



SHIRE OF KOORDA

LOCAL PLANNING SCHEME No. 3

AMENDMENT No. 2

Inserting an Additional Use – 'Workforce accommodation'
and 'Office' into Schedule 2 – Additional Uses, for Ptn Lot 19
Orchard Street, Koorda

November 2023

PLANNING AND DEVELOPMENT ACT 2005

RESOLUTION TO ADOPT AMENDMENT TO LOCAL PLANNING SCHEME

SHIRE OF KOORDA - LOCAL PLANNING SCHEME NO. 3

AMENDMENT NO. 2

Resolved that the local government pursuant to section 75 of the *Planning and Development Act 2005*, amend the above Local Planning Scheme by:

- 1. Inserting an Additional Use – ‘Workforce accomodation’ and ‘Office’ into Schedule 2 – Additional Uses, for Ptn Lot 19 Orchard Street, Koorda and amending the scheme maps accordingly.**

The Amendment is standard under the provisions of the Planning and Development (*Local Planning Schemes*) Regulations 2015 for the following reasons:

- The amendment relating to the additional uses do not prejudice the objectives identified in the scheme for that zone or reserve;
- The amendment is consistent with the Shire of Koorda *Local Planning Strategy (2014)* in supporting the rural pursuits of the community and the broader local economy;
- The land the subject of the amendment does not directly abut any existing sensitive land uses and has minimal potential to impact on surrounding land uses;
- The ‘Additional Use’ will establish a framework that requires subsequent planning to deliver the proposed office facility in a manner which accords with the surrounding (existing) community.

Dated this day of 20

.....

CHIEF EXECUTIVE OFFICER

PLANNING AND DEVELOPMENT ACT 2005

SHIRE OF KOORDA - LOCAL PLANNING SCHEME NO. 3

AMENDMENT NO. 2

SCHEME AMENDMENT REPORT

CONTENTS

- 1.0 BACKGROUND**
- 2.0 PLANNING DISCUSSION**
 - 2.1 Concept Plan
 - 2.2 Traffic and Movement
 - 2.3 Service Infrastructure
 - 2.4 Subsequent Information
- 3.0 CONCLUSION**

APPENDICES

- Appendix 1 Site Concept Plan & Office Plans (CBH Group)
- Appendix 2 Transport Impact Statement (Shawmac)
- Appendix 3 Engineering Servicing Report (McDowall Affleck)
- Appendix 4 Existing Development Approval for Workforce Accommodation (Shire of Koorda)

1.0 BACKGROUND

The site (Lot 19) is 4ha, with the the proposed amendment area measuring approximately 2.3ha and is located 600m south of the Koorda town centre. The amendment area is bound by Orchard Street to the south, Aitken Road to the west, Parks and Recreation reserve to the north and undeveloped Residential zoned land to the east. The site comprises a vacant, undeveloped land parcel and is largely cleared of vegetation.

On 13 February 2023, the Shire approved a development application for a 24-person workforce accommodation facility over the same subject site. The accommodation facility and associated amenities including common facilities, a kitchen and laundry, 27-bay car parking area and an effluent disposal system located central to the site. The proposed amendment will facilitate the development of the proposed office facility to the immediate east of the approved workforce accommodation facility.

CBH has over 130 sites across the State which together receive, handle, store and outload approximately 90 percent of Western Australia's grain harvest. CBH are seeking to develop a 24-person workforce accommodation and office facility to support their activities in the Koorda townsite. The proposed development would locate CBH's administrative facilities within the Koorda townsite and in close proximity to the existing grain handling facility, located 100m to the west along Aitken Road.

Pre-lodgement discussions with the Shire and DPLH were undertaken in December 2022 on the workforce accommodation and office proposal. Both the Shire and DPLH were generally supportive of the proposed 'Office' land use on the site and the associated amendment to LPS 3 to include this as an Additional Use.

Shire of Koorda of Local Planning Scheme No. 3 (LPS3)

The site is zoned 'Residential' under the Shire's LPS3, with 'Office' listed as an 'X' use in the Residential zone. To facilitate the intended development and allow for the development of an office use on the site, an amendment to the Shire's LPS3 is therefore required.

As LPS 3 does not include a specific definition for 'Office', the definition provided in the Model Provisions (Schedule 1) of the *Planning and Development (Local Planning Schemes) Regulations 2015* applies. Accordingly, 'Office' "means premises used for administration, clerical, technical, professional or similar business activities." Despite being defined in LPS3, 'Workforce Accommodation' is not identified within the Zoning Table, as reflected in the recent development approval over the site which was approved as a "use not listed".

The Additional Uses to the existing 'Residential' zoning has been acknowledged as the most appropriate tool to guide future such development of the site, whilst continuing the existing Residential zoning.

As Australia's largest co-operative and a leader in the Australian grain industry, with operations extending along the value chain from grain storage, handling, transport, marketing and processing CBH's continued operation in the Koorda site is not only beneficial but critical to the Shire's broader rural activities. CBH's proposed office facility further supports this notion, in that it will provide ongoing support for the rural pursuits of the local economy.

Accordingly, this amendment to LPS3 proposes to introduce an Additional Use of 'Office' and 'Workforce' for the site, with the scheme map and text to be modified to reflect. The LPS 3 Zoning Plan, shown in Figure 1, shows both current and proposed zoning. Schedule 2 – Additional Uses of LPS3 will be amended to incorporate the additional 'Office' use.

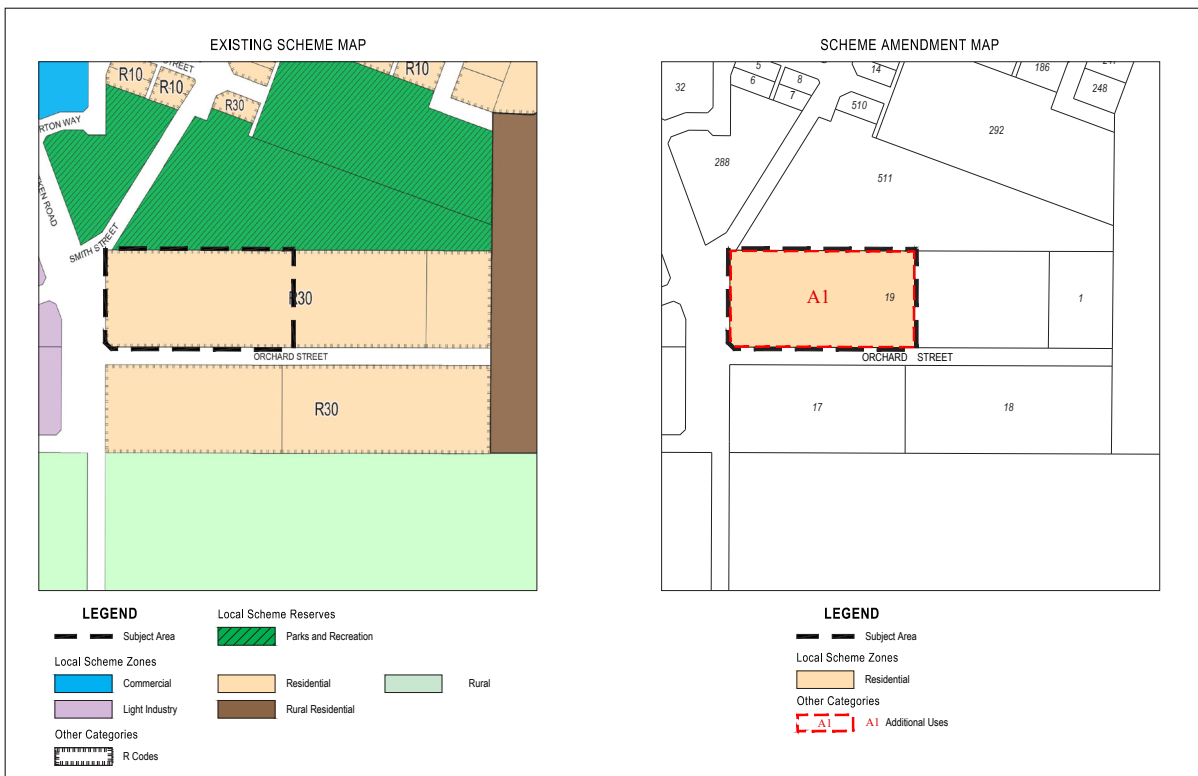


Figure 1 - Existing and Proposed Local Planning Scheme No.3 Map (Shire of Koorda - Lot 19 Orchard Street, Koorda)

Standard Amendment

Part 5, Clause 34(i) of the *Planning and Development (Local Planning Scheme) Regulations 2015* ('the Regulations') states that a local scheme amendment is defined as 'standard' if the amendment is consistent with:

- Any local planning strategy for the locality.
- The region planning scheme.
- Poses minimal impact on land in the area which is not subject to the amendment.
- Does not result in any significant environmental, social, economic or governance impacts.

In providing the framework to support development that supports the local economy, the Amendment delivers a range of social and economic benefits for the Koorda community without having any impact on the surrounding environment. The proposed amendment does not preclude the ability to accommodate future residential development over the site, given the underlying 'Residential' zoning and the balance of lot 19 which provides up to 1.7ha of unencumbered residential land. As such, the Amendment does not have any significant impact on residential land supply in Koorda and is appropriate in the context of the limited demand for residential land as outlined in the Shire's Local Planning Strategy (2014).

The Amendment which looks to introduce a much needed function to support the nearby rural pursuits, has a negligible impact on the amenity of the locality and such it is requested that the Shire confirm that the Amendment will be defined as 'standard' and will be processed in accordance with the procedures set out in Part 5; Division 4 of the Regulations.

2.0 PLANNING DISCUSSION

The following documentation has been prepared in support of the amendment:

- Concept Plans;
- Traffic Impact Statement (Shawmac); and
- Engineering Servicing Report (McDowall Affleck).

These supporting documents are discussed in further detail below.

2.1 Concept Plan

A concept plan has been prepared for the site in support of the Amendment (refer Appendix 1), at the request of the Shire, and demonstrates how the office facility can be developed in conjunction with the approved workforce accommodation facility and that all relevant planning considerations for the site can be addressed as part of a future comprehensive development application.

The concept plan has been informed by discussions with the Shire as part of the approval process for the workforce accommodation facility, who provided input on the general location of units, parking and drainage infrastructure.

It should be emphasised that the location of the office is indicative and is ultimately subject to detailed planning and design, and further consultation with the Shire of Koorda as part of a comprehensive development application. Further discussion is provided below on matters that will be refined as part of the subsequent planning for the site.

Key aspects that have been considered in preparing the concept plan include:

- A new office building (approx. 380m²) located just east of the approved workforce accommodation facility;
- The building includes a number of dedicated office spaces, meeting rooms and toilet facilities;
- The office will include an additional car park with 10 car parking bays, in addition to the approved 27 bay car park for the workforce accommodation facility;
- An existing vehicular access point along the southern boundary of the site from Orchard Street;
- The office will be operational year round;
- A maximum of 15 staff members to use the office at any given time; and
- The location of leach drains and associated sewerage treatment system will be in accordance with the existing workforce accommodation approval, north of the accommodation blocks.

2.2 Traffic and Movement

A Traffic Impact Statement (TIS) has been prepared by Shawmac (Appendix 2) demonstrating that the site is well connected to the surrounding road network and that the proposed facility will not result in significant changes to traffic movements on the surrounding road network.

As shown on the concept design, vehicular access is to be taken via the existing crossover on Orchard Street along the southern boundary of the site. This will provide direct access to the Koorda townsite via Aitken Road.

The proposed office is estimated to have a negligible impact on the existing road network, and is expected to generate only 7 vehicle movements during the morning peak hour and 9 vehicle movements during the afternoon peak hour which is able to be adequately accommodated within the existing capacity of the road network.

The TIS also demonstrates that the site is able to be provided with the appropriate level of parking, sightlines and maneuvering areas. Specifically, the office is expected to be serviced by an additional 10 car bays to support the existing 27 bays currently servicing the workforce accommodation facility. It is noted that whilst the TIS references 13 bays for the office component, an additional 3 bays were subsequently included as part of the workforce accommodation facility approval. This will result in a total of 37 bays across the site for both components of the development, as recommended by the TIS. This is considered more than adequate in satisfying the operational demands of the future office facility. These matters will ultimately be refined and determined as part of detailed designs that will be lodged as part of a subsequent development application.

Further detail is provided as part of Shawmac's Transport Impact Statement enclosed as Appendix 2.

2.3 Service Infrastructure

The Engineering Services Report prepared by McDowall Affleck (refer Appendix 3) clearly demonstrates that the site can be provided with all essential services in an efficient, timely and economical manner.

In most cases the provision of services is simply a logical expansion of the existing infrastructure network, with all service networks, except for sewer, proven to have the capacity to accommodate the development of the site. These specifically relate to the provision of water, power, drainage and telecommunications infrastructure.

The proposed office facility is expected to utilise an on-site wastewater disposal system to manage and dispose wastewater on site, in conjunction with the approved workforce accommodation facility. It is noted that the Engineering Services Report incorrectly outlines that the Koorda town site is not provided with a reticulated sewerage network, however further investigations have shown that there is an existing system. Notwithstanding this, the site is not within a Sensitive Sewage Area or a Public Drinking Water Source Area according to the Department of Water and Environmental Regulation, allowing for onsite effluent disposal on site. Given the size of the site, the system is capable of ensuring adequate separation away from the proposed facilities, which is to be cited just north of the workforce accommodation facility in accordance with the existing development approval. The Services Report confirms that the design of the effluent disposal system has considered the capacity demands of both the workforce accommodation and office facilities, which are capable of being accommodated by the same system. This will be considered as part of a subsequent development application which will have to be considered by the Department of Health prior the office facility being approved.

In terms of drainage, due to the clay soils on-site, infiltration via soak-wells are not viable and instead stormwater run-off generated from the buildings and carpark is expected to be conveyed to a small detention basin in the north-west portion of the site in lieu of soak wells. Drainage flows will be conveyed by either pit and pipe or open swales and will be further considered as part of future detailed designs.

In terms of water supply, an existing water main is located along the southern boundary of the site along Orchard Street with the site able to be connected in a relatively straightforward manner. The Water Corporation has advised that the total peak water demand may have an effect on pressure and supply but that there are options to counter this impact should they arise. These options will be explored as part of future detailed design.

The site can be easily connected to power via the existing Western Power infrastructure along the western side of Aitken Road (overhead low and high voltage power lines), which is serviced by the Western Power Cunderdin substation which has sufficient capacity in the short term. Further investigations into electricity demand for the office facility in the context of the long-term capacity of the network will be undertaken to determine whether an on-site power solution or further upgrades to the nearby network are required. This will be further considered as part of future detailed designs and addressed prior to the development application stage.

2.4 Subsequent Information

This amendment provides the necessary planning framework for the office and workforce accommodation facility to be developed. Further information relating to the final design will be provided as part of a comprehensive development application once the zoning is in place. These include:

- Bushfire Management Plan; and
- Plans and Elevations.

These matters ultimately cannot be resolved until detail designs have been finalised, which in turn can only progress once the additional use has been introduced to the 'Residential' zone in Local Planning Scheme No. 3.

3.0 CONCLUSION

The amendment to the Shire of Koorda Local Planning Scheme No. 3, which proposes to introduce an additional 'Office' 'Workforce accommodation' use, will ensure that the local scheme is able to accommodate the intended land use for the site, providing much needed administrative support for CBH ongoing operations that which underpin the farming and rural pursuits of Koorda and its surrounds. The 'Additional Use' will facilitate a comprehensive development application, which provides the mechanism to address the design and spatial arrangement of the office facility.

PLANNING AND DEVELOPMENT ACT 2005
SHIRE OF KOORDA - LOCAL PLANNING SCHEME NO. 3
AMENDMENT NO. 2

The Shire of Koorda under and by virtue of the powers conferred upon it in that behalf by the *Planning and Development Act 2005* hereby amends the above Local Planning Scheme by:

Amending Schedule 2 – Additional uses by;

- a. Deleting the words 'There are no additional uses that apply to the Scheme';
- b. Inserting a new Additional Use – 'Workforce accommodation' and 'Office' for Ptn Lot 19 Orchard Street, Koorda, as shown in the table below;

No.	Description of land	Additional use	Conditions
1	Ptn Lot 19 Orchard Street, Koorda	<ul style="list-style-type: none">• Workforce accommodation• Office	<ul style="list-style-type: none">• All development is subject to a Development Approval.

- c. Amending the Scheme maps accordingly.

Adopted by resolution of the Council of the Shire of Koorda at the Ordinary meeting of the Council held on the day of 20

..... PRESIDENT

..... CHIEF EXECUTIVE OFFICER

Adopted for final approval by resolution of the Shire of Koorda at the meeting of the Council held on the day of and the Common Seal of the Shire of Koorda was hereunto affixed by the authority of a resolution of the Council in the presence of:

..... PRESIDENT

..... CHIEF EXECUTIVE OFFICER

Recommended/Submitted for final approval

.....

