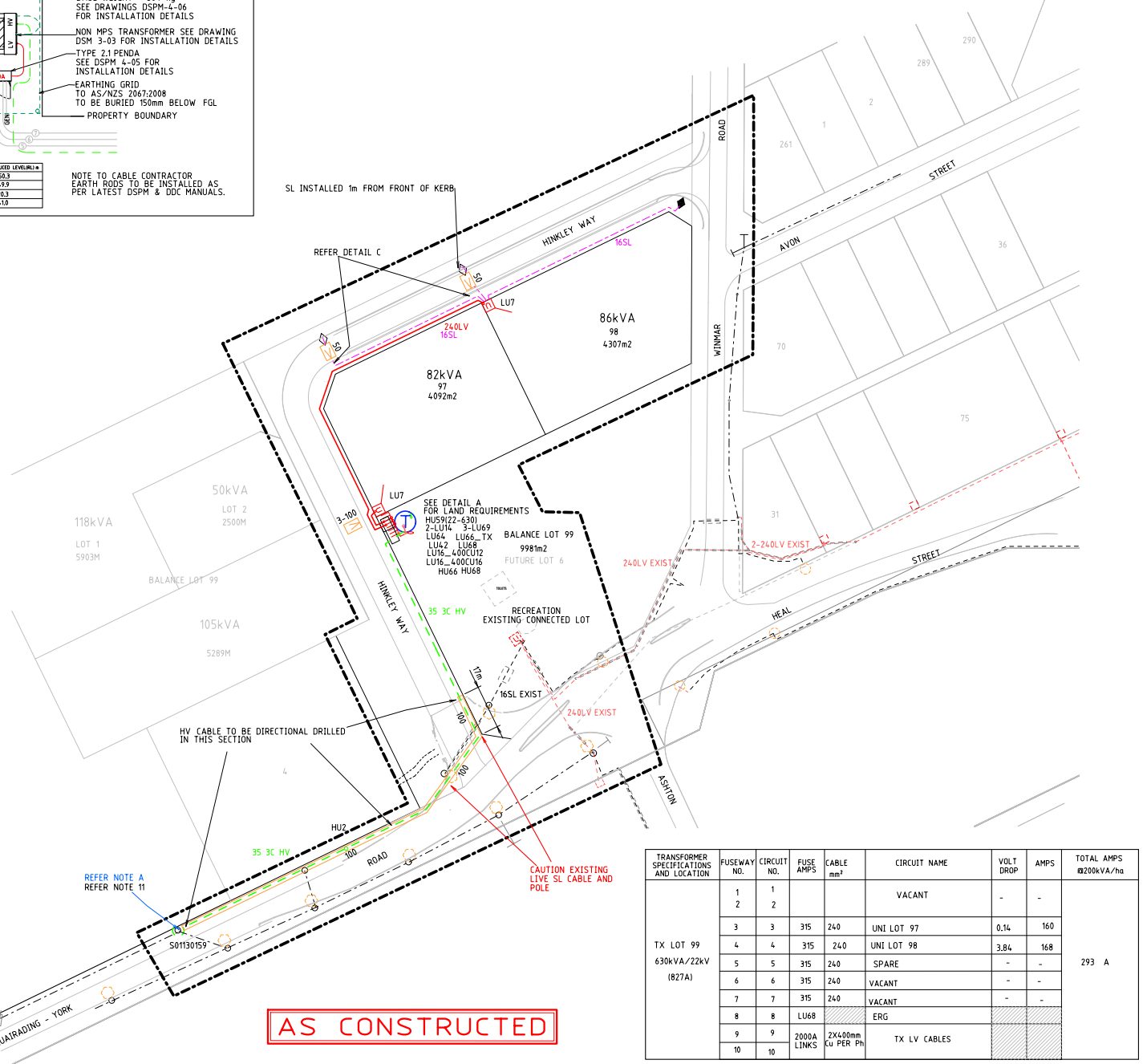
ALL WORKS IN THE VICINITY (10M) OF EXISTING WESTERN POWER ASSETS ARE TO BE UNDERTAKEN IN ACCORDANCE WITH OCCUPATIONAL SAFETY AND HEALTH (OSH) AND WORK SAFE REQUIREMENTS AS PER WORKING NEAR ELECTRICITY SECTION OF THE WESTERN POWER WEB SITE.

