

24 July 2024

Our Reference: 24-0120

Redbank Communities
76 Arthur Phillip Drive
North Richmond NSW 2754
Attn.: Mark Regent
markregent@redbankcommunities.com.au

Mark,

RE: Servicing Details to Support Planning Proposal - Redbank Expansion Area (Kemsley Park)

This letter is intended to support the Planning Proposal for Redbank Expansion Area (Kemsley Park) by showing that there are servicing solutions readily available for Potable Water, Wastewater, Electrical supply and Telecommunications

The proposed draft layout for Redbank Expansion Area (Kemsley Park), known as Lot 260 DP 1237271, is shown below. The total lot yield will be 300-350 lots consisting of R5 zoned lots and R2 zoned lots.

Figure 1 – Redbank Expansion Area (Kemsley Park)



Refer to Appendix A for Road Structure and Zoning Plan as well as the contours for the site, showing the sit sloping generally towards the northeast.

The site is surrounded by the Redbank development on three sides and Grose Vale Road on the southwestern side of the site.

It is imperative that it be noted that the site now known as Redbank Expansion Area (Kemsley Park) was included in the Strategic Planning for water and wastewater servicing in 2015 as well as the Detailed Planning in 2017. In both instances, both Strategic and Detailed Planning resulting in approved reports from Sydney Water, which included for the full servicing of the Redbank Expansion Area (Kemsley Park).

The infrastructure available for servicing Redbank Expansion Area (Kemsley Park)) is described as follows:

Potable Water

Consultation

- Following on from the servicing of the Kingsford Smith Village (80 bed ACF & 197 Seniors Houses) and Redbank (914 urban lots connected / 1399 urban lots zoned) all completed **since 2010**, ongoing consultation with Sydney Water has been undertaken regarding potable water supply. The Strategic Planning for water and wastewater servicing in 2015 as well as the Detailed Planning in 2017 catered for the proposed Redbank Expansion Area (Kemsley Park)) development in addition to the Redbank development (noting that the Redbank Expansion Area (Kemsley Park) site was then known as "Peel Farm").

Existing Potable Water

Potable Water supply is available as per Figure 2 on the following page.

- The available potable water mains range from DN100 to DN300
- The supply of potable water for this site was included as part of the original Strategic Planning and subsequent Detailed Planning for the North Richmond Redbank development that was undertaken by the developer for Redbank at the time based on Sydney Water requirements. In these documents, the site was labelled as "Peel Farm".
- The potable water supply was sized and designed to provide connection points for the future Peel Farm (now Redbank Expansion Area (Kemsley Park) area. All potable water designs to date do provide the connection points for future servicing as shown on the following page, noting that these connection points were reviewed and endorsed by Sydney Water, with the approval of potable reticulation for the progressive stages of the current Redbank development
- In order to service the Redbank development, Redbank Communities has in consultation and delivered in conjunction with Sydney Water several interim servicing arrangements for both potable water and sewer. In both cases, the interim infrastructure has been designed to be retained as much as possible for the ultimate serving arrangement. In terms of potable water, upgrading of pump drives and pumps, along with a surge tank, and three (3) pressure-reducing valves were installed and have been operational since 2019 within the existing North Richmond