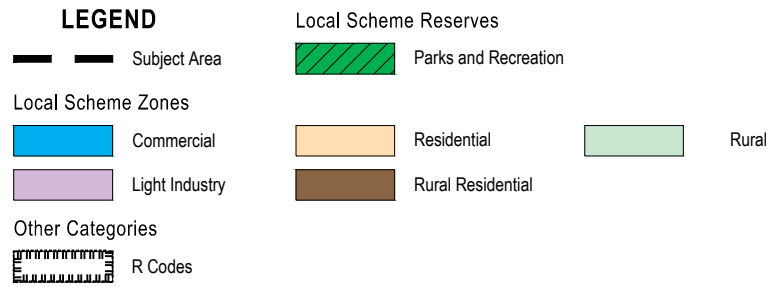
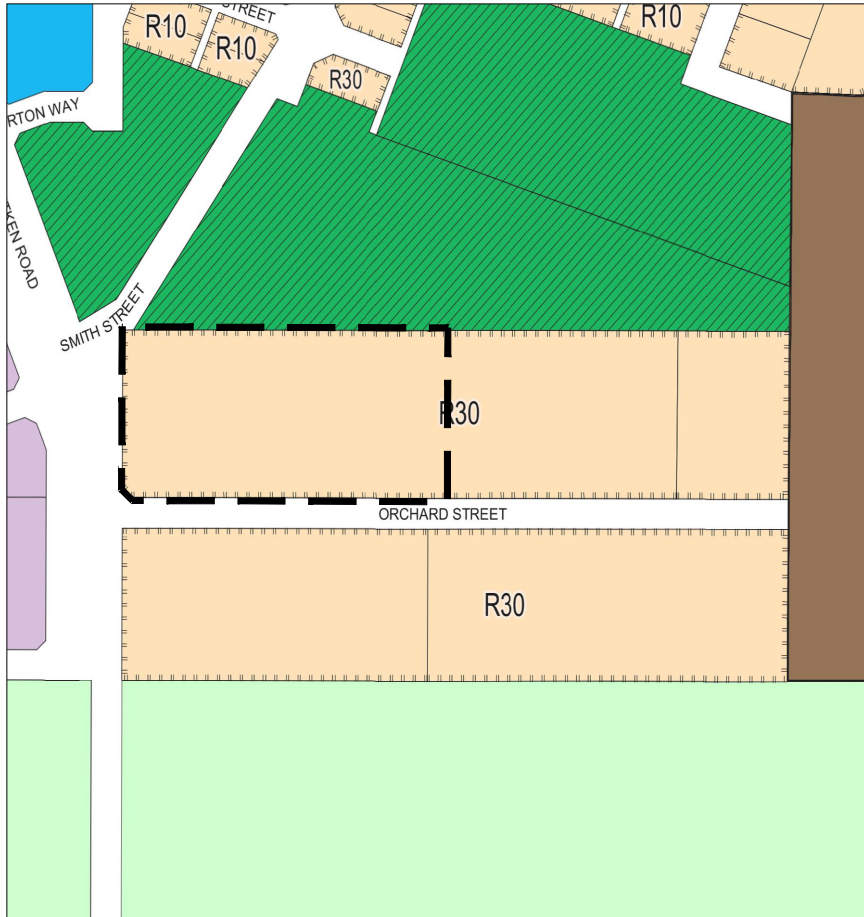
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DATE

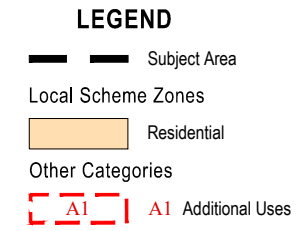
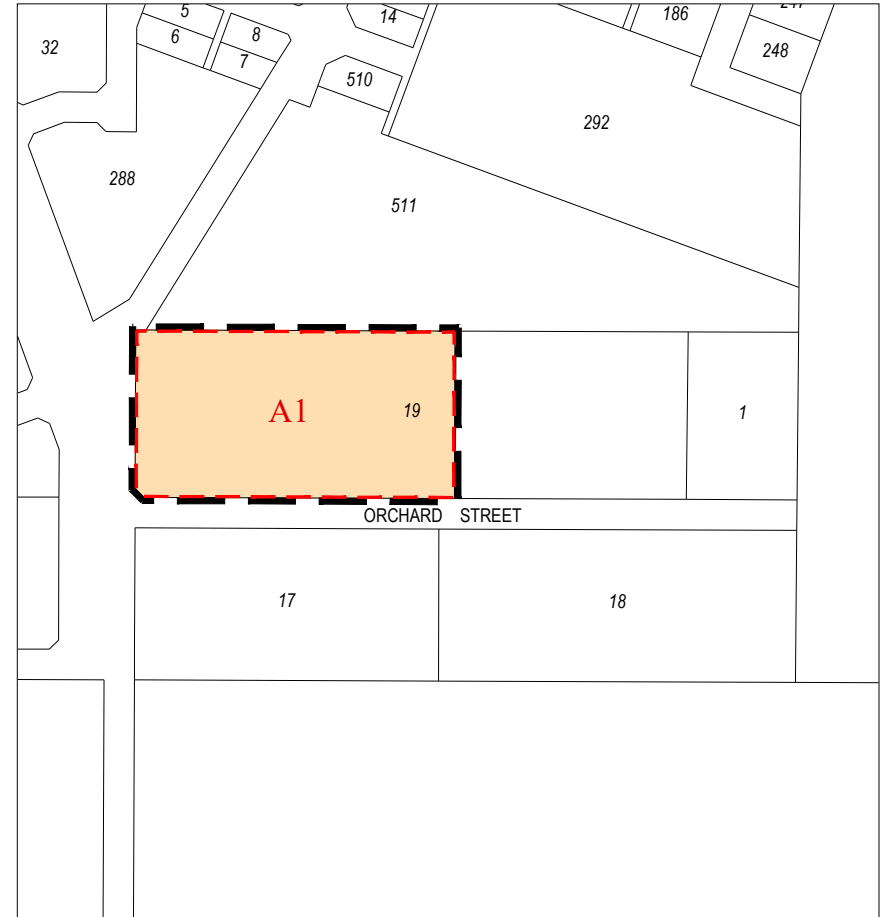
Final Approval Granted

MINISTER FOR PLANNING DATE

EXISTING SCHEME MAP



SCHEME AMENDMENT MAP



APPENDICES

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- Appendix 4 Existing Development Approval for Workforce Accommodation (Shire of Koorda)

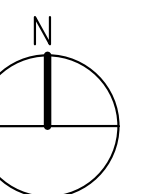
APPENDIX 1

Site Concept Plan & Office Plans (CBH Group)



LEGEND

- 01 OFFICE
- 02 FEMALE ABLUTIONS
- 03 MALE ABLUTIONS
- 04 BEER, COMMS & CLEANER ROOM
- 05 ENTRY
- 06 MEETING ROOM
- 07 MAINE OFFICE
- 08 OPEN PLAN



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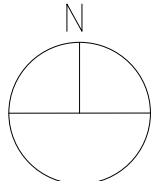
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KOORDA INFRASTRUCTURE PLANNING ACCOMMODATION SITE PLAN	373-3142-GN-STD-001	1 OF 4	0

APPENDIX 2

Transport Impact Statement (Shawmac)



Transport Impact Statement

Project: Proposed Accommodation Development
1 Orchard Street, Koorda

Client: CBH Group

Author: Paul Nguyen

Date: 26th July 2023

Shawmac Document #: 2212011-TIS-001

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Document Status: Client Review

Version	Prepared By	Reviewed By	Approved By	Date
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Contents

1.	Introduction	1
1.1.	Proponent	1
1.2.	Site Location	1
2.	Proposed Development.....	3
3.	Traffic Management on Frontage Streets.....	5
3.1.	Road Network	5
3.1.1.	Existing Road Layout and Hierarchy	5
3.1.2.	Speed Limits	6
3.2.	Traffic Volumes.....	7
4.	Vehicle Access and Parking.....	9
4.1.	Access	9
4.2.	Sight Distance.....	10
4.3.	Car Parking.....	12
4.3.1.	Planning Scheme Requirements.....	12
4.3.2.	Parking Design.....	12
4.4.	Bicycle Parking	13
4.5.	Provision for Service Vehicles.....	13
5.	Traffic Generation	15
5.1.	Accommodation	15
5.2.	Office.....	15
6.	Pedestrian and Cyclist Access.....	16
7.	Public Transport Access	16
8.	Site Specific Issues and Safety Issues.....	17
8.1.	Crash History	17
9.	Conclusion	18



Figures

Figure 1: Site Location.....	2
Figure 2: Aerial View (July 2022).....	2
Figure 3: Site Layout	4
Figure 4: Existing Road Network Hierarchy.....	5
Figure 5: Existing Speed Limits	6
Figure 6: Traffic Volumes – Average Weekday (2021/2022).....	7
Figure 7: Traffic Volumes – Average Weekend (2021/2022).....	8
Figure 8: Vehicle Access Arrangement	9
Figure 9: Sight Distance Check – Orchard Street.....	11
Figure 10: Classification of Parking Facilities	12
Figure 11: Swept Path Analysis.....	14

Tables

Table 1: AS2890.1 Car Parking Compliance.....	13
Table 2: Proposed Development Vehicle Trip Generation	15



1. Introduction

1.1. Proponent

Shawmac has been engaged by CBH Group to prepare a Transport Impact Statement (TIS) for a proposed accommodation development in Koorda.

This TIS has been prepared in accordance with the Western Australian Planning Commission (WAPC) *Transport Impact Assessment Guidelines Volume 4 – Individual Developments*. The assessment considers the following key matters:

- Details of the proposed development.
- Vehicle access and parking.
- Provision for service vehicles.
- Daily traffic volumes and vehicle types.
- Traffic management on frontage streets.
- Public transport access.
- Pedestrian access.
- Cycle access
- Site specific and safety issues.

1.2. Site Location

The site address is 1 Orchard Street, Koorda. The local authority is the Shire of Koorda.

The general site location is shown in **Figure 1** and an aerial view of the site is shown in Figure 2.

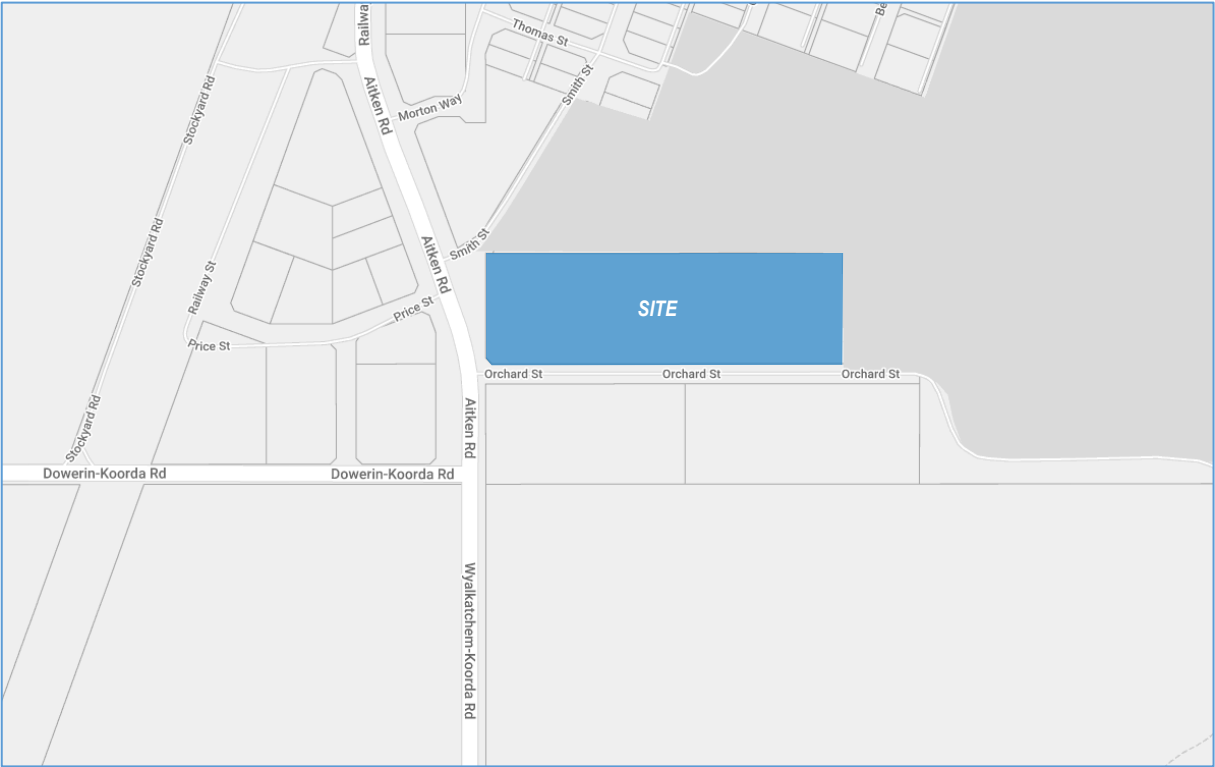


Figure 1: Site Location



Figure 2: Aerial View (July 2022)

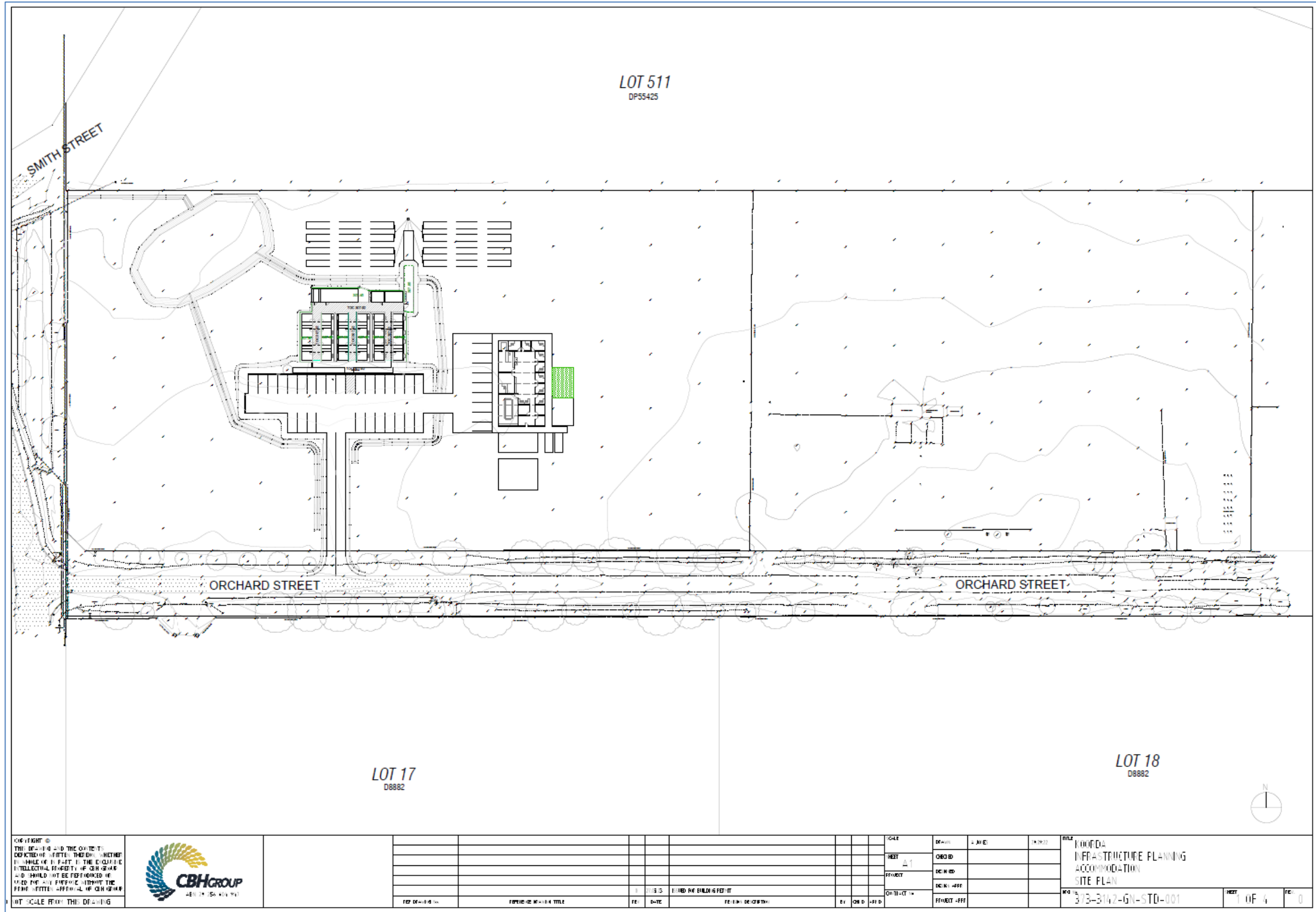


2. Proposed Development

CBH propose to construct an accommodation development on the western portion of the site comprising 24 rooms, a laundry/kitchen, a common room and parking for 27 cars. The development will be occupied by CBH workers who will travel to and from the nearby CBH site.

A future office building is proposed to the east of the accommodation site with an additional car park for 10 cars.

The proposed site plan is shown in **Figure 3**.



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		1	INFRASTRUCTURE PLANNING ACCOMMODATION SITE PLAN	15/03/2024	J. SMITH	M. SMITH	1:1000	15/03/2024	373-3142-GN-STD-001	INFRASTRUCTURE PLANNING ACCOMMODATION SITE PLAN	373-3142-GN-STD-001	1 OF 4	0			

Figure 3: Site Layout

3. Traffic Management on Frontage Streets

3.1. Road Network

3.1.1. Existing Road Layout and Hierarchy

The layout and hierarchy of the existing local road network according to the Main Roads WA *Road Information Mapping System* is shown in **Figure 4**.

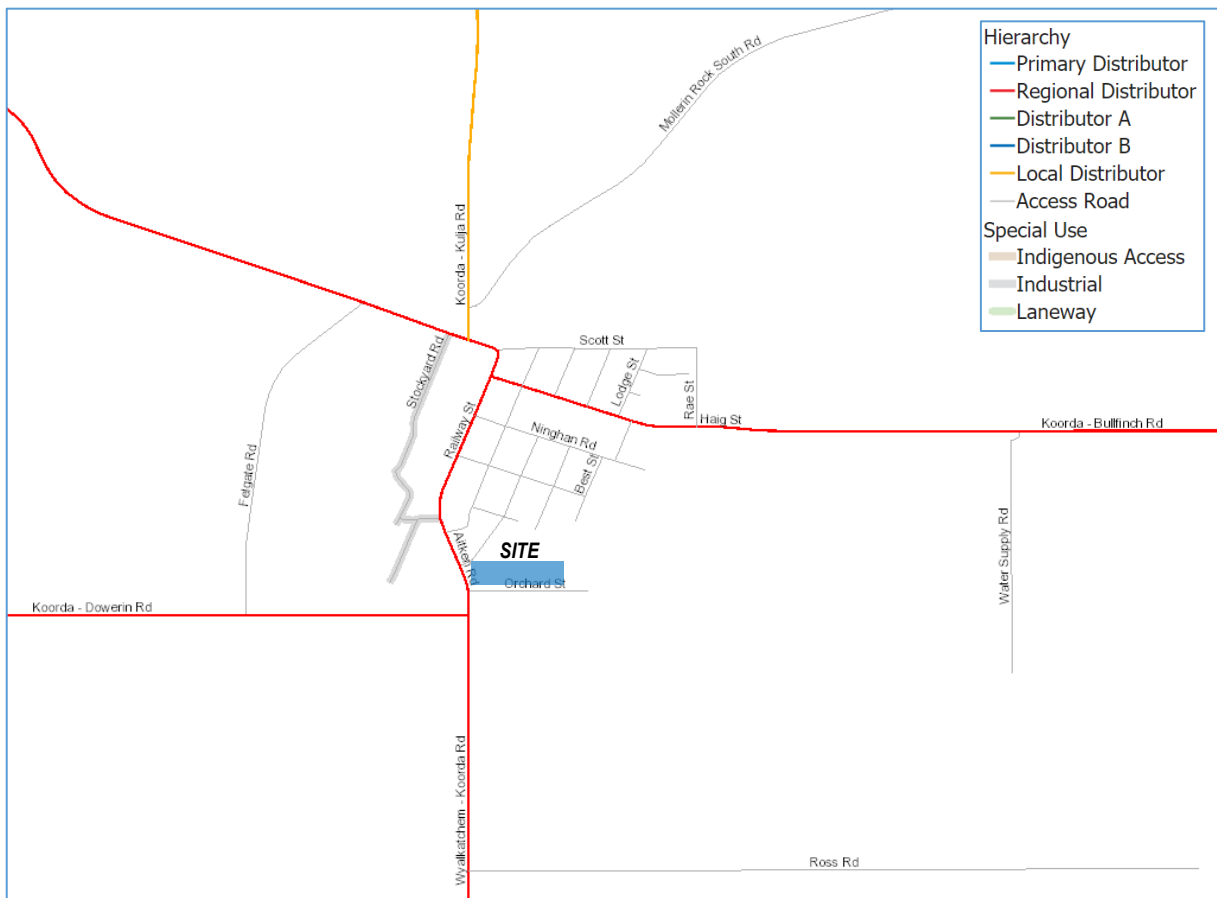


Figure 4: Existing Road Network Hierarchy

3.1.2. Speed Limits

The speed limits are shown in **Figure 5**.