**ALL DESIGN REQUIREMENTS IN THE VICINITY OF TRANSMISSION LINES.** PLEASE CONTACT: [Transmission.Product@westernpower.com.au](mailto:Transmission.Product@westernpower.com.au)

**INSTRUCTION TO CONSTRUCTION CREWS**

IT IS A REQUIREMENT OF WESTERN POWER THAT ALL EXISTING CABLE SIZES ARE CONFIRMED ON SITE TO ENSURE THAT ALL FITTINGS ARE OF THE APPROPRIATE SIZE AND ARE INSTALLED CORRECTLY IN ACCORDANCE TO THE DISTRIBUTION CONSTRUCTION STANDARDS HANDBOOK. CONTRACTORS TO REFER TO THE WHOLE OF DRAWING INCLUDING NOTES, DETAILS AND ALL SHEETS.

ALL WORKS ON EXISTING WESTERN POWER ASSETS ARE TO BE UNDERTAKEN BY WESTERN POWER.

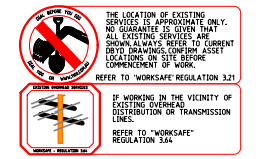
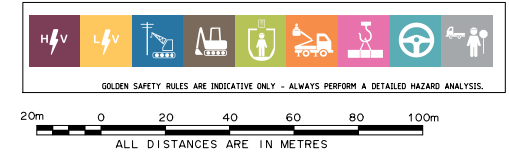


**AS CONSTRUCTED**

REV	DESCRIPTION	DATE	DRAWN	CHKD	SENT WP	DCR WP
7	REVISED AS CONSTRUCTED - LOT NUMBERS UPDATED	14-12-21	RM	BC	14-12-21	
6	AS CONSTRUCTED	8-12-21	RM	BC	8-12-21	
5	35HV CABLE REROUTED	25-06-21	RF	BE		
4	ISSUED FOR CONSTRUCTION	18-6-21	ST	BE		
3	WP REQUESTED CHANGES	11-6-21	RF	BE	11-6-21	18-6-21

GEO REFERENCE 32°00'45"S, 117°23'42"E

THIS DRAWING IS THE PROPERTY OF UPD PTY LTD. UNAUTHORISED USE OR COPYING OF THIS DRAWING IS PROHIBITED.