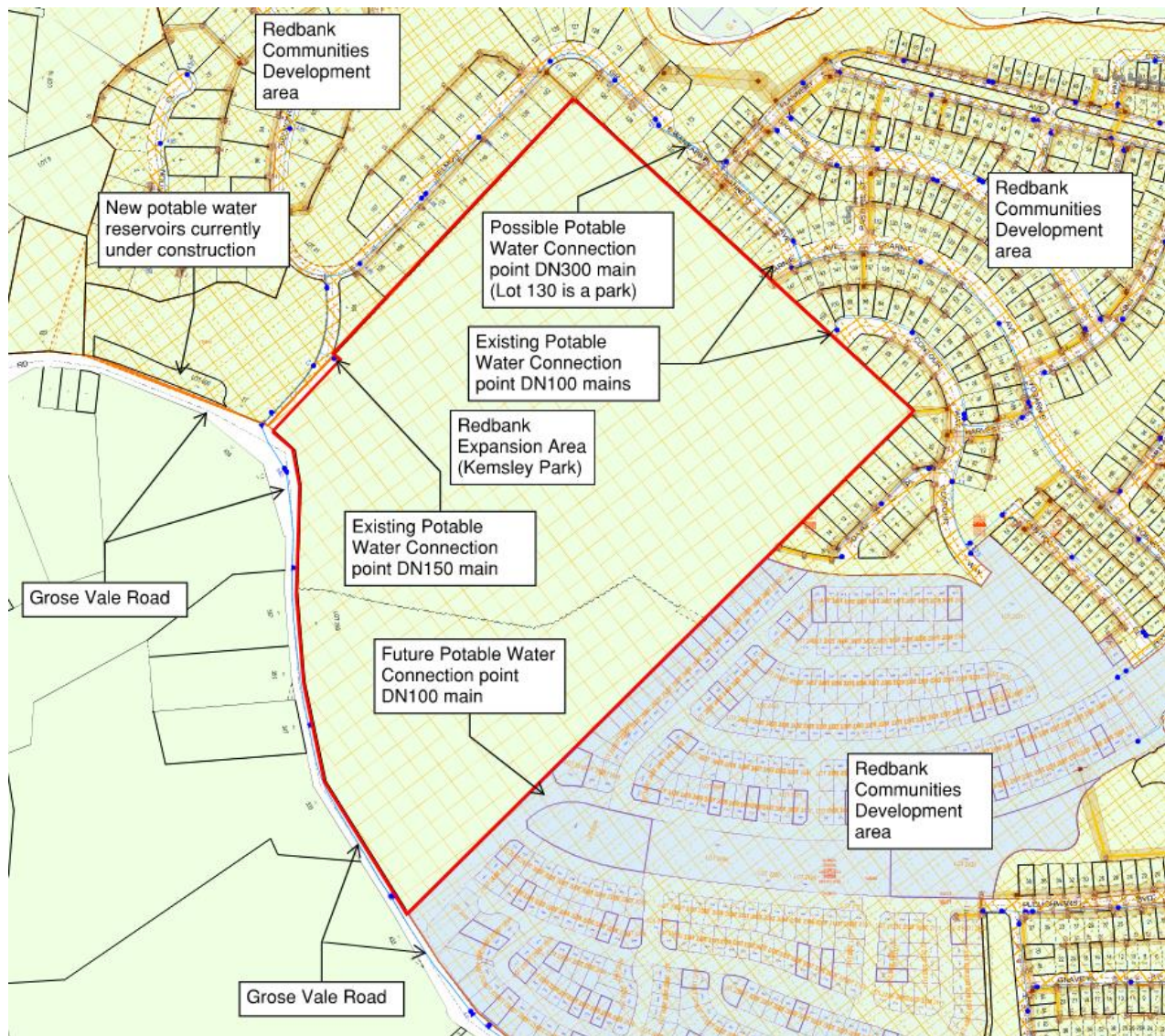
Water Filtration Plant along with 3.6km of water main along Grose Vale Rd heading west were installed as an interim serving arrangement. The 3.6km of watermain has since been confirmed as being retained for the ultimate serving of both Redbank and the Redbank Expansion Area (Kemsley Park).

- The ultimate servicing of Redbank as determined with the selection of the preferred option from the approved Sydney Water Detailed Planning (2017), was then incorporated into the Commercial Agreement between Sydney Water and Redbank Communities to deliver ultimate potable water infrastructure. This ongoing Commercial Agreement has culminated in the current ongoing delivery of a new pumping station within the existing North Richmond Water Filtration Plant site and new twin reservoirs on a portion of the original Redbank site directly adjacent Grose Vale Road, linked by the 3.6km of water main installed within the previous interim serving arrangement.
- The new twin reservoir site is located directly adjacent Grose Vale Road, and directly adjacent to the south of the Redbank Belmont stage, and is within 150 of the western boundary of the Redbank Expansion Area (Kemsley Park) along Grose Vale Road,
- It is noted that the Redbank Expansion Area (Kemsley Park) due to its high level within the surrounding greater Redbank area will be serviced by the new twin reservoirs. The potable water mains that are proposed to service the site as per the markup on the following page will all be connected to the new twin reservoirs. The anticipated commissioning time of the new reservoirs is the second quarter of 2025.
- The North Richmond system is supplied by the North Richmond Water Filtration Plant which extracts water from the Nepean/Hawkesbury River and treats it on-site before distributing the treated water into the system. To address some capacity constraints and to allow for growth in the servicing areas of the treatment plant upgrades at the plant were undertaken and commissioned in 2022. These upgrades increased the reliability of production capacity and treated water quality. The upgrade is also allowing for population growth in the area serviced by the North Richmond Water Filtration Plant.