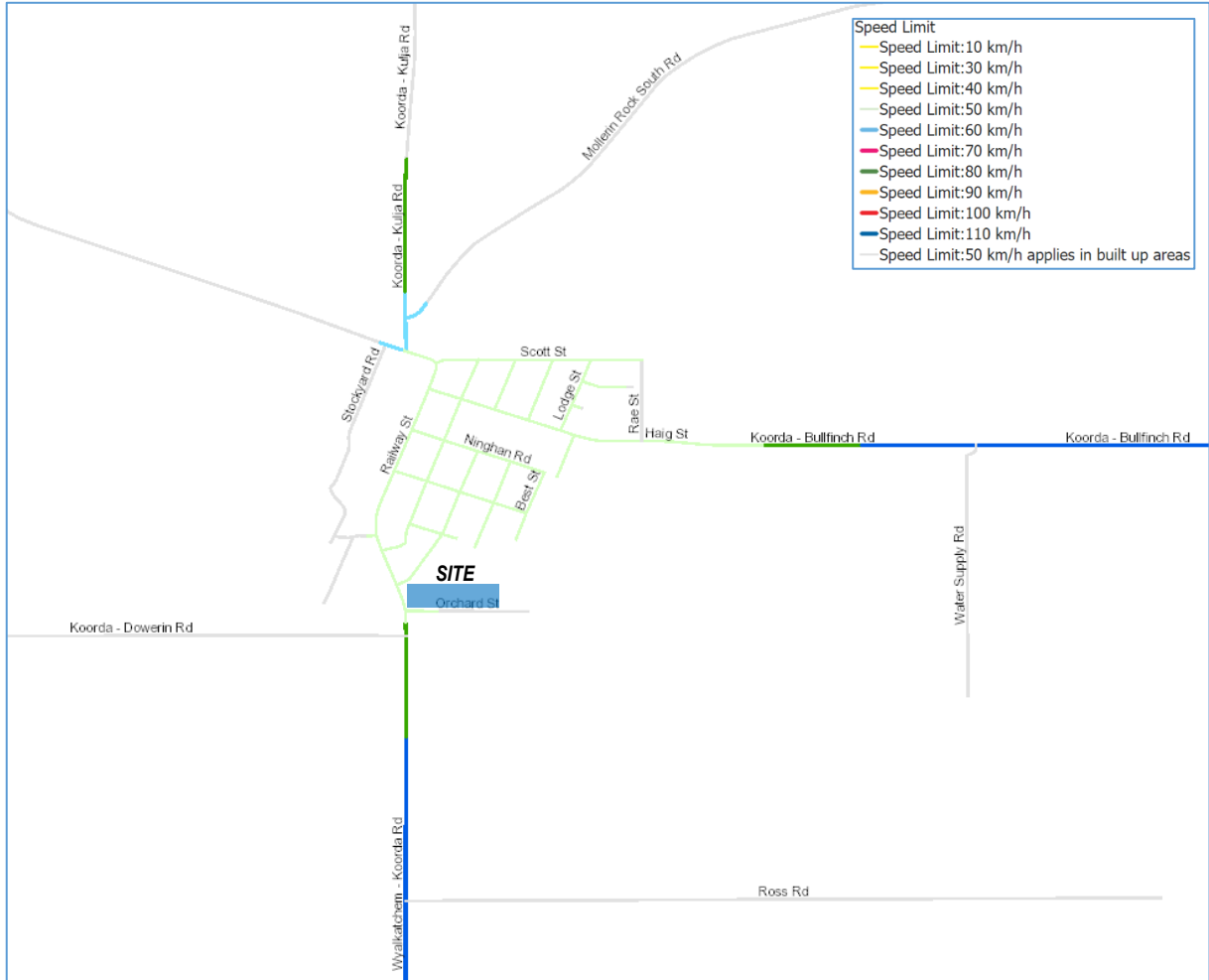


Figure 5: Existing Speed Limits

3.2. Traffic Volumes

The latest traffic volumes along Wyalkatchem-Koorda Road were obtained from Main Roads WA *Traffic Map* as summarised in **Figure 6**.

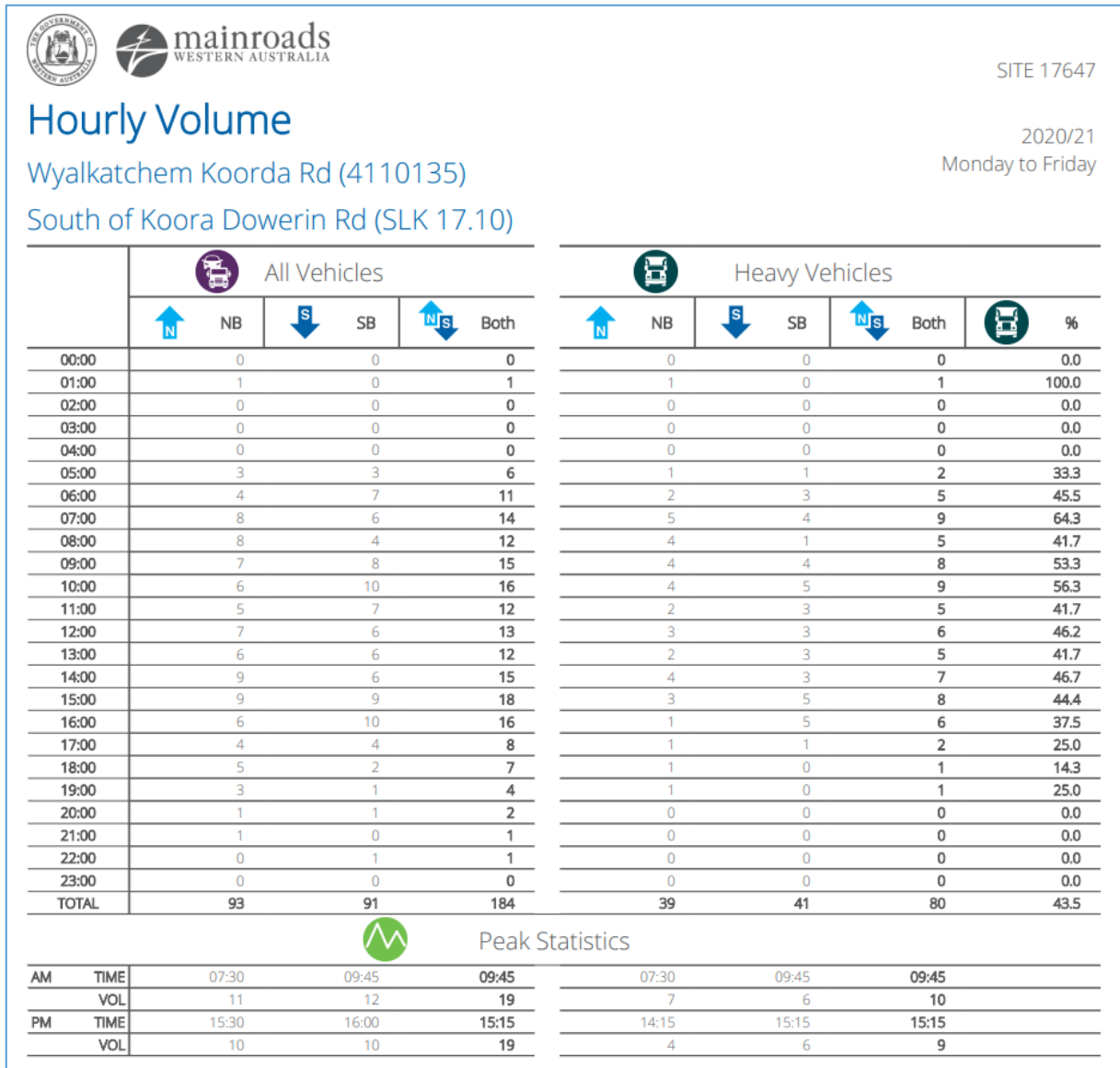


Figure 6: Traffic Volumes – Average Weekday (2021/2022)

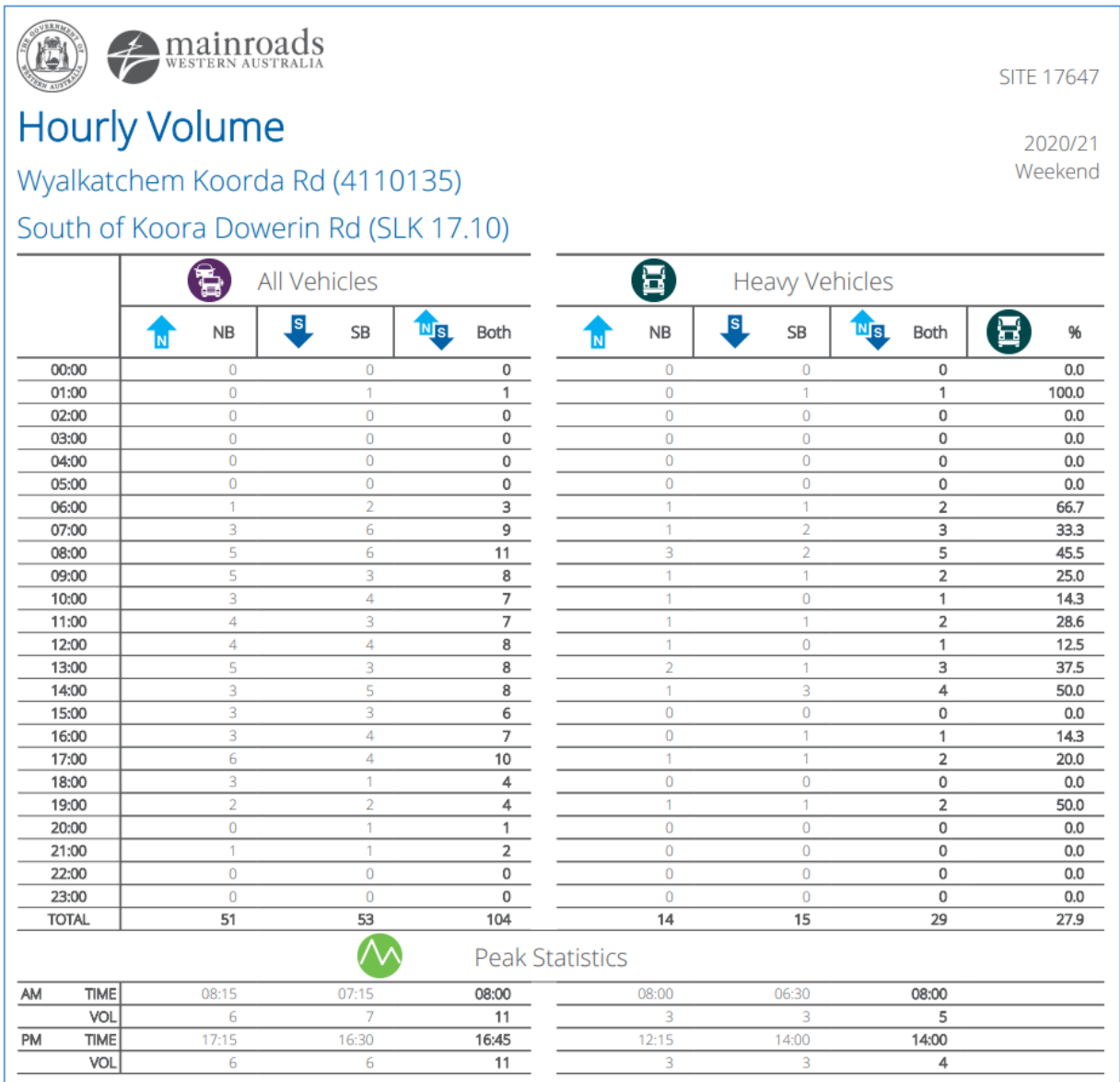


Figure 7: Traffic Volumes – Average Weekend (2021/2022)

4. Vehicle Access and Parking

4.1. Access

Vehicle access is proposed via new crossover on Orchard Street as shown in **Figure 8**. All vehicles will travel to and from the site via the Wyalkatchem-Koorda Road / Orchard St intersection which is a standard T-intersection.

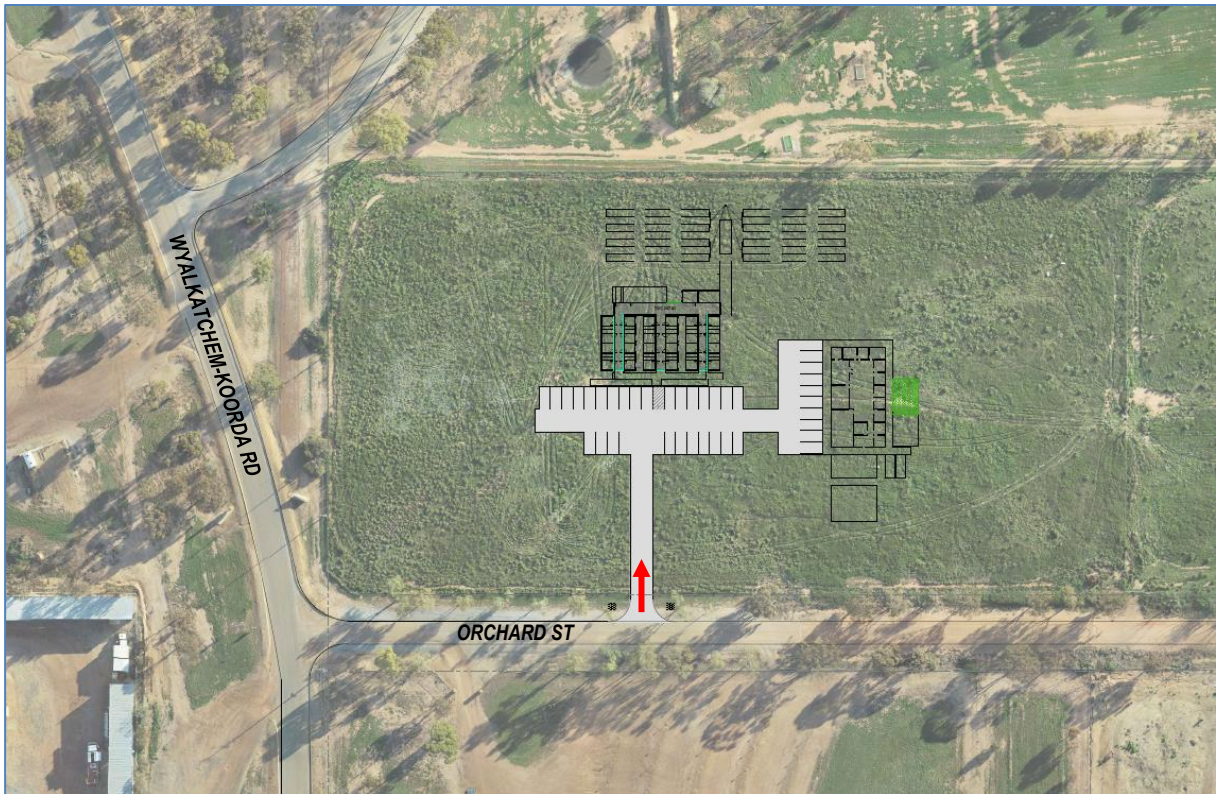


Figure 8: Vehicle Access Arrangement

4.2. Sight Distance

Sight distance requirements from vehicle exit points are defined in Figure 3.2 of Australian Standard AS2890.1-2004 *Parking facilities Part 1: Off street car parking* (AS2890.1) which are based on the Austroads Stopping Sight Distance (SSD).

There is no posted speed limit along Orchard Street and according to the Main Roads WA *Road Information Mapping System*, a 110km/h speed limit would apply, assuming that the area is not considered to be a built up area. However, considering the proximity of the access to Wyalkatchem-Koorda Road and transition from a sealed road to the east of the site access, the actual travel speed in the vicinity of the site access is expected to be much lower. At this stage, the frontage road speed is assumed to be 70km/h which would require a minimum 85m of SSD.

The sight distance check is shown in **Figure 9**. As shown, assumed 85m sight distance is achieved at the proposed vehicle access in both directions.



Figure 9: Sight Distance Check – Orchard Street

4.3. Car Parking

The development plan indicates a total provision of 37 car parking bays on the site. 27 bays will be provided initially with the accommodation development and then 10 bays will be added when the office is constructed.

4.3.1. Planning Scheme Requirements

The car parking requirements for developments in the Shire of Koorda are outlined in the Shire's Local Planning Scheme. The closest applicable uses would be Motel which requires 1 bay per unit plus 1 bay per 25m² of service area and Office which requires 1 bay for every 30m² of plot ratio area.

Based on the proposed 24 rooms, 24 bays would be required for guests. The service area is not known but it is considered that 1 or 2 additional spaces for any maintenance or operating staff should be sufficient. It is understood that staff movements are expected to occur only during the day when workers are away from the site and so the proposed 27 bays would be sufficient.

For the future office building, the area of 380m² building area would require 13 bays. It is recommended to consider providing additional bays to meet the minimum requirements or to confirm the expected number of staff and provide parking accordingly.

4.3.2. Parking Design

The parking layout will need to comply with the requirements of Australian Standard AS2890.1. The user class will depend on the purpose of the bay as detailed in **Figure 10**.