QUAIRADING, LOT 1 & LOT 75, WINMAR ROAD

STAGE 1

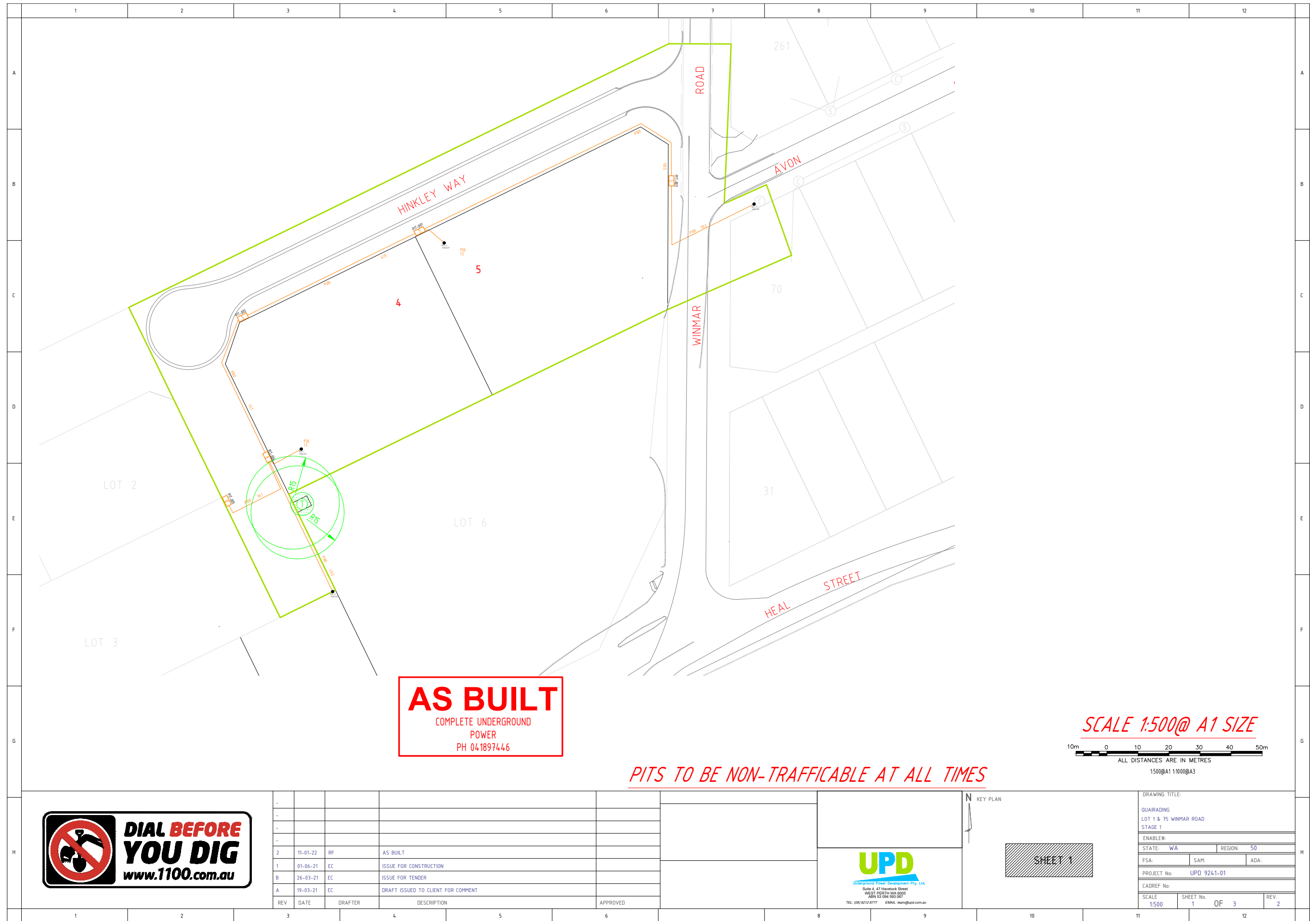
2 COMMERCIAL LOTS  
UNDERGROUND POWER DISTRIBUTION

DESIGNER: BELLETT | DRAWN: NER ENGINEER | RF: KS | SCALE: 1:1000

Western Power Reference No: NS010659 | WAPC No: 159178

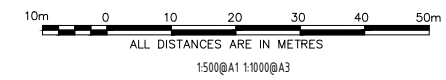
UPD  
Underground Power Development Pty. Ltd.  
Suite 4, 47 Havelock Street  
WEST PERTH WA 6005  
ABN 53 054 553 067  
TEL: (08) 9412 9777 | EMAIL: team@upd.com.au

Drawing No: UPD9241-01 | Revision: 7



**AS BUILT**  
 COMPLETE UNDERGROUND  
 POWER  
 PH 041897446

*SCALE 1:500@ A1 SIZE*



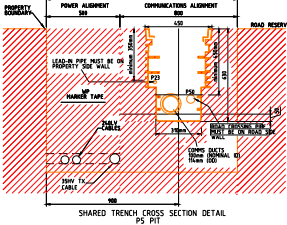
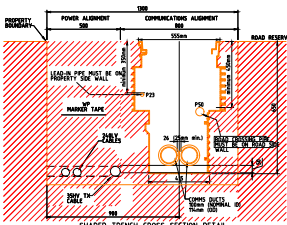
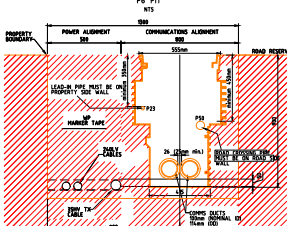
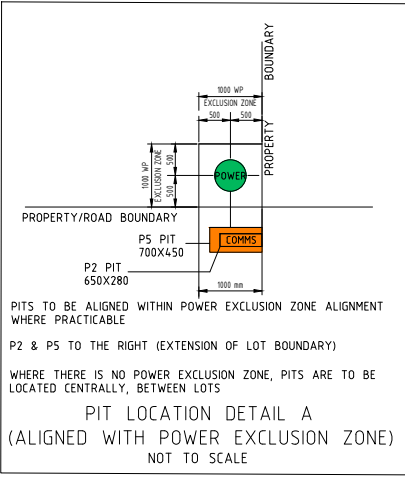
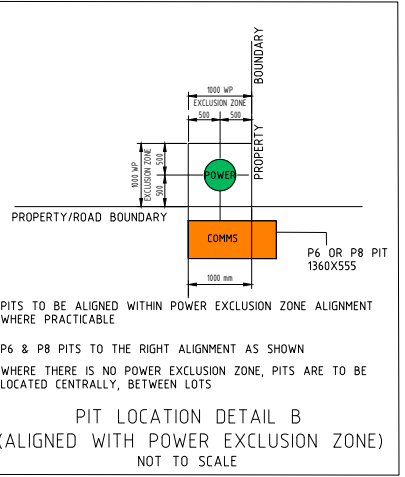