Proposed Potable Water

- Proposed potable water mains will be laid based on the current scheme plan; this scheme plan takes the servicing of Redbank Expansion Area (Kemsley Park) into account (as per Figure 2 on the following page one additional point of connection will be provided for the future Redbank Expansion Area (Kemsley Park) based on the approved road network)
- As mentioned previously the new twin reservoirs are currently being constructed (WS0489 & WS0490) with commissioning expected in the second quarter of 2025. These reservoirs will provide adequate pressure for the majority of the Redbank development and will also provide adequate supply and pressure to the proposed Redbank Expansion Area (Kemsley Park) development.

Figure 2 – Potable Water Supply



Lot Capacity & Program

- With the completed upgrade works at the North Richmond Water Filtration Plant and the commissioning of the new twin reservoirs it is anticipated that there will be sufficient capacity available for the proposed development in Redbank Expansion Area (Kemsley Park) (300 to 350 lots),
- This development yield of 300 to 350 lots specifically for the Redbank Expansion Area (Kemsley Park) has already been accommodated for by Sydney Water, as detailed in the Sydney Water Developer Services Plan (DSP) contributions arrangement, which is being progressively implemented from 2024,
- Assuming a successful rezoning of the Redbank Expansion Area (Kemsley Park) the details of the proposed staging and timing of the potable water infrastructure will be confirmed via lodgement of reticulation applications with Sydney Water. Pending a successful rezoning in

2025, a re-zoning DA can be lodged in 2025, followed by DA consent in early 2026, with anticipated delivery of infrastructure from 2026 through to 2029.

Wastewater

Consultation

- Following on from the servicing of the Kingsford Smith Village (80 bed ACF & 197 Seniors Houses) and Redbank (914 urban lots connected / 1399 urban lots zoned) **since 2010**, ongoing consultation with Sydney Water has been undertaken regarding wastewater servicing of the development area. The Strategic Planning for water and wastewater servicing in 2015 as well as the Detailed Planning in 2017 catered for the proposed Redbank Expansion Area (Kemsley Park)) development in addition to the Redbank development (noting that the Redbank Expansion Area (Kemsley Park) site was then known as "Peel Farm").