User class	Required door opening	Required aisle width	Examples of uses (Note 1)
1	Front door, first stop	Minimum for single manoeuvre entry and exit	Employee and commuter parking (generally, all-day parking)
1A	Front door, first stop	Three-point turn entry and exit into 90° parking spaces only, otherwise as for User Class 1	Residential, domestic and employee parking
2	Full opening, all doors	Minimum for single manoeuvre entry and exit	Long-term city and town centre parking, sports facilities, entertainment centres, hotels, motels, airport visitors (generally medium-term parking)
3	Full opening, all doors	Minimum for single manoeuvre entry and exit	Short-term city and town centre parking, parking stations, hospital and medical centres
3A	Full opening, all doors	Additional allowance above minimum single manoeuvre width to facilitate entry and exit	Short term, high turnover parking at shopping centres
4	Size requirements are specified in AS/NZS 2890.6 (Note 2)		Parking for people with disabilities

Figure 10: Classification of Parking Facilities



Resident parking (long-term parking) would be classified as User Class 1A. A summary of the AS2890.1 parking requirements is detailed in **Table 1**.

Table 1: AS2890.1 Car Parking Compliance

Dimension	Requirement	Provided
90 degree parking – Class 1 – Long Term Parking (Residents)		
Car Bay Width	2.4m	3.0m
Car Bay Length	5.4m	6.0m
Parking Aisle Width	5.8m	6.0m

All proposed parking bays are 3.0m wide, 6.0m long and the parking aisles is 6.0m. The key parking dimensions are compliant with AS2890.1.

4.4. Bicycle Parking

The proposed use is unlikely to generate any demand for cycling and so the provision of bicycle parking or end of trip facilities is not considered to be warranted.

4.5. Provision for Service Vehicles

Waste is proposed to be collected from the site on a fortnightly basis.

A vehicle swept path analysis has been undertaken in Autodesk Vehicle Tracking to check the manoeuvring of waste vehicles through the site crossover. The analysis has been undertaken using a vehicle template for a typical 10m long waste collection vehicle.

The results of the analysis are shown in **Figure 11**. The analysis demonstrates that the site provides adequate room for the waste vehicle to enter and exit the site in a forward direction.

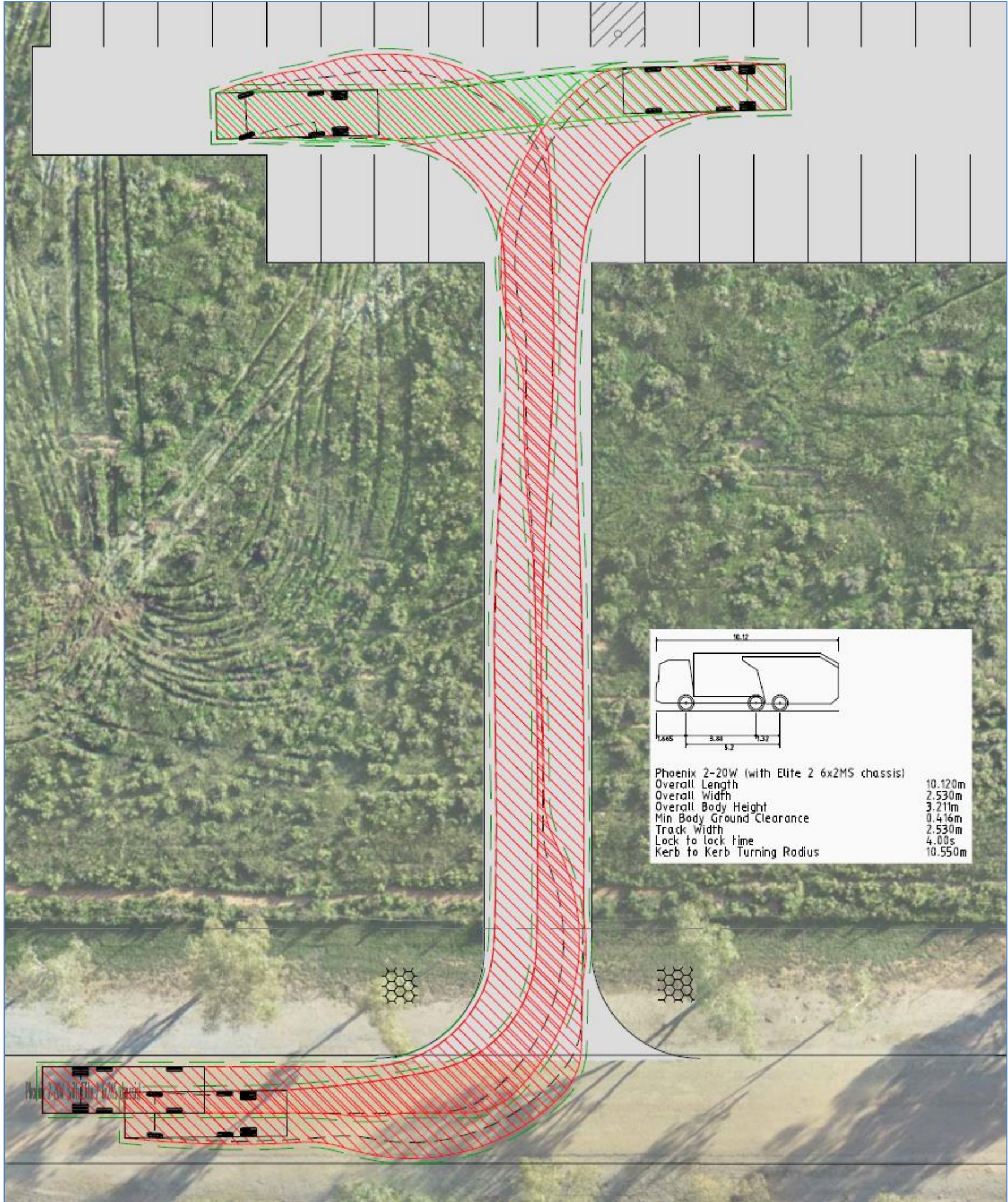


Figure 11: Swept Path Analysis

5. Traffic Generation

5.1. Accommodation

This component of the development will accommodate CBH workers who will travel to the nearby CBH facility in the morning between 5:30am and 6:00am and then return in the evening between 5:30pm and 6:00pm.

Assuming all workers drive individually, it is estimated that the accommodation component will generate approximately 24 vehicle movements during each peak hour, including 24 outbound vehicle movements during the morning peak hour and 24 inbound vehicle movements during the afternoon peak hour.

According to the WAPC TIA guidelines, an increase of between 10 to 100 peak hour vehicles is considered to have a low to moderate impact and is generally deemed acceptable without requiring detailed capacity analysis. The estimated 24 vehicles per hour is at the lower end of this range and so the development traffic is considered to have a low impact and can be accommodated within the existing capacity of the road network.

It is also noted that the current background traffic volumes along the road network are very low and the peak hours of the development do not coincide with the peak hours on the road network as indicated by the traffic data shown previously in **Figure 6** and **Figure 7**.

5.2. Office

The volume of traffic generated by the proposed office has been estimated using trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual 11th Edition* as detailed in **Table 2**.

Table 2: Proposed Development Vehicle Trip Generation

Land Use	Units	Quantity	Generation Rate			Number of Trips		
			Daily	AM Peak	PM Peak	Daily	AM Peak	PM Peak
Small Office Building (Land Use 712)	100m ² GFA	380m ² GFA	15.49	1.80	2.33	59	7	9

As shown, the proposed office is predicted to generate approximately 59 daily vehicle trips, including 7 vehicle trips during the morning peak hour and 9 during the afternoon peak hour. The estimated 7 to 9 vehicles per hour is at the lower end of the above range and so the office traffic is considered to have a low impact and can be accommodated within the existing capacity of the road network.



6. Pedestrian and Cyclist Access

There are no paths along Orchard Street or along the adjacent roads. Based on the location of the site and the proposed use, the demand for walking and cycling to and from the site would be minimal and so the provision of new paths or cycle lanes is not warranted by the proposed development.

7. Public Transport Access

There are no existing public transport services within reasonable walking distance of the site. All guests and visitors are expected to travel via private vehicle and so there is no demand for public transport.



8. Site Specific Issues and Safety Issues

8.1. Crash History

The crash history of the adjacent road network was obtained from the MRWA Reporting Centre including Orchard Street and the length of Wyalkatchem-Koorda Road between Railway Street and Ross Road. No crashes have been recorded on the above roads over the five-year period from January 2017 to December 2021 and so the crash history does not appear to indicate any major safety issues on the adjacent road network.

The proposed redevelopment itself will generate a low volume of additional traffic and there is no indication that the redevelopment would increase the risk of crashes unacceptably.

9. Conclusion

This Transport Impact Statement for the proposed accommodation development at 1 Orchard Street in Koorda concluded the following:

- It is estimated that the accommodation component would generate approximately 24 vehicle movements during each peak hour, including 24 outbound vehicle movements during the morning peak hour and 24 inbound vehicle movements during the afternoon peak hour. This volume of traffic is low and can be accommodated within the existing capacity of the road network with no major impact.
- The proposed office is predicted to generate approximately 59 daily vehicle trips, including 7 vehicle trips during the morning peak hour and 9 during the afternoon peak hour. This volume of traffic is also very low and can be accommodated within the existing capacity of the road network.
- The minimum sight distance requirement based on an assumed 70km/h frontage road speed is achieved from the proposed crossover on Orchard Street in both directions.
- The provision of 24 car bays would satisfy the parking requirement for guests. It is understood that staff movements are expected to occur only during the day when workers are away from the site and so the proposed 24 bays would be sufficient.
- For the future office building, the area of 380m² building area would require 13 bays. It is recommended to consider providing additional bays to meet the minimum requirements or to confirm the expected number of staff and provide parking accordingly.
- The key parking dimensions are compliant with AS2890.1.
- A vehicle swept path analysis demonstrates that the site provides adequate room for the waste vehicle to enter and exit the site in a forward direction.
- The crash history of the adjacent road network did not indicate any safety issue on the adjacent road network and there is no indication that the development would increase the risk of crashes unacceptably.
- It is expected that all residents and visitors will be accessing the site via a motor vehicle and so there is no demand for additional path infrastructure or public transport services.

APPENDIX 3

Engineering Servicing Report (McDowall Affleck)



ENGINEERING SERVICING REPORT

FOR

No. 1 Orchard Street, Koorda

Prepared by

McDOWALL AFFLECK PTY LTD

CONSULTING ENGINEERS | PROJECT MANAGERS



Table of Contents

1	INTRODUCTION	3
2	SURFACE FEATURES	3
	2.1 Existing Features	3
	2.2 Land Surface	3
	2.3 Existing Drainage	3
	2.4 Roads	3
3	GEOTECHNICAL	3
	3.1 Groundwater	4
	3.2 Acid Sulphate Soils	4
4	EARTHWORKS	4
5	ROADS & CARPARKING	5
6	STORMWATER DRAINAGE PLAN	5
7	WASTEWATER (EFFLUENT) DISPOSAL	5
8	WATER SUPPLY	6
9	UNDERGROUND POWER	6
10	COMMUNICATIONS	7
11	CONCLUSION	7
	APPENDIX 1 – PROPOSED CBH KOORDA CONCEPT PLAN	8
	APPENDIX 2 – SHIRE OF KOORDA LOCAL PLANNING SCHEME NO. 4	9
	APPENDIX 3 – AERIAL PHOTO NO. 1 ORCHARD STREET KOORDA	10
	APPENDIX 4 – GEOTECHNICAL STUDY NO. 1 ORCHARD STREET KOORDA	11
	APPENDIX 5 – ON-SITE WASTEWATER MANAGEMENT FOR ETA BEDS CALCULATIONS	12
	APPENDIX 6 – WATER BALANCE CALCULATION FOR DRIP IRRIGATION EFFLUENT DISPOSAL SYSTEM	13
	APPENDIX 7 – WATER CORPORATION WATER MAINS NETWORK MAP	14
	APPENDIX 8 – WESTERN POWER OVERHEAD AND UNDERGROUND NETWORK MAP	15
	APPENDIX 9 – WESTERN POWER NETWORK CAPACITY MAP	16
	APPENDIX 10 – TELSTRA NETWORK MAP	17



1 INTRODUCTION

McDowall Affleck Pty Ltd have been commissioned by CBH Group to conduct an engineering servicing report to support the scheme amendment to allow for additional commercial land use over No. 1 Orchard Street Koorda herein referred to as the site.

The site is currently zoned as 'residential-R30' under the Shire of Koorda Town Planning Scheme No. 3, which can be accessed from the Department of Planning, Lands and Heritage (DPLH).

CBH have provided a proposed concept design of the office for 15 staff along with worksite accommodation including 24 beds, 24 bathrooms, kitchen, laundry and common room facilities. Refer to APPENDIX 1 – PROPOSED CBH KOORDA CONCEPT PLAN.

This report is based on data obtained through the provided geotechnical report and a desktop study of available information from records and discussion with relevant statutory authorities.

2 SURFACE FEATURES

2.1 Existing Features

The site is located approximately 300m south from the Koorda townsite, and currently zoned as residential. Refer to APPENDIX 2 – SHIRE OF KOORDA LOCAL PLANNING SCHEME NO. 3.

The site is approximately 4.05Ha in size, and best described as sparse grassland fields with light shrubbery and trees surrounding the site. An existing shed resides central within the eastern half and some stockpile sundry items within the south-eastern corner fronting Orchard Street. Refer to APPENDIX 3 – AERIAL PHOTO NO. 1 ORCHARD STREET KOORDA.

2.2 Land Surface

The site is relatively flat with two low points towards the north-western corner and on the northern side of Orchard Street within the eastern half of the site from the Site Plan in Appendix 1. Starting at approximately 307.5mAHD at the north-east and south-eastern corners, and gradually decreasing to 306.5mAHD at the low points. Due to the size of the site, this height difference could be considered as negligible and less than 1% in grade.

2.3 Existing Drainage

Currently, there is no notable drainage infrastructure within the site. Based off the contour information observed and small grade, it is expected that stormwater runoff will slowly follow the natural topography of the site. Most of the site would potentially flow towards the south-eastern corner of the site towards Orchard Street however this would be unlikely for minor storm events. It is expected that stormwater will infiltrate on site due to the small grade.

2.4 Roads

As shown in the aerial photo in Appendix 3, approximately 130m of Orchard Street is asphalted / sealed from Aitken Road and the remains a gravel road heading east for the remaining frontage of the site. There are no notable roads within the site, only access tracks from the gates and firebreaks surrounding the fencing of the site.

3 GEOTECHNICAL

CBH Group had engaged Galt Geotechnics to conduct a preliminary geotechnical report of the site in July 2022. Refer to APPENDIX 4 – GEOTECHNICAL STUDY NO. 1 ORCHARD STREET KOORDA.

As described in the geotechnical report and the fieldworks conducted, the subsurface conditions of the site were relatively consistent and comprised of:



- Sandy CLAY / Gravelly Sandy CLAY: low and medium plasticity, dark brown, with fine to coarse grained sand, with fine to medium grained, variably cemented gravel, trace roots, moist, extending from surface to a typical depth of 0.2m overlying,
- Sandy CLAY / Gravelly Sandy CLAY: low and medium plasticity, pale red brown and red brown, with fine to coarse grained sand, with fine to medium grained, variably cemented gravel, moist, extending to depths ranging from 0.7 – 1.3m.

The geotechnical report also indicated possible shallow rock that their borehole auger was not able to penetrate. Further investigation using larger plant / equipment may assist in determining the nature of the shallow rock or boulders encountered.

3.1 Groundwater

The Department of Water and Environmental Regulation (DWER) “Perth Groundwater Map” & “Water information reporting” mapping provides information on average and historical maximum groundwater levels around Western Australia.

Searching within the Koorda district, there seems to be no recent reporting of groundwater levels close to the site to give an approximate indication of the groundwater level. The geotechnical report did not encounter groundwater at the time of fieldwork investigation. Due to the shallow clayey soils, it is expected that water may perch on these soils following periods of significant rainfall, particularly during the winter months.

3.2 Acid Sulphate Soils

Acid Sulphate Soil (ASS) testing has not been conducted for the site and there is no known evidence for ASS risk assessments conducted within the Koorda region. As indicated by the geotechnical study, the site conditions were not consistent with general locations known to have ASS present such as wetland areas and saline inland areas.

Therefore, the risk of ASS occurrence is relatively low, and no further ASS investigation would be necessary.

4 EARTHWORKS

As per the provided geotechnical study, the site had been given a classification of “Class H-D” in its current state at the time of the investigation due to the design soil suction zone for the Koorda region, and potential thickness of medium plasticity Sandy CLAY / Gravelly Sandy Clay.

The geotechnical report describes further investigation and proving of in-situ rock may possibly improve the site classification to “Class M-D” or “Class S”.

Due to the clay soils encountered, the geotechnical report outlines difficulty of excavation during the wet winter months and recommends that this is done during the drier summer months.

It is expected that there would be minimal deep excavation within the site with exception for the wastewater tanks and drainage pits and pipes. Localised levelling would be required for the accommodation villas, common room and the area for the leach drains.

Importing of soils and disposal of the in-situ clay soil may be considered to improve the site working conditions. However, this will be reliant on the availability of soil material within the area to avoid increased importation expenses.



5 ROADS & CARPARKING

The only proposed road within the development would be for site access from Orchard Street and into the carpark. This would typically be 5.5m wide to allow for two-way entry / exit with the carparking bays sized in accordance with Australian Standard AS2890.1 – Parking Facilities Part 1: Off-street car parking.

6 STORMWATER DRAINAGE PLAN

The Shire of Koorda has no known stormwater management plan for the town of Koorda. As a guide we would expect stormwater to be discharged in its natural flow path at predevelopment flow rates. Due to the clay soils on-site, infiltration via soak-wells will not be viable and it would be best to convey stormwater away from the buildings.

As shown in the amended concept site plans, there is a proposed basin to be constructed within the north-western corner of the site. It is expected that stormwater run-off generated from the buildings and carpark will be conveyed to this point to slowly infiltrate into the ground.

Its anticipated that that run-off generated from the carpark, accommodation villas and the common room will be conveyed by pit and pipe system or open swales to a small detention basin to provide attenuation to limit outflows from the site to predeveloped flow rates at the north-western corner of the site.

7 WASTEWATER (EFFLUENT) DISPOSAL

There is no reticulated sewer infrastructure within the Shire of Koorda and it will be some time until Water Corporation's networks expands to this area. Therefore, wastewater will have to be managed and disposed of on-site. The geotechnical report had previously conducted permeability testing in accordance with Australian Standard AS1547:2012 'On-site domestic wastewater management', and a soil category 6 was given for the in-situ soils.

Category 6 soils present a lot of difficulty in managing due to the very low infiltration rate and large disposal area required. Wastewater would need to be managed via a secondary treatment before being discharged to an onsite effluent disposal field using drip irrigation or evapotranspiration-absorption (ETA) systems. Tables L1 and M1 from AS1547:2012 outline design loading rates (DLR) for ETA beds and drip irrigation respectively. For category 6 soils, the loading rates for ETA beds is 5mm/day and for drip irrigation is 2mm/day.