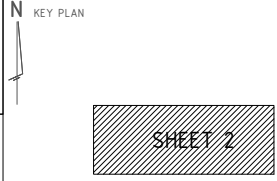
*PITS TO BE NON-TRAFFICABLE AT ALL TIMES*



REV	DATE	DRAFTER	DESCRIPTION	APPROVED
2	11-01-22	RF	AS BUILT	
1	01-06-21	EC	ISSUE FOR CONSTRUCTION	
B	26-03-21	EC	ISSUE FOR TENDER	
A	19-03-21	EC	DRAFT ISSUED TO CLIENT FOR COMMENT	



DRAWING TITLE:			
QUARRADING			
LOT 1 & 75 WINMAR ROAD			
STAGE 1			
ENABLE#:			
STATE: WA	REGION: 50		
FSA:	SAM:	ADA:	
PROJECT No: UPD 9241-01			
CADREF No:			
SCALE: 1:500	SHEET No: 1	OF: 3	REV: 2

  			<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>ALL WORKS CARRIED OUT, REFER TO NBN Co GUIDE LINES NBN-TE-CTO-194.</li> <li>CONSTRUCTORS ARE NOT PERMITTED TO INTERFERE WITH EXISTING COMMUNICATION INFRASTRUCTURE. THIS INCLUDES THE INSTALLATION OF NEW PITS OVER EXISTING COMMUNICATION CONDUITS.</li> <li>2 COMMERCIAL LOTS.</li> <li>DEVELOPER TO PROVIDE ALL TRENCHING IN ACCORDANCE WITH UTILITY PROVIDERS CODE OF PRACTICE (APPENDIX B-Road Reserve Allocations for Utility Service Providers)</li> <li>CONSTRUCTOR TO ARRANGE WITH UPD TO COMPLETE AS BUILT DRAWING FOR ELECTRONIC SUBMISSION TO THE COMMUNICATION PROVIDER. THIS DRAWING REMAINS THE PROPERTY OF UPD P/L AND NO UNAUTHORISED REVISIONS PERMITTED.</li> <li>REFER TO CIVIL DRAWINGS WHERE PIT AND/OR PIPE ENDS ADJACENT TO RETAINING WALLS. ENSURE ALL APPROPRIATE SAFETY PRACTICES ARE ADHERED TO WHEN WORKING IN THE VICINITY OF RETAINING WALLS.</li> <li>NETWORK SHOWN OUTSIDE THE SCHEME BOUNDARY ARE EXISTING COMMUNICATION NETWORK BASED ON DBYD. CONSTRUCTORS ARE RESPONSIBLE FOR VERIFYING THE EXISTING NETWORK ASSET. IT IS RECOMMENDED THAT THE CONSTRUCTOR UNDERTAKES A SITE SURVEY TO VERIFY THE LOCATION OF COMMUNICATION ASSETS AS SHOWN ON THE DRAWING.</li> <li>CONSTRUCTORS NOTE: THE NEW PIT MUST HAVE A CLEARANCE OF AT LEAST 1.0 METRE FROM THE PROPOSED STREET LIGHT POLE. REFER TO NOTE 1.</li> <li>CONSTRUCTORS TO ENSURE 500mm OF SAND TO SURROUND PIT TO PREVENT TRIPPING HAZARD.</li> <li>CONSTRUCTOR TO ENSURE THAT ALL OTHER SERVICES HAVE SUFFICIENT CLEARANCES (DEPTH) FOR THE INSTALLATION OF THE PROPOSED P8 AT THIS POINT TO ALLOW COMMS INSTALLER TO INSTALL PIT AS SHOWN IN TYPICAL PIT LOCATION DETAIL UNLESS OTHERWISE SHOWN.</li> <li>ALL CONTRACTORS TO NOTE THAT ANY CHANGES TO THE COMMS DESIGN ARE TO BE DISCUSSED WITH UPD WITH APPROVAL PROVIDED PRIOR TO THE CHANGES BEING DONE ON SITE. PLEASE BE ADVISED THAT UPD BEARS NO RESPONSIBILITY FOR ANY CONSTRUCTION CHANGES DONE WITHOUT APPROVAL FROM UPD.</li> <li>ENSURE THAT THE BENDS FOR PIPE INSTALLATION MUST NOT EXCEED 90 DEGREES. REFER TO NOTE 1. PIPE CROSSING ARE SHOWN FOR DIAGRAMMATIC ONLY.</li> <li>IT IS RECOMMENDED THAT THE CONSTRUCTOR UNDERTAKES A SITE SURVEY TO VERIFY THE LOCATION OF COMMUNICATION ASSETS AS SHOWN ON THE DRAWING PRIOR TO CONSTRUCTION</li> </ol>																																																																									