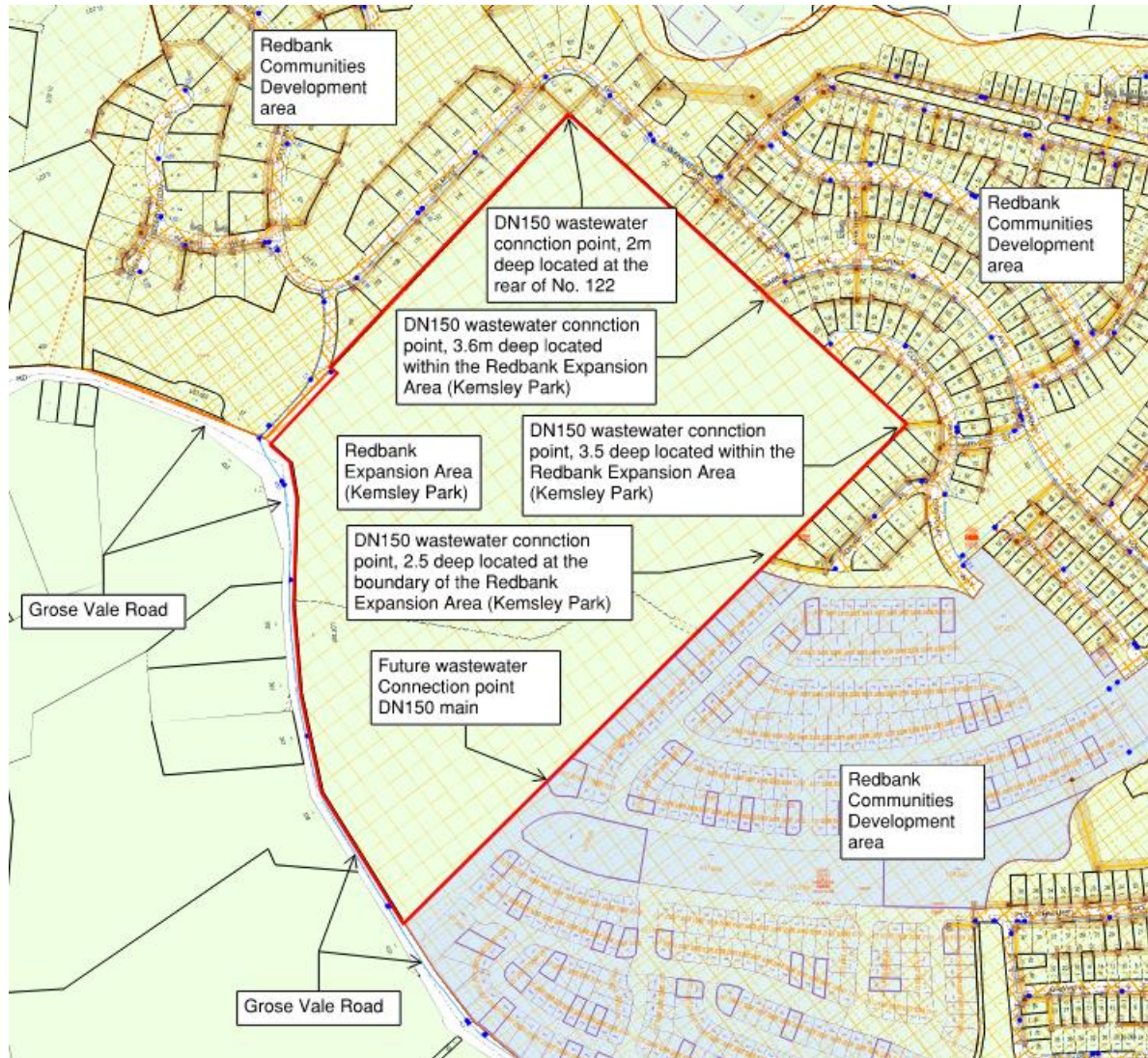
Existing Wastewater

Wastewater connection points are available as per Figure 3 on the following page.

- The available wastewater mains are all DN150 connections
- The servicing strategy for wastewater for this site was included as part of the original Strategic Planning and subsequent Detailed Planning for the North Richmond Redbank development that was undertaken by the developer for Redbank at the time based on Sydney Water requirements. In these documents, the site was labelled as "Peel Farm".
- The wastewater system was sized and designed to provide connection points for the future Peel Farm (now Redbank Expansion Area (Kemsley Park) area. All wastewater designs to date providing the connection points as shown on the following page were reviewed and endorsed by Sydney Water.
- The ultimate servicing of Redbank as determined with the selection of the preferred option from the approved Sydney Water Detailed Planning (2017), was then incorporated into the Commercial Agreement between Sydney Water and Redbank Communities to deliver ultimate potable water infrastructure. As wastewater wasn't included in the Commercial Agreement, a complimentary package of infrastructure for both interim and ultimate serving of both Redbank and the Redbank Expansion Area (Kemsley Park) was determined.
- In order to service the Redbank development, Redbank Communities has in consultation and delivered in conjunction with Sydney Water several interim servicing arrangements for both potable water and wastewater. In both cases, the interim infrastructure has been designed to be retained as much as possible for the ultimate serving arrangement.
- In terms of a complimentary package of infrastructure for wastewater, delivered in consultation and in conjunction with Sydney Water, an interim operation plan (IOP) Storage & Smart Pump for servicing of the northern catchment of Redbank was constructed and has been operating since 2018, whilst the southern catchment of Redbank has been able to connect to the existing North Richmond township reticulation, with progressive stages being connected and then

further supported in 2023 with a Waste Water Storage and Emergency Relief System (ERS) being completed and operational downstream of the Redbank site. The first IOP-Storage & Smart Pump being interim and the second Wastewater Storage and Emergency Relief System (ERS) being ultimate.

Figure 3 – Wastewater connection points



- With the Strategic and Detailed planning processes from 2017, a Sewer Pump Station (SPS) and rising main had been preferred, receiving flows from Redbank and the future Redbank Expansion Area (Kemsley Park) on the east side of Peel Park. An ultimate project to compliment the Wastewater Storage and Emergency Relief System (ERS) which has been operational since 2023, was to provide a wastewater augmentation on local roads and primarily adjacent Bells Line or Road down to the existing North Richmond Wastewater Treatment Plant. This Bells Line of Road wastewater augmentation was to commence from a location within the existing Redbank township, at which point it would receive flows from the Sewer Pump Station (SPS) via the proposed rising main.