Following the Department of Health (DoH) 'Supplement to Regulation 29 and Schedule 9', for non-residential premises we would consider the proposed development to be very similar to mine-site accommodation camp units for a combined hydraulic loading rate of 180L/person/day.

Multiplying this value by the 24-person maximum occupancy gives a total of 4,320L/day. Example calculations for the required effluent disposal area using ETA beds show that 1,770m² would be required. Refer to APPENDIX 5 – ON-SITE WASTEWATER MANAGEMENT FOR ETA BEDS CALCULATIONS for additional details. The required effluent disposal increases to approximately 1,990m² considering an irrigation system to dispose of the effluent at a design loading rate of 2mm/day, refer to APPENDIX 6 – WATER BALANCE CALCULATION FOR DRIP IRRIGATION EFFLUENT DISPOSAL SYSTEM.

In this instance, we have not included the 15 office staff as part of the current wastewater calculations due to some current unknowns in the office layout plan and we have assumed that they are included as part of the 24-person accommodation worksite. As a guide, if the proposed 15 office staff are to be considered additional to the 24-person accommodation, then we would consider that the hydraulic loading rate would be 30L/person/day for offices (non-showering staff). An additional 450L/day (15 staff multiplied by 30L/person/day) for the office site would need to be added onto the previous total



of 4,320L/day, and would ultimately increase the required area for the effluent disposal field to about 2,000 – 2,200m².

The site has a total area of 4.46Ha and is able to contain the above-mentioned effluent disposal areas. The previous Galt geotechnical report was limited, as soil testing was only conducted using boreholes, which are limited in excavation methods. Further investigation using heavier excavation plant such as a small backhoe loader capable of digging 2 – 2.5m below ground level will assist in determining the lower subsurface profiles.

This site is not within a Sensitive Sewage Area or a Public Drinking Water Source Area according to the Department of Water and Environmental Regulation and groundwater was not encountered within any of the boreholes from the geotechnical report.

A possible method to assist in on-site infiltration would be to over excavation of the effluent receiving soil to remove / dispose of the clay material and import soil with increased permeability to surround the ETA beds or the irrigation system to allow for increase infiltration.

8 WATER SUPPLY

Network mapping provided by the Water Corporation from Before You Dig Australia (BYDA) indicates that there is an existing DN58 AC water main along the western side of the site along Aitken Road and a DN100 AC along the northern side of Orchard Street. Refer to APPENDIX 5 – WATER CORPORATION WATER MAINS NETWORK MAP. The site is on the boundary of the existing water network with the Koorda townsite. From observing the Water Corporation ESnet data, Koorda has a Eastern and Western Tank, in which the site is closer to the Eastern Tank approximately 7km. After discussions with the Water Corporation planning team, they have indicated that they would require some more detailed information regarding the total water demand of the site, as this could possibly influence the current pressure and supply if they are to accommodate the peak water demands of the proposed development.

Considering 270L/person/day as a conservative water consumption equates to an average demand of 6,480L/day, which would need to be assessed against the current scheme.

There would need to be further discussion with Water Corporation to determine if they are required to supply the peak demand flow and if upgrades to the existing water mains would be necessary to achieve this. Alternatively, tanks and a pump system can be installed on-site with a trickle feed supply from Water Corporation at the average demand. Further investigation into the exact water demand will be required.

Ultimately the site can still be serviced for water, with consideration of the above-mentioned options.

9 UNDERGROUND POWER

Overhead and Underground Power Network mapping supplied by Western Power indicates the following:

- There is no underground power along the western and southern boundaries of the site along Aitken Road and Orchard Street.
- The Town of Koorda and the site is currently serviced by the Western Power Cunderdin substation, approximately 100km south of Koorda.
- There are existing overhead high and low voltage power poles along the western side of the site from Aitken Road.

There would need to be further investigation into the electrical demand for the proposed development and if the existing nearby electrical infrastructure has enough capacity. If the existing network does



not have enough capacity, then an on-site transformer may be considered or upgrades to the existing nearby network will be needed. Refer to APPENDIX 6 – WESTERN POWER OVERHEAD AND UNDERGROUND NETWORK MAP.

Using the Western Power Network Mapping Tool, we have assessed the remaining capacity of the Cunderdin substation to service the proposed development. The substation currently indicates a remaining capacity of less than 5 MVA as of 2023. The forecasted capacity is estimated to remain at this capacity until 2029 noting that there is currently no plan for increasing this capacity for the next 6 years. Refer to APPENDIX 7 – WESTERN POWER NETWORK CAPACITY MAP.

The site can ultimately be serviced with overhead power considering possible power works to service the site.

10 COMMUNICATIONS

Network information supplied by Telstra indicates an existing in-service cable/duct along the eastern side of Aitken Road, inside the site boundary. Pot-holing may be required to ensure the service is not damaged or arrangement with Telstra to relocate the cable/duct back outside and within the road reserve. It is anticipated that the proposed accommodation village within the site can be serviced by the existing Telstra service or existing mobile phone coverage. Refer to APPENDIX 8 – TELSTRA NETWORK MAP. The NBN network has no known existing service within the area along Aitken Road or Orchard Street. From accessing NBN's network website it does indicate that it is available and further investigation is needed to see if additional work is to be completed before the site can be connected.

The site can ultimately be serviced with communications services.

11 CONCLUSION

This report has considered factors relating to the serviceability of the site for the proposed CBH development based on a desktop investigation and the previous preliminary Galt geotechnical report from July 2022. In conclusion, the site is able to be supplied by the required services for a 24 person accommodation worksite. As design development progresses prior to construction, then additional investigations and calculations will be required to confirm the exact sizes and requirements for items such as water supply, onsite effluent disposal, stormwater design, communications and electrical supply.



APPENDIX 1 – PROPOSED CBH KOORDA CONCEPT PLAN

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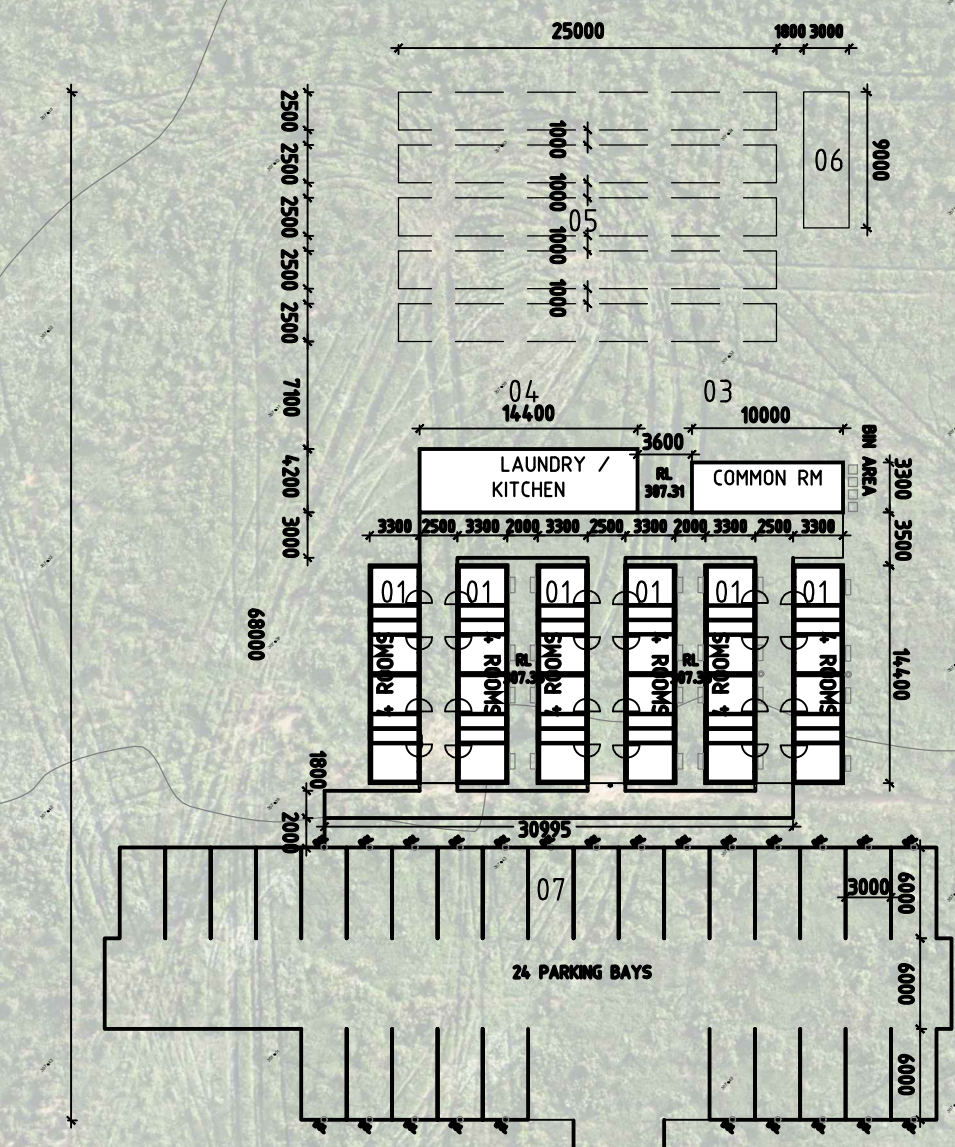
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SMITH STREET

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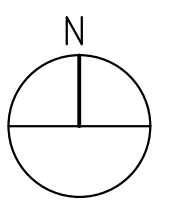


ORCHARD STREET

ORCHARD STREET

LEGEND

- 01 SPQ
- 02 UA SPQ
- 03 COMMON ROOM
- 04 KDLU
- 05 SEPTICS
- 06 ATU
- 07 CAR PARK



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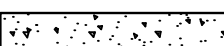
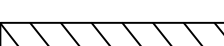
DETAILED PLAN

SPECIFICATIONS

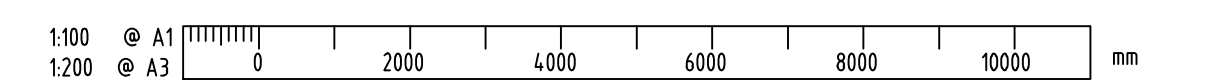
SINGLE PERSONS QUARTERS (SPQ) MODIFICATIONS

- Electrical**
 Airconditioners
 - Disposal of all old A/C units
 - Supply and installation of all new A/C split system units (internal components)
- Light fittings**
 - Testing of all lights, fans and electrical system
 - Replacement of lights and fans where they are defective or not working
- Hotwater system**
 - Supply of a new electrical hot water storage unit (standard) and valves
- Windows**
 - Supply and install all stainless steel mesh for windows frames to meet the BAL Ratings
- Doors**
 - Repair door locks and closers where required
- Floors**
 - Clean and Mechanical buff and polish the floors
- Furniture**
 - PS: Supply all new king single beds frames and mattresses - assume 2040 (l) x 1070 (w).
 - Disposal of the old beds and mattresses
 - Unpack rooms, cut down all internal cupboards/desks to allow for the installation of the new beds. Clear dimension of 1150mm is required between end of cupboard or desk to the wall to fit a bed frame and mattress of 1070mm wide.
- Other requirements**
 - Sub-floor to be either enclosed or provided mesh/perforated sheet with max 2mm aperture as per Clause 6.2 of AS3959
 - Subfloor ventilation clearance must be at least 150mm as per NCC Figure 3.4.3a & b
 - Windows and door should be provided either by bushfire shutter or screens
 - Non-combustible roof, all gaps must be sealed as per Clause 3.6 of AS3959

LEGEND

-  PROPOSED CONCRETE WALKWAY
-  PROPOSED VERANDAH

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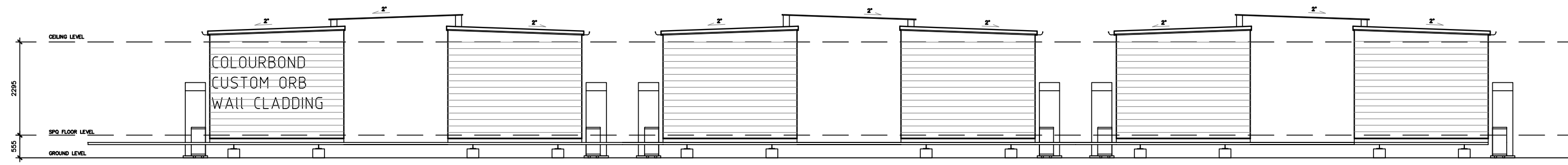


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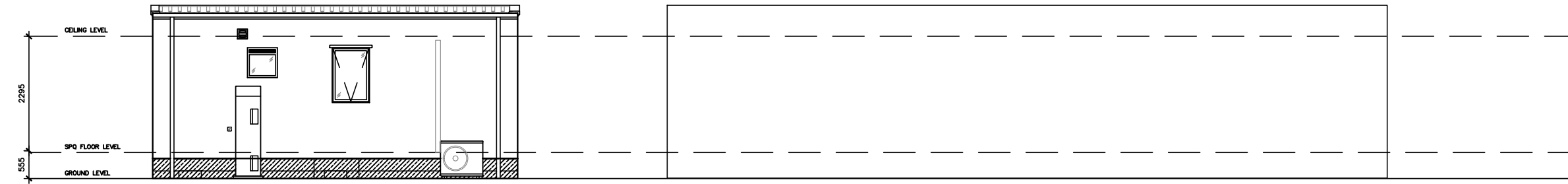


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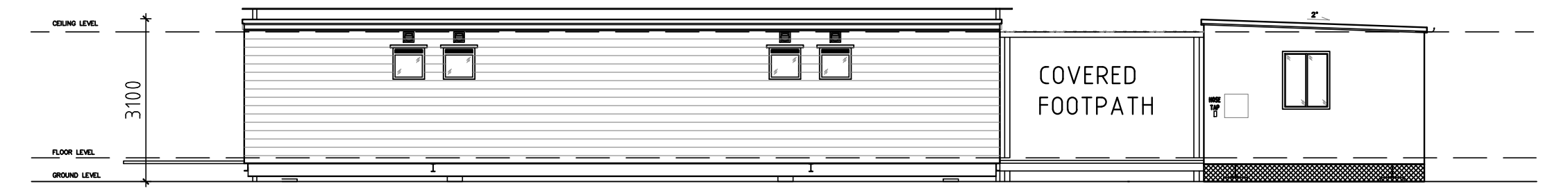
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SOUTH ELEVATION
1:100



NORTH ELEVATION
1:100

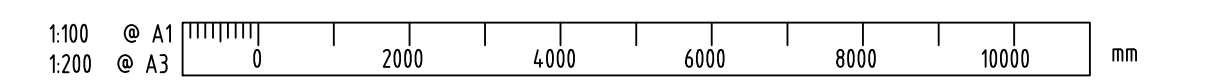


WEST ELEVATION
1:100



EAST ELEVATION
1:100

ISSUED FOR CONSTRUCTION



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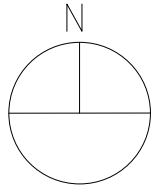
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ORCHARD STREET

ORCHARD STREET

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REF DRAWING No.	REFERENCE DRAWING TITLE	REV	DATE	REVISION DESCRIPTION	BY	CHK'D	APP'D
		0	27.03.23	ISSUED FOR BUILDING PERMIT			

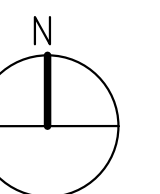
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SHEET	CHECKED		
A1	DESIGNED		
PROJECT	DESIGN APPR		
CONTRACT No	PROJECT APPR		

TITLE	DRG No	SHEET	REV.
KOORDA INFRASTRUCTURE PLANNING ACCOMMODATION SITE PLAN	373-3142-GN-STD-001	1 OF 4	0



LEGEND

- 01 OFFICE
- 02 FEMALE ABLUTIONS
- 03 MALE ABLUTIONS
- 04 BEER, COMMS & CLEANER ROOM
- 05 ENTRY
- 06 MEETING ROOM
- 07 MAINE OFFICE
- 08 OPEN PLAN



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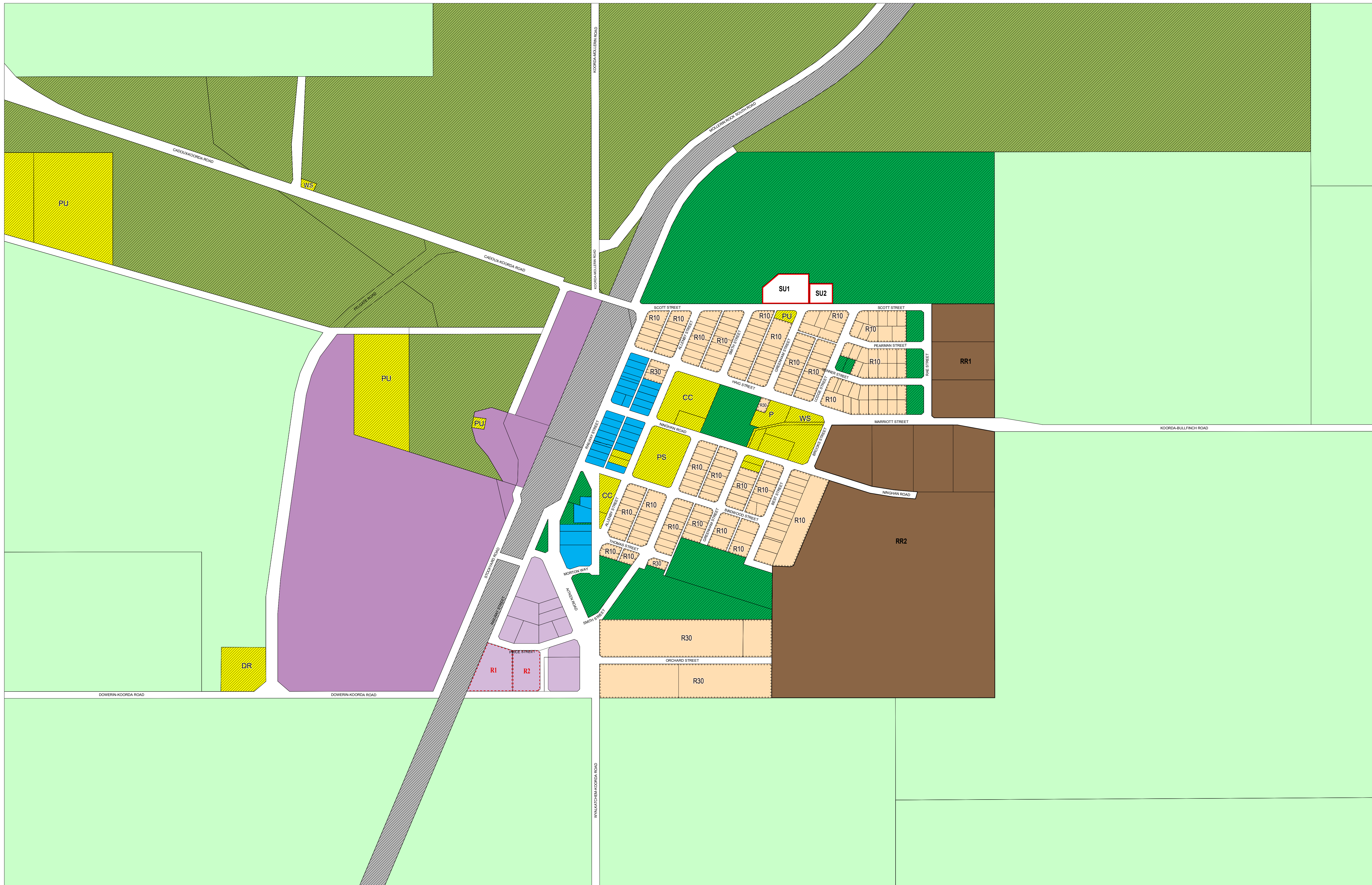
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		C					
		B					
				ISSUED FOR REVIEW			