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<p><b>POP</b> PRIVATELY OPERATED PAYPHONES</p> <p><b>APS</b> ASSISTANCE TELEPHONES (EG ELEVATOR AND ROADSIDE PHONES)</p> <p><b>MET</b> APPLY TO OTHER TYPE OF METERING POINT ( any service)</p> <p><b>ATM</b> ATM</p> <p><b>PRK</b> BANDSTAND / ROTUNDA / SPORTS FIELD STANDS / OTHER PARK BUILDING</p> <p><b>PSD</b> POINT OF SALE DEVICE (vending machine, ticket machine)</p> <p><b>TRF</b> Traffic Lights / Traffic Light Controller / Variable Speed Sign / Traffic Signal</p> <p><b>PBT</b> Public Transport (bus stop, tram stop, railway station, taxi rank, ferry wharf)</p> <p><b>SWT</b> Links / Link Pole / MV / HV Links / ABC Links / Dynamic Switch / Airbrake Switch / Isolator</p> <p><b>WAT</b> Water Infrastructure (storage, pumps, valves water supply, waste water, sewerage stations)</p> <p><b>GAS</b> Natural Gas Infrastructure</p> <p><b>CAM</b> Camera (security / traffic)</p> <p><b>CTL</b> Bridge control, swing bridge, traffic control gates, railway boom gates)</p> <p><b>MOB</b> Mobile Phone Tower / radio antenna</p> <p><b>LIT</b> Street Lighting Pole / street light controller</p> <p><b>CAR</b> Unmanned (council) car park</p> <p><b>PWR</b> Transformer / Kiosk / Pad Mount Sub-station / Pole Mount Transformer</p> <p><b>NAP-ID</b> Network Access Point (NAP)</p> <p><b>MPT-ID</b> Multipoint (MPT) n is the number of ports (eg 4,6,8,12)</p> <p><b>Penetration</b></p> <p><b>CABLE TRAY:</b></p>	<p><b>TJL-ID</b> Splice Joint on a Transit Cable (TJL)</p> <p><b>DJL-ID</b> Splice Joint on a Distribution Cable (DJL)</p> <p><b>LJL-ID</b> Splice Joint on a Local Cable (LJL)</p> <p><b>MJL-ID</b> Splice Joint on a Tether Cable (MJL)</p> <p><b>AJL-ID</b> Zone Terminal / Splice Joint (AJL)</p> <p><b>FDH-ID</b> Fibre Distribution Hub-FDH Cabinet with Cabinet ID shown</p> <p><b>PIT-ID 2</b> Service Drop Access Pit (650mmX280mmX565mm)</p> <p><b>PIT-ID 5</b> Network Boundary/Local Network Pit (Single Lid) (700mmX450mmX650mm)</p> <p><b>PIT-ID 6</b> Distribution/Local Network Connection Pit (Dual Lid) (1360mmX555mmX650mm)</p> <p><b>PIT-ID 8</b> Distribution/Local Network Connection Pit (1360mmX555mmX860mm)</p> <p><b>PIT-ID 9</b> Fibre Distribution Hub (FDH) Pit (2000mmX555mmX900mm)</p> <p><b>Shared Trench</b></p> <p><b>NTD</b> nbn NTD</p> <p><b>OBBU</b> NBN Optional Battery Backup Unit</p> <p><b>PDH</b> nbn Premises Distribution Hub</p> <p><b>CTL</b> nbn Cable Transition Location</p> <p><b>FDT</b> nbn Fibre Distribution Terminal</p> <p><b>FIP</b> nbn NTD Fire Indicator Panel</p> <p><b>Riser</b> Riser</p> <p><b>LIFT</b> nbn NTD LIFT</p> <p><b>AP</b> Access Panel</p> <p><b>SEC</b> nbn NTD Security</p> <p><b>CET</b> nbn Communications Earth Terminal</p> <p><b>DES QTY</b> Example of descriptor box that will show the type of work and the quantity involved</p> <p><b>nbn manhole</b></p> <p>Existing Telstra manhole</p> <p>Fan Access Node site (FAN)</p> <p>Multi Dwelling Unit (MDU)</p>	<p><b>DEPTH--</b> <b>ALIGN--</b> DEPTH OVER ALIGNMENT SYMBOL TO BE USED WITH EVERY MARKER POST</p> <p><b>X</b> Symbol to be used when replacing/removing existing network</p> <p><b>PCD</b> Premise Connection Device (PCD)</p> <p><b>POLE-ID</b> Pole (showing pole identity)</p> <p><b>5</b> Existing Telstra Pit ( 2,3,4,5,6,7,8,9 ) Telstra exchange</p> <p><b>T</b> Example of Telstra Major Conduit Layout with Proposed duct marked to be used by NBN</p> <p><b>M</b> NBN MARKER POST MARKER POST TO BE NUMBERED</p>	<p><b>CONDUIT CONFIGURATION</b></p> <p>CONDUITS AND DUCTS ARE IN LAYER : &lt; L460 NBN Support - Underground &gt; AND TERMINOLOGY CATEGORIZED INTO TWO GROUPS IN THE DRAWING AS PER BELOW:</p> <p>1- DUCT USED WITH LOCAL NETWORK</p> <p>2- CONDUIT USED WITH LEAD-IN DROPS ATTRIBUTES ATTACHED ARE AS SHOWN</p> <p>CONDUIT SIZE: PIT-ID 9 P100</p> <p>CONDUIT LENGTH: 26.5</p> <p>PIT-ID 5</p>	<p><b>CABLE CONFIGURATION</b></p> <p>CABLE TYPE: CABLES DIVIDE INTO FOLLOWING CATEGORIES AND ARE COLOUR CODED:</p> <p>TRANSIT CABLES COLOUR NO: 1 312F</p> <p>DISTRIBUTION CABLES COLOUR NO: 190 288F</p> <p>LOCAL CABLES COLOUR NO: 4 144F</p> <p>TETHER CABLES COLOUR NO: 3 12F</p> <p>LEAD IN (DROP) CABLES COLOUR NO: 5 1F</p> <p>CABLE SIZE: CABLE SIZE IS THE TOTAL NUMBER OF OPTIC FIBRES IN THE CABLE AND IS DETERMINED BY A NUMBER FOLLOWED BY F (FIBRE) OR R (RIBBON) IN THE MIDDLE OF THE LINE TYPE</p> <p>576F</p> <p>CABLE LOCATION: CABLE LOCATIONS DETERMINES WHERE THE CABLE IS USED AS PER BELOW:</p> <p>IN-CONDUIT 288F</p> <p>AERIAL 144F</p> <p>BURIED 96F</p> <p>EXAMPLE: 144 FIBRE AERIAL LOCAL CABLE 144F</p> <p>1 FIBRE BURIED DROP CABLE 1F</p> <p>432 FIBRE IN-CONDUIT TRANSIT CABLE 48F</p> <p>LINE TYPES ARE CATEGORIZED INTO 3 TYPES: 1. IN-CONDUIT: DXXXF 312F ... 2. AERIAL: DXXXF_AJ 144_A ... 3. BURIED: DXXXF_BJ 12_B ...</p> <p>FSA Boundary</p> <p>FSAM Boundary</p> <p>FDA Boundary</p>																									
<p><b>STAFF WORKING ON THIS ESTIMATE PLEASE NOTE:</b> The location of other authorities services which may affect this work have not been obtained by the estimator. Constructor to obtain service information before commencing.</p> <p><b>LEGEND</b></p>	<p><b>AS BUILT</b> COMPLETE UNDERGROUND POWER PH 04.1897446</p> <p><b>SAFETY FIRST</b> SAFETY STARTS WITH YOU</p> <p><b>DANGER LASER BEAM</b> EYE PROTECTION MUST BE WORN</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>REV</th> <th>DATE</th> <th>DRAFTER</th> <th>DESCRIPTION</th> <th>APPROVED</th> </tr> <tr> <td>2</td> <td>11-01-22</td> <td>RF</td> <td>AS BUILT</td> <td></td> </tr> <tr> <td>1</td> <td>01-06-21</td> <td>EC</td> <td>ISSUE FOR CONSTRUCTION</td> <td></td> </tr> <tr> <td>B</td> <td>26-03-21</td> <td>EC</td> <td>ISSUE FOR TENDER</td> <td></td> </tr> <tr> <td>A</td> <td>19-03-21</td> <td>EC</td> <td>DRAFT ISSUED TO CLIENT FOR COMMENT</td> <td></td> </tr> </table>	REV	DATE	DRAFTER	DESCRIPTION	APPROVED	2	11-01-22	RF	AS BUILT		1	01-06-21	EC	ISSUE FOR CONSTRUCTION		B	26-03-21	EC	ISSUE FOR TENDER		A	19-03-21	EC	DRAFT ISSUED TO CLIENT FOR COMMENT		<p><b>KEY PLAN</b></p> <p><b>LEGEND</b></p> <p><b>UPD</b> Underground Power Development Pty Ltd Suite 4, 47 Hancock Street WEST PERTH WA 6005 PH: (81) 9212 8777 EMAIL: team@upd.com.au</p>	<p><b>DRAWING TITLE:</b> QUAIRADING LOT 1 &amp; 75 WINMAR ROAD STAGE 1</p> <p>ENABLE#:</p> <p>STATE: WA REGION: 50</p> <p>FSA: SAM: ADA:</p> <p>PROJECT No: UPD 9241-01</p> <p>CADREF No:</p> <p>SCALE: N/A SHEET No: 3 OF 3 REV: 2</p>
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**ATTACHMENT 4: Stage 2 Indicative Development Costs (Options 1-3)**