SCALE	DRAWN	A BROWM	30.06.22
SHEET	CHECKED		
PROJECT	DESIGNED		
CONTRACT No	DESIGN APPR		
CW6997	PROJECT APPR		

TITLE	DRG No	SHEET	REV.
KOORDA INFRASTRUCTURE PLANNING OFFICE FLOOR PLAN		1 OF 1	0



APPENDIX 2 – SHIRE OF KOORDA LOCAL PLANNING SCHEME NO. 3



LEGEND

LOCAL SCHEME RESERVES

Conservation	Public Purposes : Primary School
Parks and Recreation	Public Purposes : Public Utility
Public Purposes : Cemetery	Public Purposes : Waste Disposal
Public Purposes : Civic and Cultural	Public Purposes : Waste Disposal and Parks and Recreation
Public Purposes : Drainage Reserve	Public Purposes : Water Supply
Public Purposes : Police	Railway

LOCAL SCHEME ZONES

Commercial	Rural
General Industry	Rural Residential
Light Industry	Special use
Residential	Townsite

OTHER CATEGORIES

(see scheme text for additional information)

Scheme Area Boundary
Local Government Boundary
R20 R Codes
R1 Restricted Uses
RR1 Rural Residential Area
SU1 Special use area
No Zone

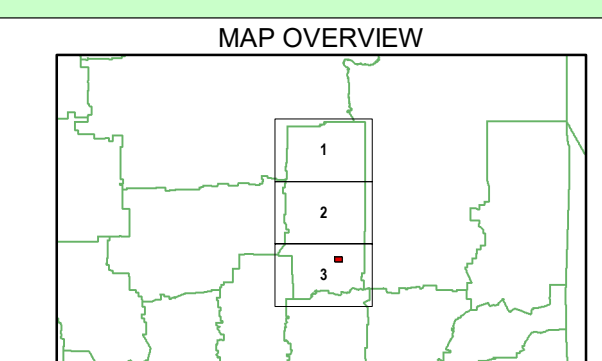
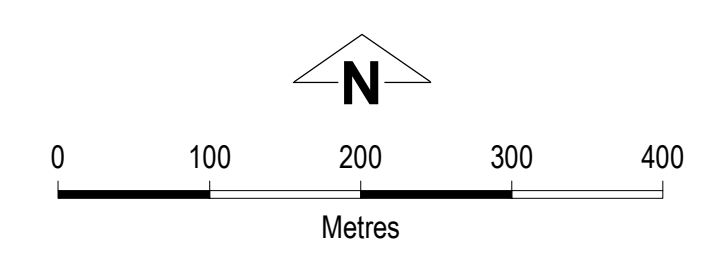
VERSION No 1

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Shire of Koorda
Local Planning Scheme No. 3
(District Scheme)



Authorised: T.Servaas
Plot Date: 26 May 2020
G.Gazette: Wednesday, 10 December 2014
Local Planning Scheme Map No. 4 of 4
MAP: Koorda Townsite

Shire of Koorda
Local Planning Scheme No. 3
(District Scheme)



APPENDIX 3 – AERIAL PHOTO NO. 1 ORCHARD STREET KOORDA





APPENDIX 4 – GEOTECHNICAL STUDY NO. 1 ORCHARD STREET KOORDA



APPENDIX 5 – ON-SITE WASTEWATER MANAGEMENT FOR ETA BEDS CALCULATIONS

1 Orchard Street, Koorda

- Secondary Treatment
 - Category 6 soil determined from the Galt Geotechnical Report

Hydraulic Calculation

$$\begin{aligned}
 & 4320 \text{ L/day} \\
 / & 5 \text{ mm/day} \quad \text{According to Table L1 AS1547 (soil category 6 > DLR - 5mm/day for ETA Beds)} \\
 = & 864 \text{ m}^2 \\
 / & 1.5 \text{ m (Width of bed)} \\
 = & 576.00 \text{ m required length for drainage} \\
 / & 20 \text{ m recommended length for bed} \\
 = & 28.80 \gg \mathbf{30} \text{ - number of drains required (must be even)}
 \end{aligned}$$

Insert Setback distance **1.8 m**

- Alternatively, the width can be replaced for Infiltrative Area (m²/m) to determine the total LAA required in accordance with DoH.

Length of Land Application Area (Effluent disposal field)

$$\begin{aligned}
 & 19.20 \text{ m} \\
 + & 2 * \text{Setback distances} = 3.6 \text{ m} \\
 = & \mathbf{22.80 \text{ m}}
 \end{aligned}$$

Width of Land Application Area (Effluent disposal field)

$$\begin{aligned}
 & 1.5 \text{ m (typical width of standard ETA beds)} \\
 * & 30 \text{ drains} \\
 & 45.00 \text{ m} \\
 + & 1 \text{ m minimum separation between each bed} * 29 \\
 = & 74.00 \text{ m} \\
 + & 3.6 \text{ m (2*setback distances for outer edge drains)} \\
 = & \mathbf{77.60 \text{ m}}
 \end{aligned}$$

Total Land Application Area Required

$$\begin{aligned}
 & 22.80 \text{ m} \times 77.60 \text{ m} \\
 = & \mathbf{1769.28 \text{ m}^2}
 \end{aligned}$$

AS1547 recommends maximum drain lengths of 20m. Longer lengths are possible provided even distribution can be demonstrated.

DoH Supplement of Regulation 29 and Schedule 9 - Wastewater system loading rates for non-standard dwellings.

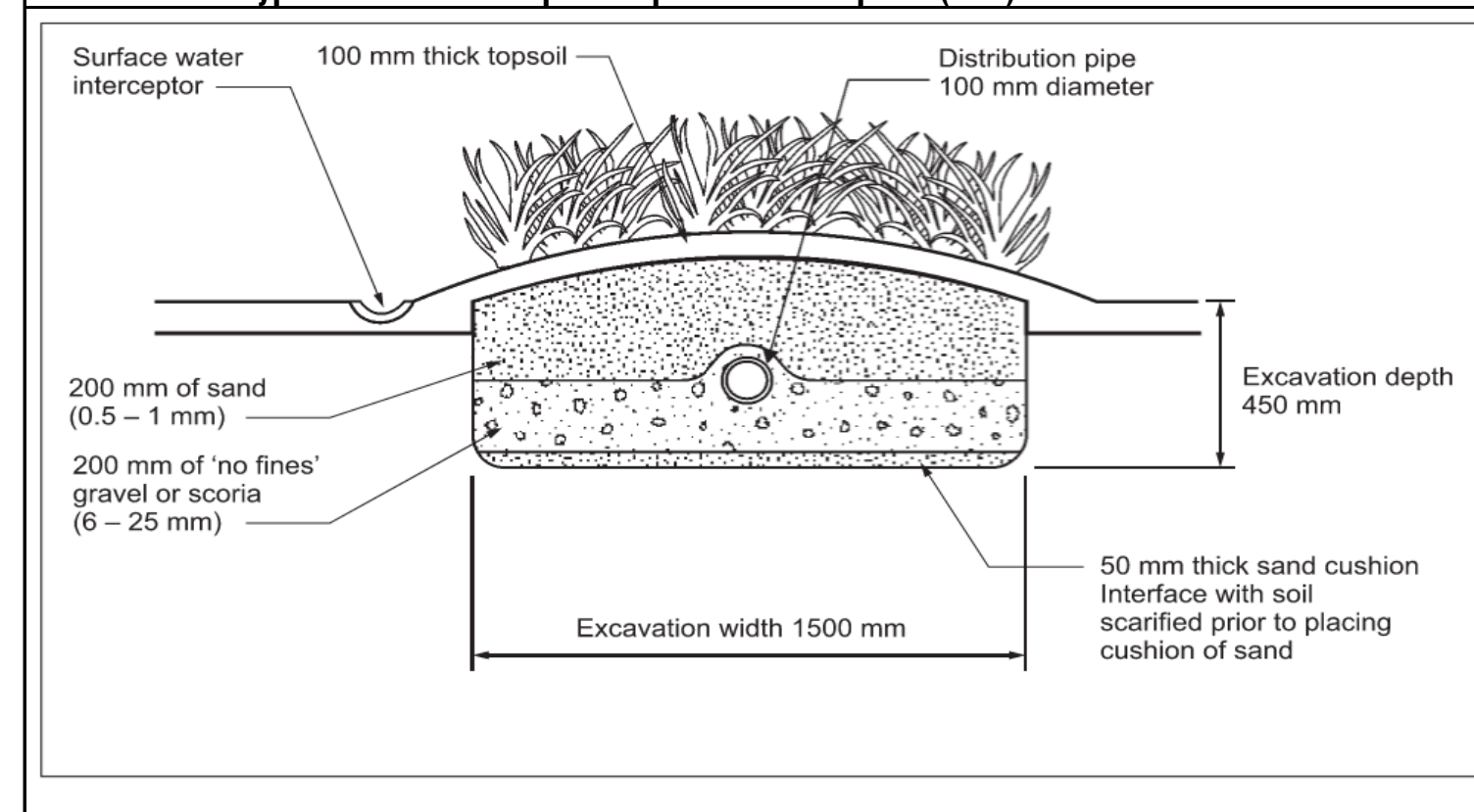
Table 2: Human waste hydraulic loading rates

Type of premises (Regulation 29)	Equivalent Use	Combined Flow (L/person/day)
Hotel	Minesite accomodation camp units	180

Table L1 - Recommended Design Loading Rates (DLR) for Trenches and Beds

TABLE L1 RECOMMENDED DESIGN LOADING RATES FOR TRENCHES AND BEDS							
Soil category	Soil texture	Structure	Indicative permeability (K _{sat})(m/d)	Design loading rate (DLR) (mm/d)			ETA/ETS beds and trenches
				Trenches and beds		Secondary treated effluent	
				Primary treated effluent Conservative rate	Maximum rate		
1	Gravels and sands	Structureless (massive)	> 3.0	20 (see Note 1)	35 (see Note 1)	50 (see Note 1)	(see Note 4)
2	Sandy loams	Weakly structured	> 3.0	20 (see Note 1)	30 (see Note 1)	50 (see Note 1)	
		Massive	1.4 – 3.0	15	25	50	
3	Loams	High/moderate structured	1.5 – 3.0	15	25	50	(see Note 4)
		Weakly structured or massive	0.5 – 1.5	10	15	30	
4	Clay loams	High/moderate structured	0.5 – 1.5	10	15	30	12
		Weakly structured	0.12 – 0.5	6	10	20	8
		Massive	0.06 – 0.12	4	5	10	5
5	Light clays	Strongly structured	0.12 – 0.5	5	8	12	8
		Moderately structured	0.06 – 0.12				
6	Medium to heavy clays	Weakly structured or massive	< 0.06	(see Notes 2 & 3)	5	8	5 (see Notes 2, 3, & 5)
		Strongly structured	0.06 – 0.5				
		Moderately structured	< 0.06				
		Weakly structured or massive	< 0.06				

AS1547:2012 Typical detail for evapotranspiration-absorption (ETA) beds





APPENDIX 6 – WATER BALANCE CALCULATION FOR DRIP IRRIGATION EFFLUENT DISPOSAL SYSTEM



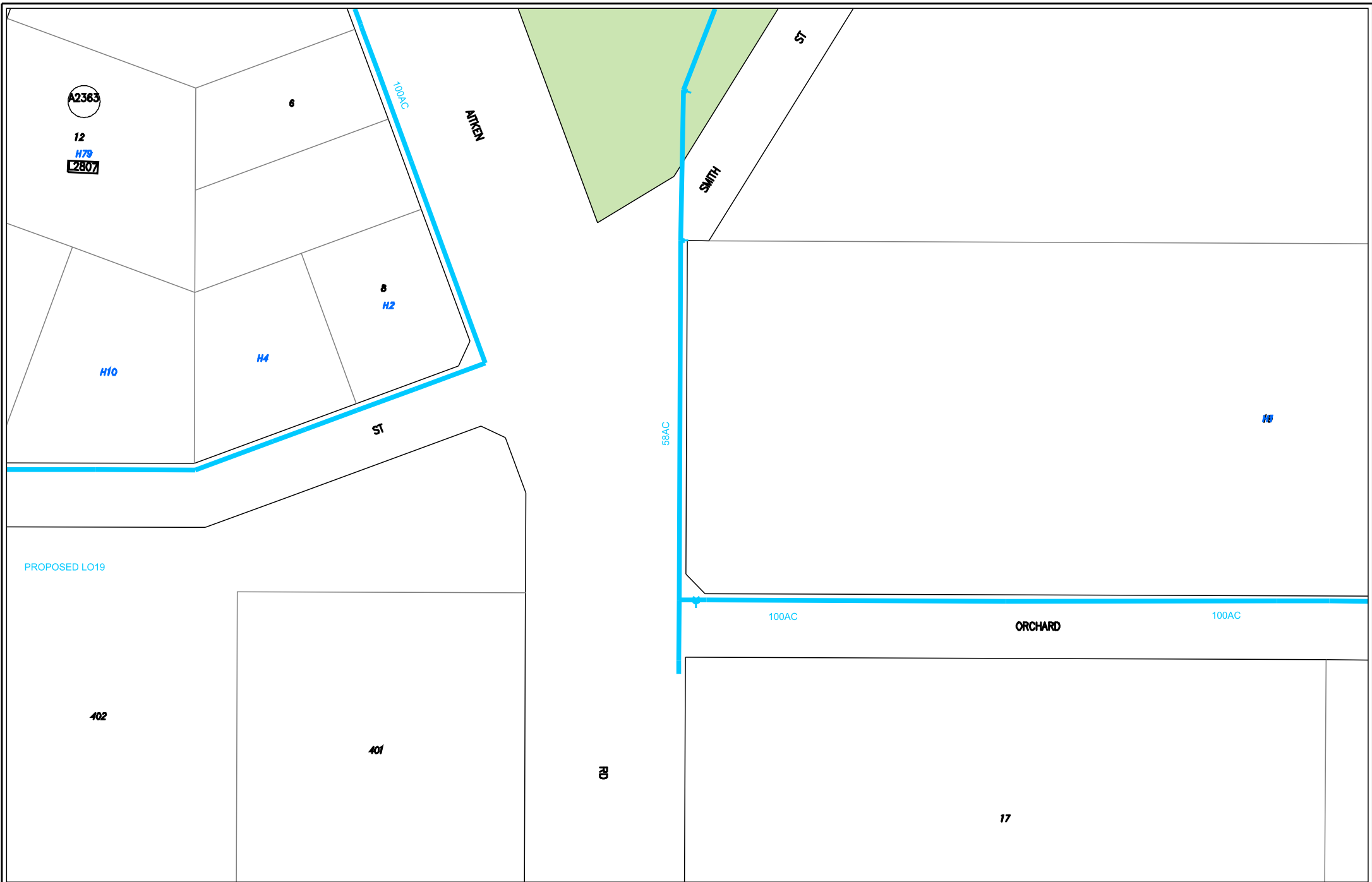
APPENDIX 7 – WATER CORPORATION WATER MAINS NETWORK MAP



WARNING - CRITICAL PIPELINE
 Refer to *Information Brochure Damage Prevention and Legend* for details

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 Prevention and Legend for details

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511

HWS

ST

HWS



Scale: 1:1500 Centre Point: 117.486°, -30.831°

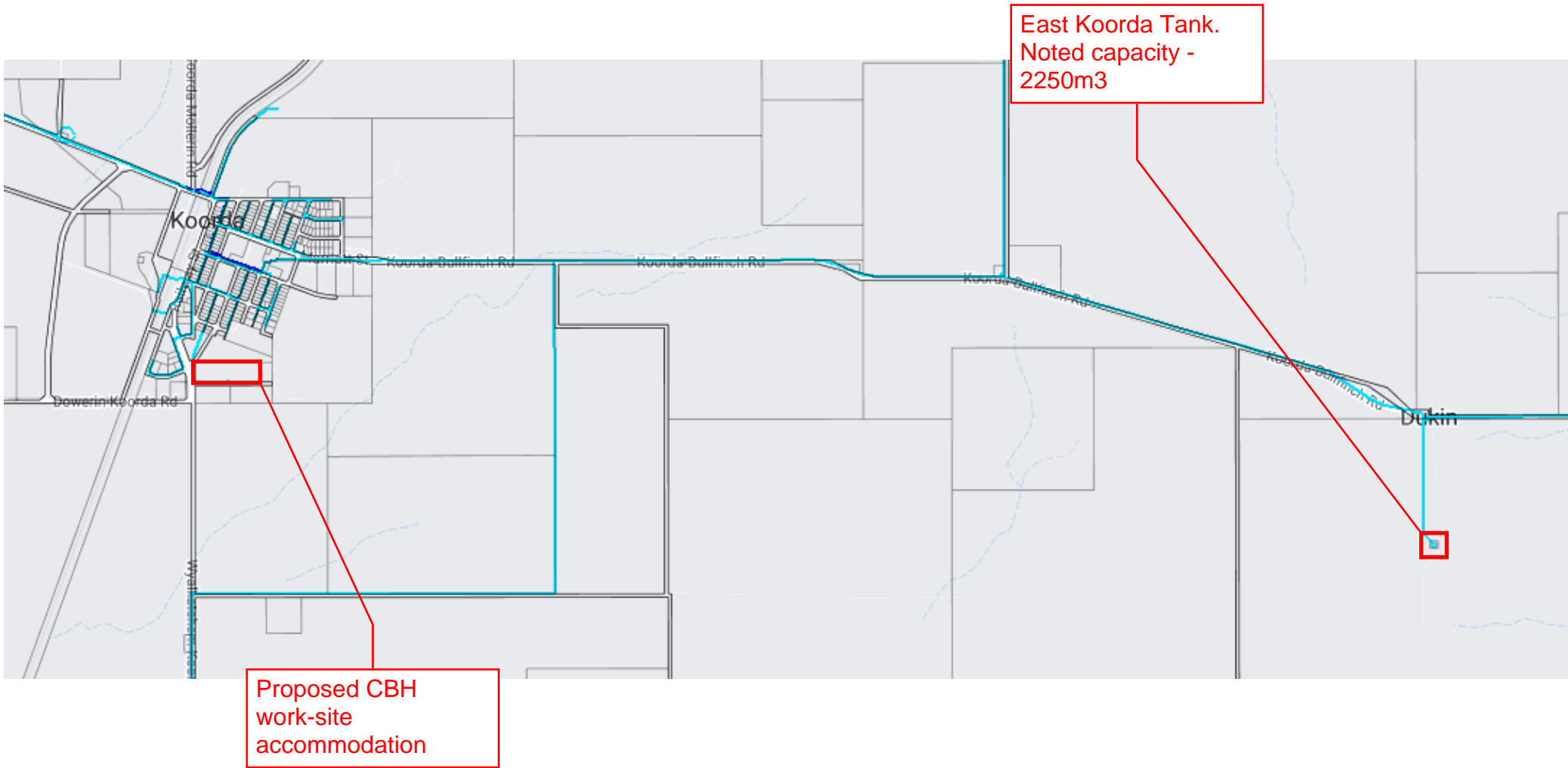
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Print Date: 01/02/2023 Page: 6 of 7