**Project** Lot 1 & Lot 75 Winmar Road, Quairading  
**Option** 1  
**Number of Lots** 4  
**Client** Shire of Quairading  
**Engineer** Jamie King  
**Job Number** 23-11-134  
**Date** 12 December 2023  
**File Name** T188.23  
**Revision** A  
**Reference Document** Letter to Client L248.23



Level 2, 58 Kishorn Road  
 Mount Pleasant WA 6153  
 PO Box 1036  
 Canning Bridge WA 6153  
 Tel: (08) 9315 9955  
 office@portereng.com.au  
 www.portereng.com.au

<b>INDICATIVE DEVELOPMENT COSTS</b>	
<b>CONSTRUCTION COSTS</b>	<b>TOTAL COST</b>
Preliminaries	\$ 77,600
Earthworks and Siteworks	\$ 56,200
Sewer Reticulation	\$ -
Water Reticulation	\$ -
Drainage	\$ 6,500
New subdivisional Roads	\$ 184,900
Fencing	\$ 35,000
Underground Power	\$ 59,000
Communications	\$ 5,400
Construction Contingency (20% of construction)	\$ 85,000
<b>CONSTRUCTION TOTAL</b>	<b>\$ 509,600</b>
<b>DEVELOPMENT FEES AND CHARGES</b>	<b>TOTAL COST</b>
Water Corporation Standard Sewer Infrastructure Contribution	\$ 10,836
Water Corporation Standard Water Infrastructure Contribution	\$ 7,467
Water Corporation Standard Drainage Infrastructure Contribution	\$ -
Local Authority Fees	\$ -
Water Corporation Fees	\$ 5,100
Western Power Fees (including Gifted Asset Tax)	\$ 42,300
Communications Headworks and Backhaul Charges	\$ 2,400
WAPC and Landgate Fees	\$ 4,800
Professional Fees (12%)	\$ 51,000
Administration Contingency (5% of fees/charges)	\$ 7,000
<b>DEVELOPMENT FEES AND CHARGES TOTAL</b>	<b>\$ 130,903</b>
<b>SUB TOTAL COSTS</b>	<b>\$ 640,503</b>
<b>GST</b>	<b>\$ 62,220</b>
<b>TOTAL COSTS</b>	<b>\$ 702,723</b>
<b>COST PER LOT (excluding GST)</b>	<b>\$ 160,126</b>

We stress that these costs are indicative only and are reflective of current construction costs in the area. No allowances have been made for property costs. The reader should be satisfied that the costs are appropriate for their purpose. Porter Consulting Engineers does not accept responsibility or liability for their interpretation or use.

**Project** Lot 1 & Lot 75 Winmar Road, Quairading  
**Option** 2  
**Number of Lots** 4  
**Client** Shire of Quairading  
**Engineer** Jamie King  
**Job Number** 23-11-134  
**Date** 12 December 2023  
**File Name** T189.23  
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<b>INDICATIVE DEVELOPMENT COSTS</b>	
<b>CONSTRUCTION COSTS</b>	<b>TOTAL COST</b>
Preliminaries	\$ 77,600
Earthworks and Siteworks	\$ 56,200
Sewer Reticulation	\$ -
Water Reticulation	\$ -
Drainage	\$ 6,500
New subdivisional Roads	\$ 142,100
Fencing	\$ 35,000
Underground Power	\$ 59,000
Communications	\$ 5,400
Construction Contingency (20% of construction)	\$ 77,000
<b>CONSTRUCTION TOTAL</b>	<b>\$ 458,800</b>
<b>DEVELOPMENT FEES AND CHARGES</b>	<b>TOTAL COST</b>
Water Corporation Standard Sewer Infrastructure Contribution	\$ 10,836
Water Corporation Standard Water Infrastructure Contribution	\$ 7,467
Water Corporation Standard Drainage Infrastructure Contribution	\$ -
Local Authority Fees	\$ -
Water Corporation Fees	\$ 5,100
Western Power Fees (including Gifted Asset Tax)	\$ 42,300
Communications Headworks and Backhaul Charges	\$ 2,400
WAPC and Landgate Fees	\$ 4,800
Professional Fees (12%)	\$ 45,900
Administration Contingency (5% of fees/charges)	\$ 6,000
<b>DEVELOPMENT FEES AND CHARGES TOTAL</b>	<b>\$ 124,803</b>
<b>SUB TOTAL COSTS</b>	<b>\$ 583,603</b>
<b>GST</b>	<b>\$ 56,530</b>
<b>TOTAL COSTS</b>	<b>\$ 640,133</b>
<b>COST PER LOT (excluding GST)</b>	<b>\$ 145,901</b>

We stress that these costs are indicative only and are reflective of current construction costs in the area. No allowances have been made for property costs. The reader should be satisfied that the costs are appropriate for their purpose. Porter Consulting Engineers does not accept responsibility or liability for their interpretation or use.

**Project** Lot 1 & Lot 75 Winmar Road, Quairading  
**Option** 3  
**Number of Lots** 2  
**Client** Shire of Quairading  
**Engineer** Jamie King  
**Job Number** 23-11-134  
**Date** 12 December 2023  
**File Name** T190.23  
**Revision** A  
**Reference Document** Letter to Client L248.23



INDICATIVE DEVELOPMENT COSTS	
CONSTRUCTION COSTS	TOTAL COST
Preliminaries	\$ 34,200
Earthworks and Siteworks	\$ 50,200
Sewer Reticulation	\$ -
Water Reticulation	\$ -
Drainage	\$ 6,500
New subdivisional Roads	\$ -
Fencing	\$ 35,000
Underground Power	\$ 51,000
Communications	\$ 5,400
Construction Contingency (20% of construction)	\$ 37,000
<b>CONSTRUCTION TOTAL</b>	<b>\$ 219,300</b>
DEVELOPMENT FEES AND CHARGES	TOTAL COST
Water Corporation Standard Sewer Infrastructure Contribution	\$ 3,612
Water Corporation Standard Water Infrastructure Contribution	\$ 2,489
Water Corporation Standard Drainage Infrastructure Contribution	\$ -
Local Authority Fees	\$ -
Water Corporation Fees	\$ 1,700
Western Power Fees (including Gifted Asset Tax)	\$ 41,100
Communications Headworks and Backhaul Charges	\$ 1,200
WAPC and Landgate Fees	\$ 4,400
Professional Fees	\$ 36,000
Administration Contingency (5% of fees/charges)	\$ 5,000
<b>DEVELOPMENT FEES AND CHARGES TOTAL</b>	<b>\$ 95,501</b>
<b>SUB TOTAL COSTS</b>	<b>\$ 314,801</b>
<b>GST</b>	<b>\$ 30,870</b>
<b>TOTAL COSTS</b>	<b>\$ 345,671</b>
<b>COST PER LOT (excluding GST)</b>	<b>\$ 78,700</b>

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