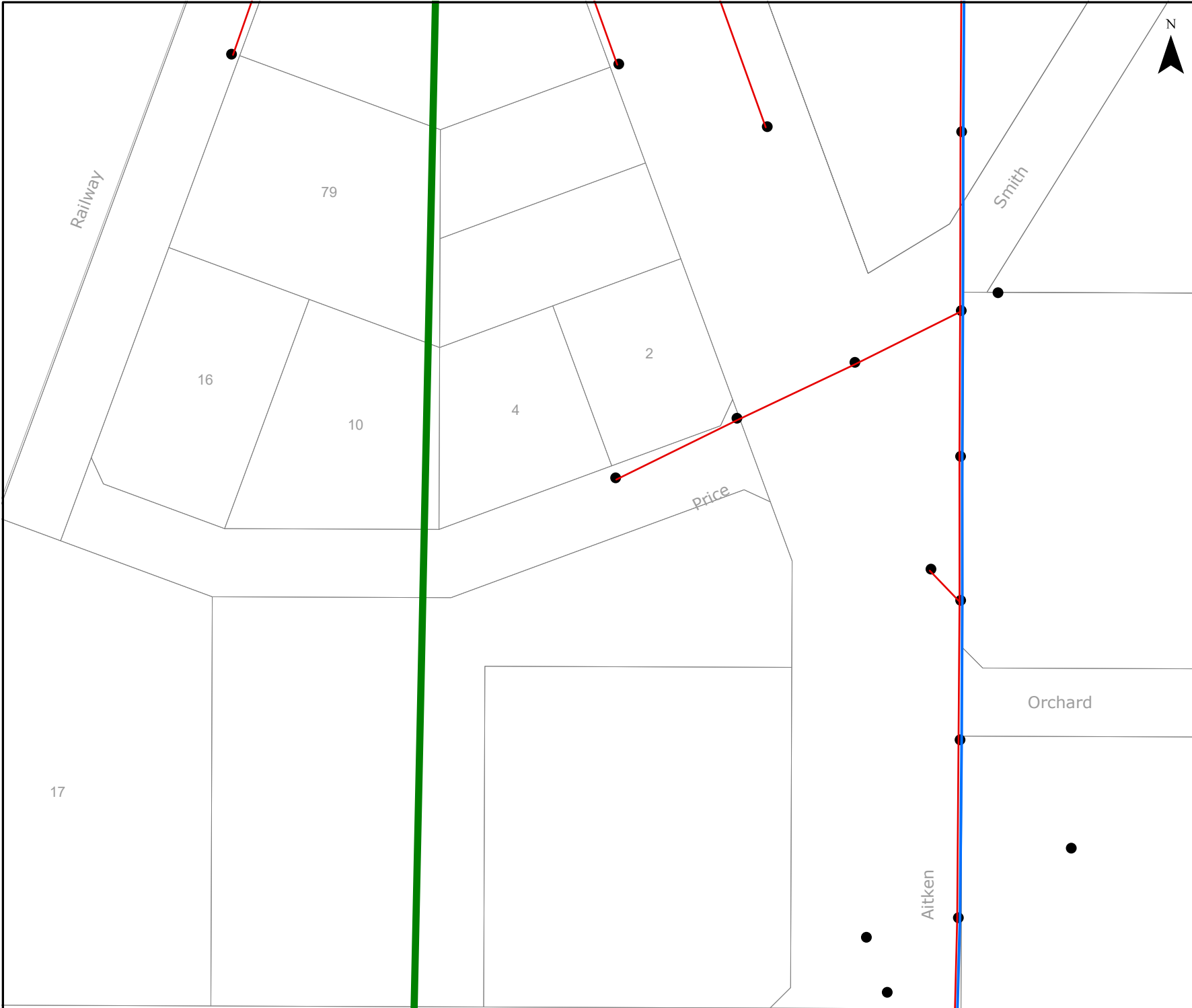
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APPENDIX 8 – WESTERN POWER OVERHEAD AND UNDERGROUND NETWORK MAP



OVERHEAD LEGEND

Structures

- Power Pole ■ Transmission Poles

Transmission Overhead Powerline

- Transmission (33kV - 330kV)

Distribution Overhead Powerline

- High Voltage (1kV - 33kV)
- Low Voltage (< 1kV)

Proposed Construction Assets

- Design Area *
- High Voltage Overhead Powerline
- Low Voltage Overhead Powerline
- Power Pole

Communications Assets

- Overhead Pilot Cable

Feature

- Area of Interest

*** Please refer to coversheet**

Privately owned cables NOT SHOWN (including house services)

This map is INDICATIVE ONLY. Check that you have enough clearance from the DANGER ZONES near overhead powerlines.

**Telephone Support: 1300 769 345
Mon to Fri - 08:00 to 16:30**

Information valid for 30 days from date of issue

A4 Scale : 1:1500

WARNING! Look out for overhead power lines



OVERHEAD LEGEND

Structures

- Power Pole
- Transmission Poles

Transmission Overhead Powerline

- Transmission (33kV - 330kV)

Distribution Overhead Powerline

- High Voltage (1kV - 33kV)
- Low Voltage (< 1kV)

Proposed Construction Assets

- Design Area *
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- Low Voltage Overhead Powerline
- Power Pole

Communications Assets

- Overhead Pilot Cable

Feature

- ▭ Area of Interest

*** Please refer to coversheet**

Privately owned cables NOT SHOWN (including house services)

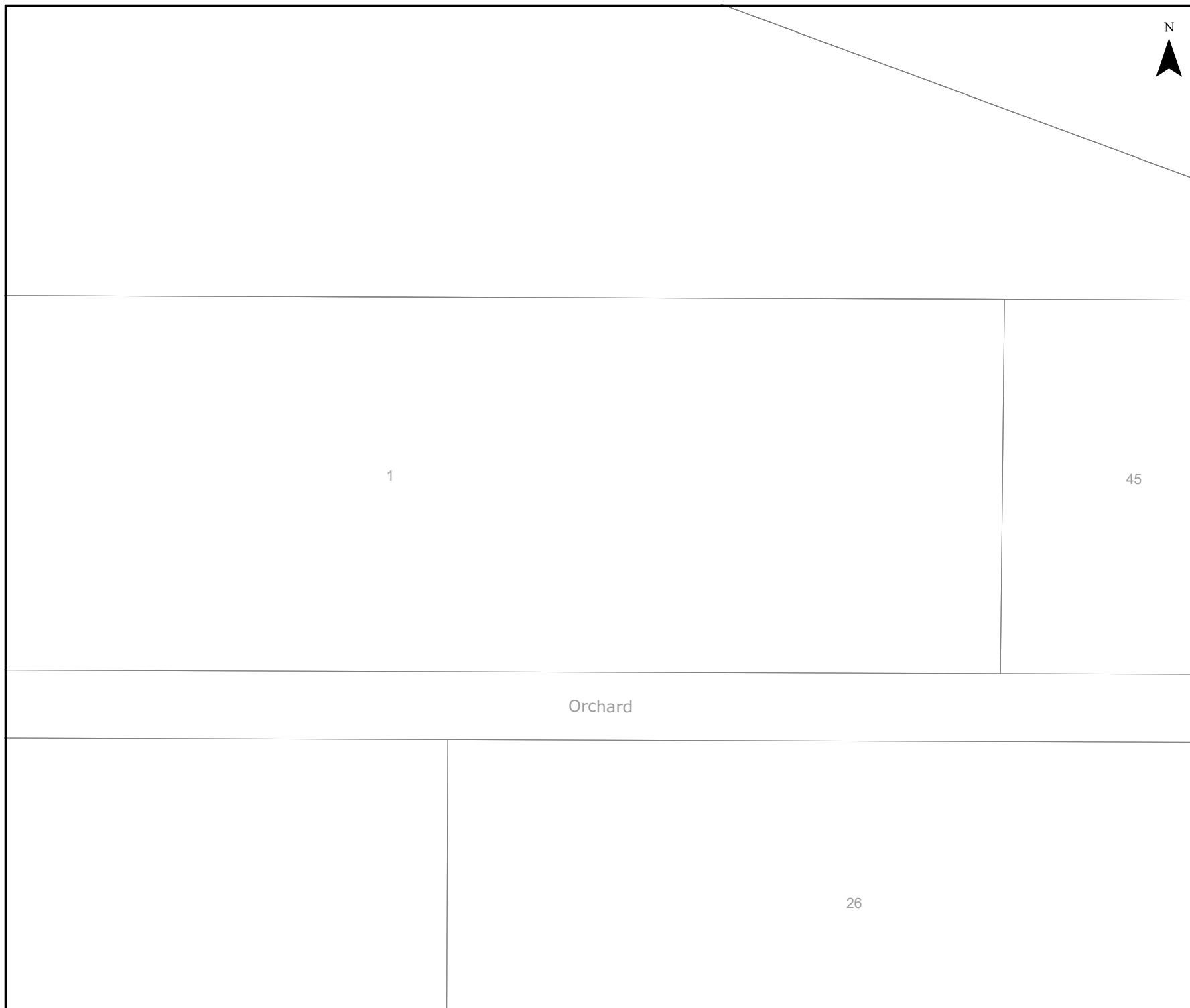
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Check that you have enough clearance from the **DANGER ZONES** near overhead powerlines.

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Information valid for 30 days from date of issue

A4 | Scale : 1:1500

WARNING! Look out for overhead power lines





UNDERGROUND LEGEND

- Structures**
- Pillar
 - Metal Pole
 - Transformer Site
 - UG Crossing *
 - Ring Main Unit
 - LV Distribution Frame

- Distribution Cables**
- High Voltage Cable (1kV - 33kV)
 - Low Voltage Cable (< 1kV)
 - Street Light Circuit (< 1kV)
 - Street Light Pilot (< 1kV)
 - Earth Wire

- Cable Pole Terminations**
- HV Termination
 - LV Termination

- Proposed Construction Assets**
- Design Area *
 - High Voltage Underground Cable
 - Low Voltage Underground Cable
 - Metal Pole
 - Pillar
 - Transformer site
 - HV Termination
 - LV Termination

- State Underground Power Project**
- CURRENT Work Area *
 - COMPLETED Area *

- Feature**
- Area of Interest

*** Please refer to coversheet**

Privately owned cables NOT SHOWN (including house services)

This map is INDICATIVE ONLY. Hand exposure via pothole method is MANDATORY.

**Telephone Support: 1300 769 345
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Information valid for 30 days from date of issue

A4 | Scale : 1:1500

WARNING! Look out for overhead power lines



UNDERGROUND LEGEND

Structures

- Pillar
- Metal Pole
- Transformer Site
- UG Crossing *
- Ring Main Unit
- LV Distribution Frame

Distribution Cables

- High Voltage Cable (1kV - 33kV)
- Low Voltage Cable (< 1kV)
- Street Light Circuit (< 1kV)
- Street Light Pilot (< 1kV)
- Earth Wire

Cable Pole Terminations

- HV Termination
- LV Termination

Proposed Construction Assets

- Design Area *
- High Voltage Underground Cable
- Low Voltage Underground Cable
- Metal Pole
- Pillar
- Transformer site
- HV Termination
- LV Termination

State Underground Power Project

- CURRENT Work Area *
- COMPLETED Area *

Feature

- Area of Interest

*** Please refer to coversheet**

Privately owned cables NOT SHOWN (including house services)

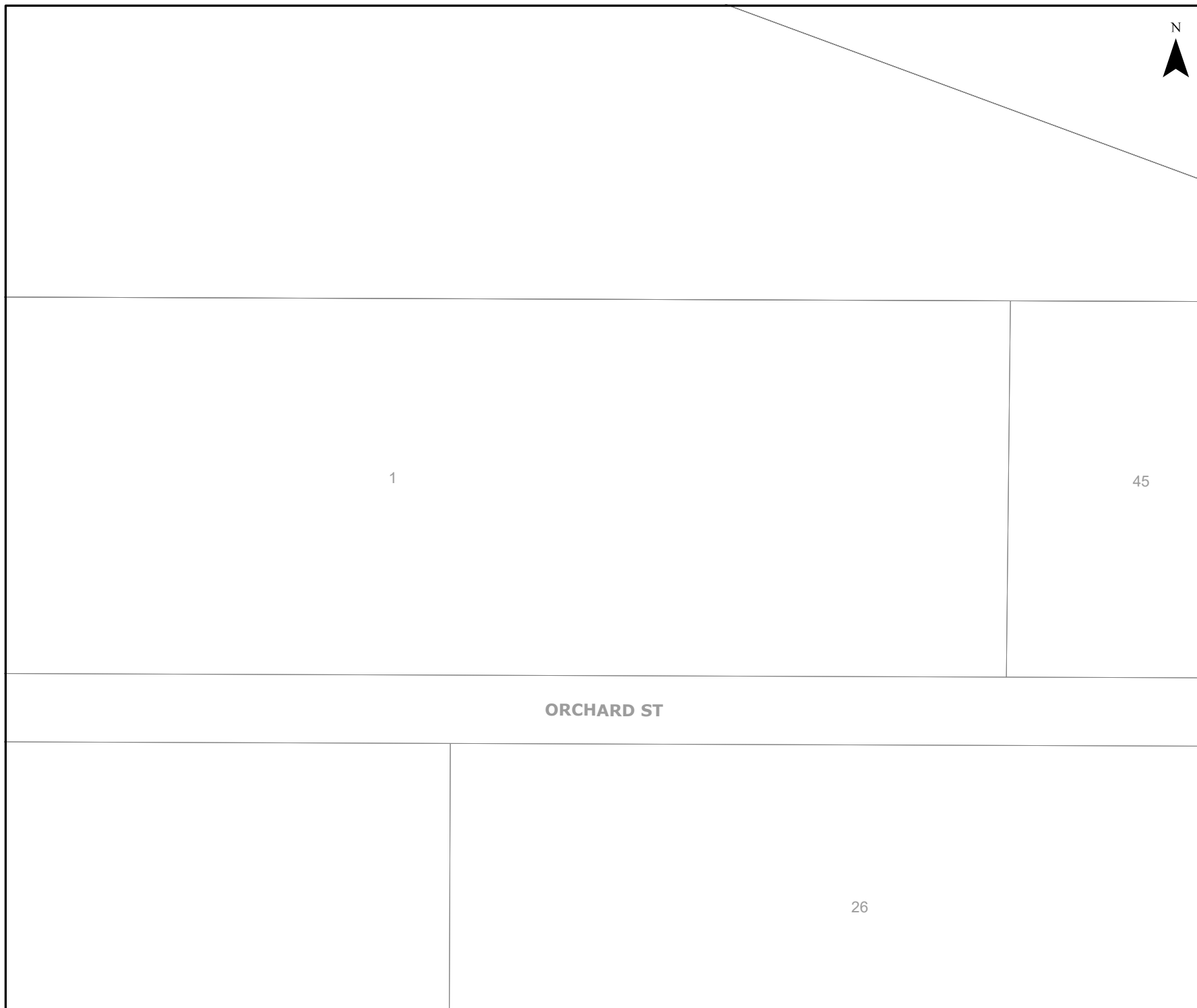
This map is INDICATIVE ONLY. Hand exposure via pothole method is MANDATORY.

**Telephone Support: 1300 769 345
Mon to Fri - 08:00 to 16:30**

Information valid for 30 days from date of issue

A4 | Scale : 1:1500

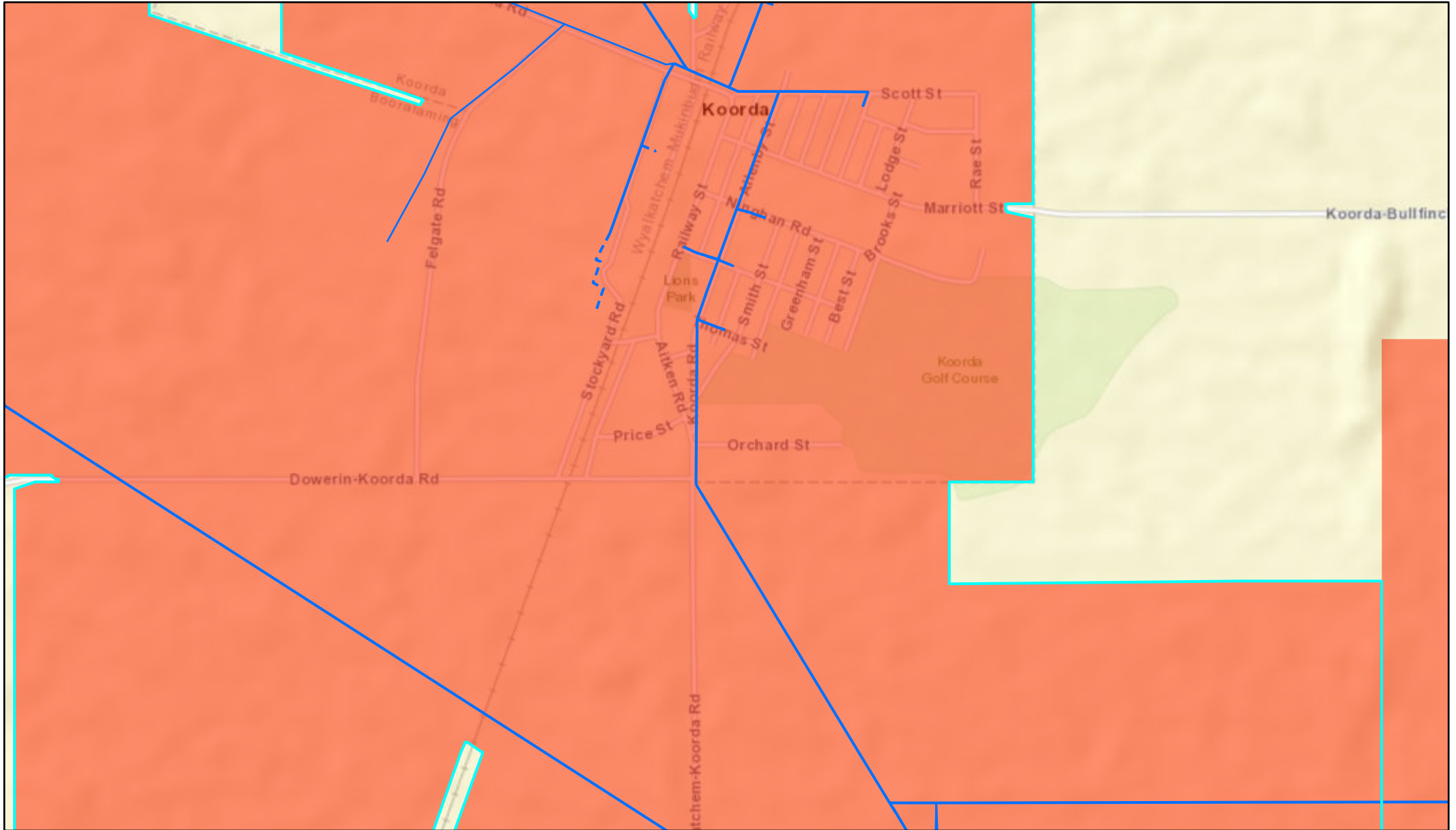
WARNING! Look out for overhead power lines





APPENDIX 9 – WESTERN POWER NETWORK CAPACITY MAP

1 Orchard St - NCMT 2023



01/02/2023, 15:30:35

NCMT High Voltage Distribution Lines (WP-052)

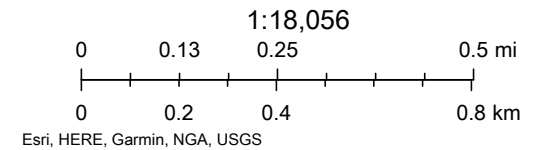
--- Underground Three Phase

— Overhead Single Phase

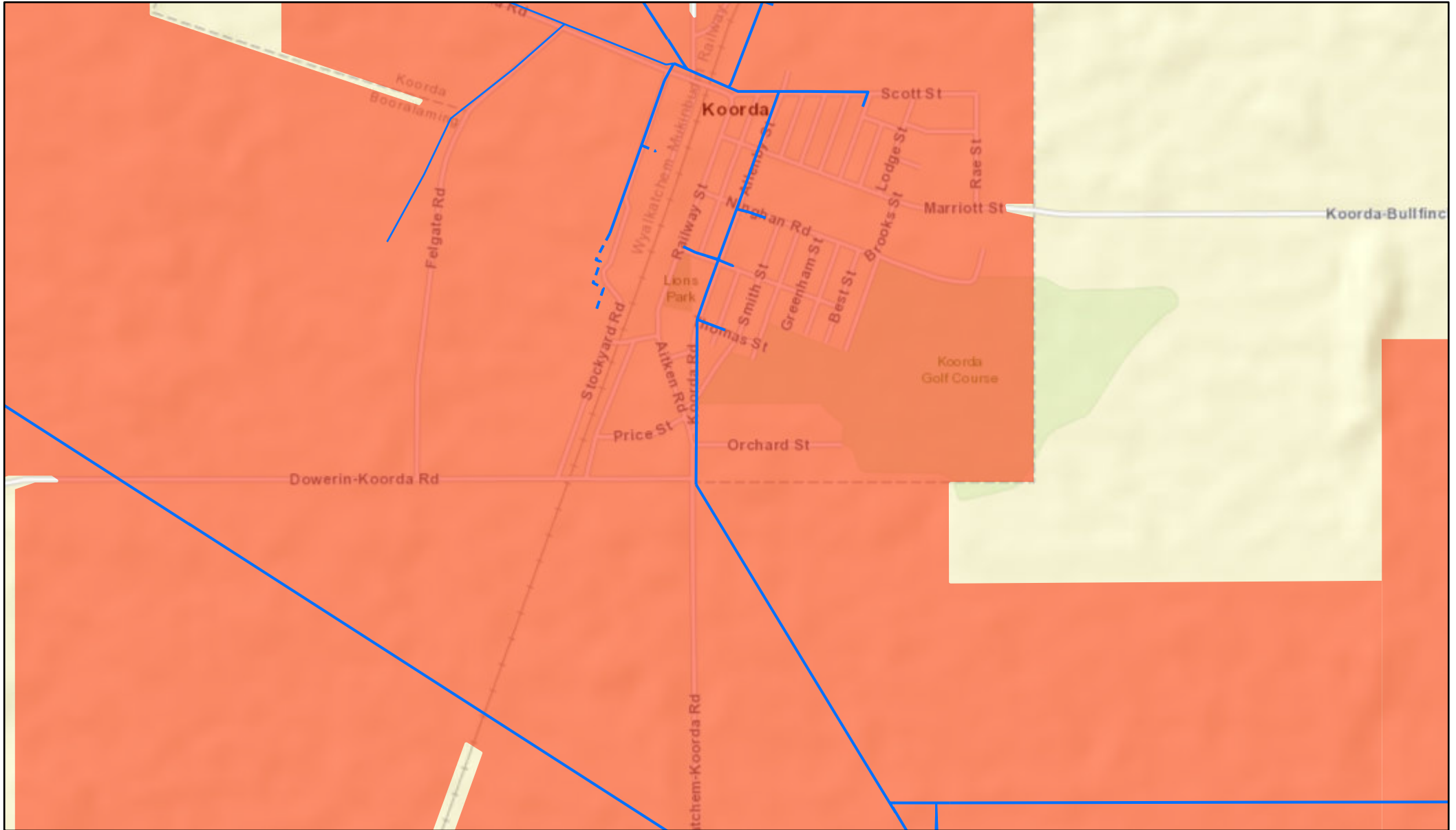
— Overhead Three Phase

NCMT Forecast Remaining Capacity 2023 (WP-053)

Less than 5 MVA



1 Orchard St - NCMT 2026



01/02/2023, 15:31:42

NCMT High Voltage Distribution Lines (WP-052)

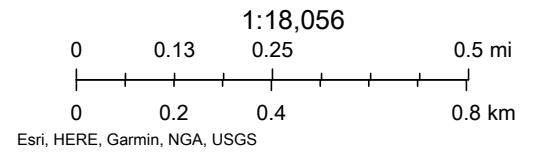
--- Underground Three Phase

— Overhead Single Phase

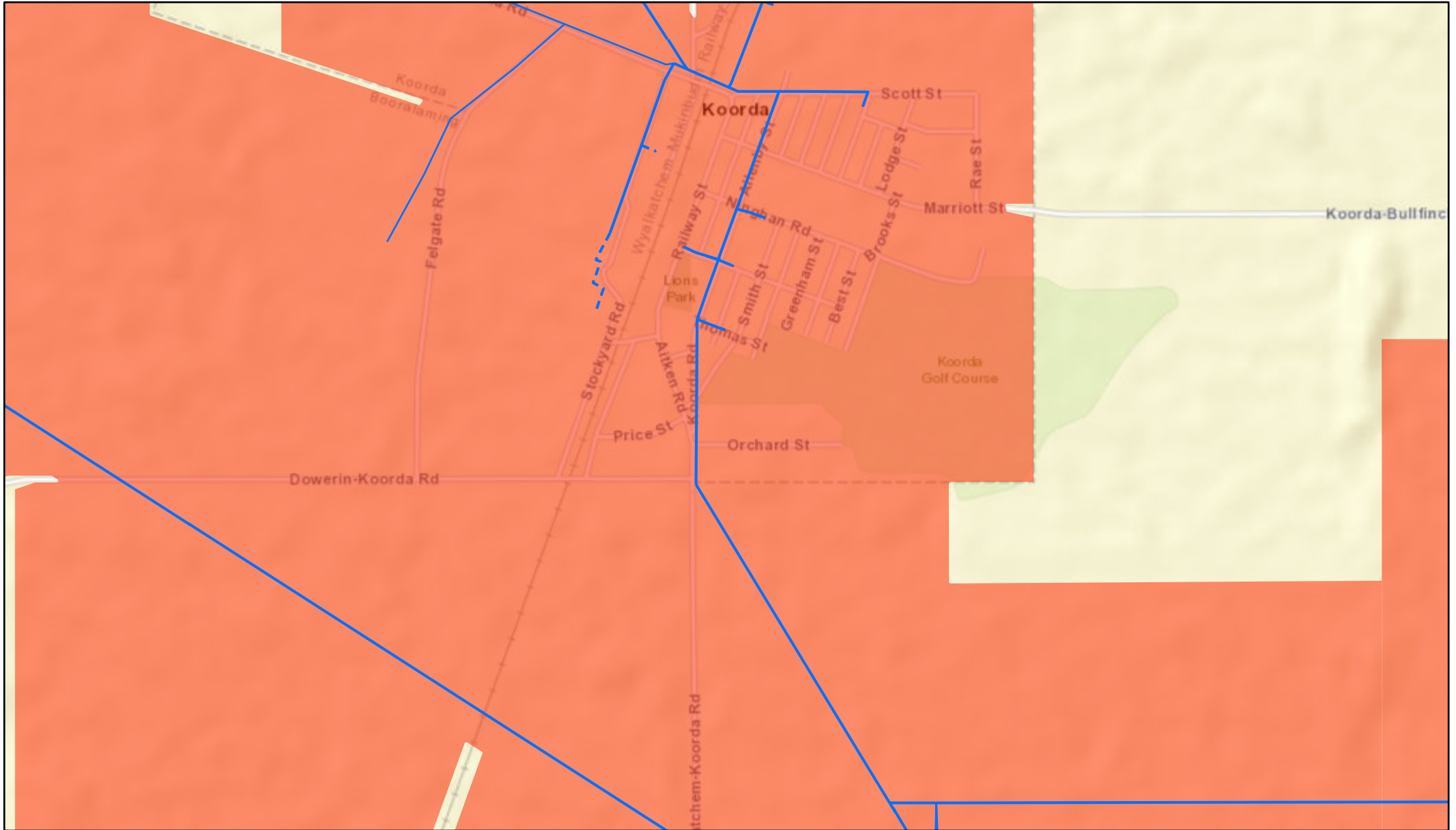
— Overhead Three Phase

NCMT Forecast Remaining Capacity 2026 (WP-056)

Less than 5 MVA



1 Orchard St - NCMT 2029



01/02/2023, 15:33:23

NCMT High Voltage Distribution Lines (WP-052)

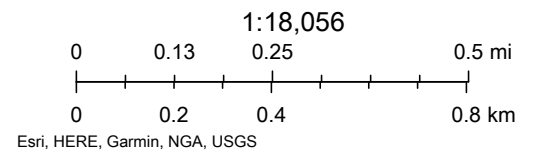
--- Underground Three Phase

— Overhead Single Phase

— Overhead Three Phase

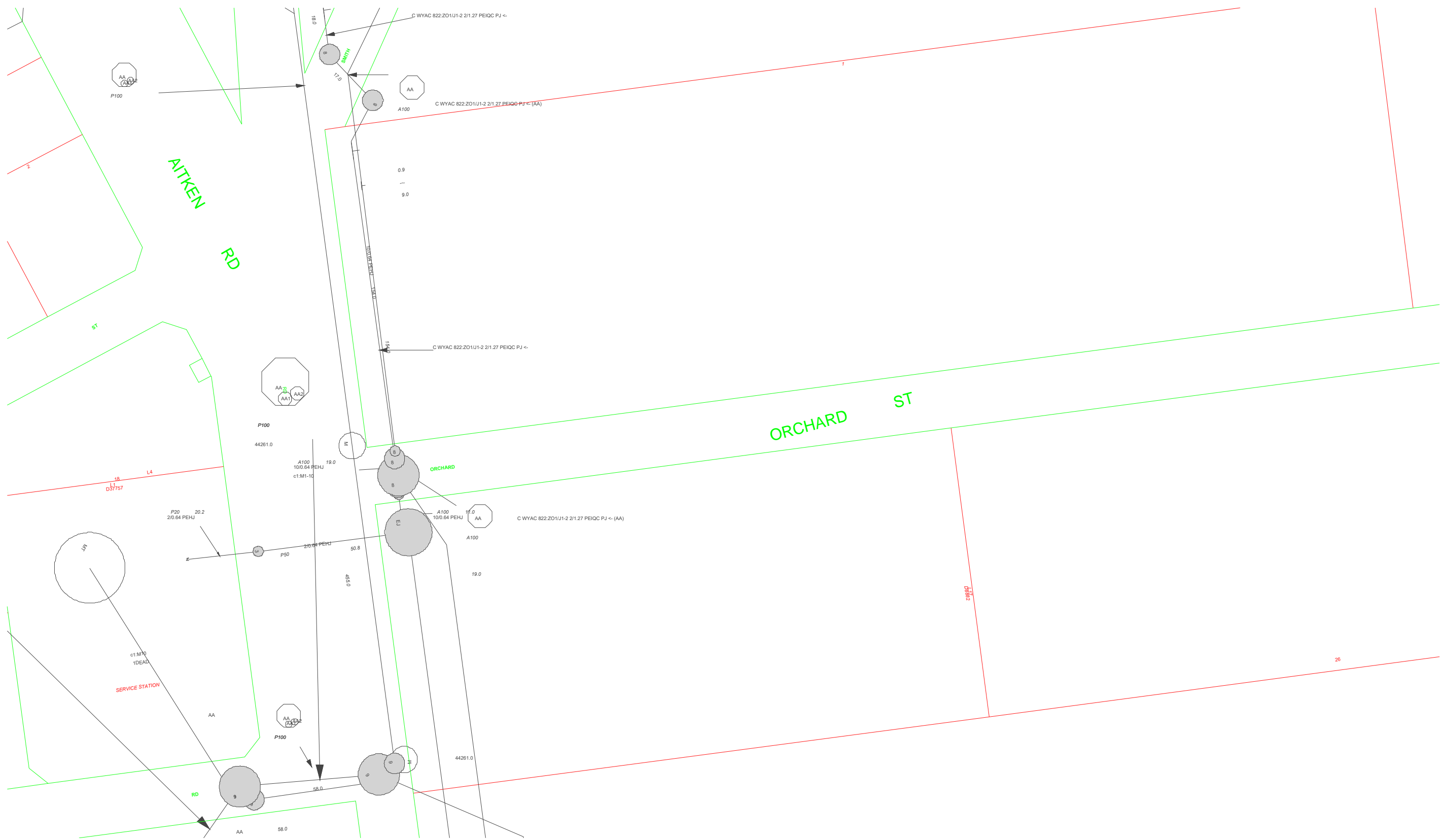
NCMT Forecast Remaining Capacity 2029 (WP-059)

Less than 5 MVA





APPENDIX 10 – TELSTRA NETWORK MAP



APPENDIX 4

Existing Development Approval for Workforce Accommodation (Shire of Koorda)

Enquires: Darren Simmons – 9684 1219

13 February 2023

Mr Timothy Roberts
Specialist Regulatory Approvals – Government & Industry Relations
CBH Group
Level 6
240 St Georges Terrace
PERTH WA 6000



By email only to: timothy.roberts@cbh.com.au

Dear Tim

**APPLICATION FOR DEVELOPMENT APPROVAL – CBH WORKERS
ACCOMMODATION AT LOT 19 (HN 1) ORCHARD STREET, KOORDA**

I refer to your application for development approval dated 9 November 2022 for CBH Workers Accommodation at Lot 19 (HN 1) Orchard Street, Koorda

In this regard, I wish to advise that, in accordance with authority delegated by the Council of the Shire of Koorda, the application is approved subject to conditions as outlined in the attached 'Notice of determination on application for development approval' dated 13 February 2023.

Yours sincerely

Darren Simmons
Chief Executive Officer

Shire of Koorda

Notice of determination on application for development approval



Shire of
Koorda

Location: Lot 19 (HN 1) Orchard Street, Koorda

Lot: 19

Plan/Diagram: Plan 11260

Vol. No: 61

Folio No: 186A

Application date: 9 November 2022

Received on: 1 February 2023 (All documents)

Description of proposed development:

- Accommodation that caters for 24 people;
- Site amenities including kitchen, laundry, ablutions and common room area;
- Covered areas, verandahs and associated amenities; and
- Sewer disposal appropriate for accommodation of this size.

The application for development approval is:

Approved subject to the following conditions

Refused for the following reason(s)

Conditions/reasons for refusal:

1. The development being constructed in accordance with the Stormwater Management Plan, with all drainage contained on site, to the satisfaction of the Shire of Koorda CEO.
2. The development being constructed and maintained in accordance with the Bushfire Management Plan to the satisfaction of the Shire of Koorda CEO.
3. The preparation and lodgement of a Landscape Management Plan, for the establishment and on-going maintenance of landscaping, to the satisfaction of Shire of Koorda CEO
4. Vehicular crossover to be constructed to the satisfaction of the Shire of Koorda CEO.
5. Effluent disposal to be constructed and operated to the satisfaction of the Shire of Koorda CEO.

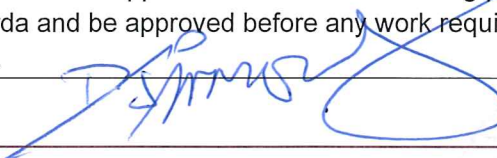
Date of determination: 13 February 2023

Advice notes:

1 If the development, the subject of this approval, is not substantially commenced within a period of 24 months from the date of the approval, the approval will lapse and be of no further effect. For the purposes of this condition, the term "substantially commenced" has the meaning given to it in the *Planning and Development (Local Planning Schemes) Regulations 2015* as amended from time to time.

2 If an applicant or owner is aggrieved by this determination, there is a right of review by the State Administrative Tribunal in accordance with the *Planning and Development Act 2005* Part 14. An application must be made within 28 days of the determination.

3 The applicant is advised that granting of development approval does not constitute a building permit and that an application for relevant building permits must be submitted to the Shire of Koorda and be approved before any work requiring a building permit can commence on site.

 13/2/2023