- In late 2023, it was confirmed by Sydney Water that an alternative to the Sewer Pump Station (SPS) and rising main was in concept design, which would as an alternative deliver a gravity wastewater main adjacent Redbank Creek, connecting to the Redbank reticulation to which the Redbank Expansion Area (Kemsley Park) would connect to in future. This concept design was further supported by Redbank in late 2023 and 2024 with Redbank personnel attending site visits by Sydney Water, with Redbank supplying key project and local information.
- The outcome of this further consultation is detailed in the next section Proposed Wastewater

Proposed Wastewater

- The population in the Richmond and Upper Hawkesbury area is projected to increase by up to 85 percent over the next 30 years. The Richmond Water Resource Recovery Facility and the North Richmond Wastewater Treatment Plant currently service two independent systems separated by the Hawkesbury River. Sydney Water is currently upgrading the wastewater infrastructure in the Richmond area to allow for the transfer of wastewater from North Richmond to Richmond to service further growth in the combined catchments. The Richmond System Wastewater Upgrade is a \$200M program of work that includes an upgrade on the Richmond wastewater network and the Richmond Water Resource Recovery Facility which will double the treatment capacity. The North Richmond Wastewater Treatment Plant will be converted into a new pump station and a new seven-kilometer transfer main will be constructed from the North Richmond plant to the Richmond plant. Three pump stations in the Richmond area will also be upgraded. Construction will start in 2024 with the project to be completed by the end of 2026.
- This upgrade will benefit the North Richmond Wastewater system by providing sufficient capacity for further development; development was restricted by the capacity of the North Richmond Wastewater Treatment Plant.
- In late 2023, it was confirmed by Sydney Water that an alternative to the Sewer Pump Station (SPS) and rising main (see Existing Water Water above) was in concept design, which would as an alternative deliver a gravity wastewater main adjacent Redbank Creek, connecting to the Redbank reticulation to which the Redbank Expansion Area (Kemsley Park) would connect to in future. This concept design was further supported by Redbank in late 2023 and 2024 with Redbank personnel attending site visits by Sydney Water, with Redbank supplying key project and local information.
- Through ongoing consultation and resultant confirmation by Sydney Water to Redbank, it is understood that business case planning has progressed significantly, and the subject gravity wastewater main adjacent Redbank Creek is now the preferred option. In turn, this will allow the Redbank Expansion Area (Kemsley Park) to connect directly to the existing connection points in Redbank, which will then in turn connect to the gravity wastewater main adjacent Redbank Creek, then connecting to the new pumping station / seven-kilometer transfer main to the Richmond Water Resource Recovery Facility.

Lot Capacity & Program

- With the completed construction works of the pumping station replacing the existing Wastewater Treatment Plant it is anticipated that there will be sufficient capacity available for the proposed development in Redbank Expansion Area (Kemsley Park) (300 to 350 lots)
- This development yield of 300 to 350 lots specifically for the Redbank Expansion Area (Kemsley Park) has already been accommodated for by Sydney Water, as detailed in the Sydney Water Developer Services Plan (DSP) contributions arrangement, which is being progressively implemented from 2024,
- With the delivery of the gravity wastewater main adjacent Redbank Creek, it is **not** expected that there is a need for any minor upgrades within the reticulation system between Redbank Expansion Area (Kemsley Park) and Redbank. There is already consultation underway between Sydney Water and Redbank Communities to confirm the preliminary scope for the decommissioning of the interim operation plan (IOP) Storage & Smart Pump, as this interim infrastructure is completely superseded by the ultimate infrastructure being the gravity wastewater main adjacent Redbank Creek.
- Assuming a successful rezoning of the Redbank Expansion Area (Kemsley Park), the details of the proposed staging and timing of the wastewater infrastructure will be confirmed via lodgement of applications with Sydney Water. Pending a successful rezoning in 2025, a rezoning DA can be lodged in 2025, followed by DA consent in early 2026, with anticipated delivery of infrastructure from 2026 through to 2029.

Electricity

Consultation

- following on from the servicing of the Kingsford Smith Village (80 bed ACF & 197 Seniors Houses) and Redbank (914 urban lots connected / 1399 urban lots zoned) **since 2010**, ongoing stage-based consultation with Endeavour Energy has been undertaken with subsequent provisions within the constructed HV feeder and reticulation network within Redbank being included in order to connect to the network within Redbank to fulfill the medium term requirement to fully service Redbank Expansion Area (Kemsley Park).

Existing Transmission / Distribution Lines

The Redbank site has three (3) Transmission / Distribution line easements (refer to Appendix B) -

- A transmission line along the eastern Redbank boundary, which has been incorporated into the Kingsford Smith Village urban layout and remains operational,
- A transmission line to the northern Redbank boundary, which then also extends from Redbank across Redbank Creek, and which has been incorporated into the Redbank urban layout and remains operational,
- A distribution line to the centre of the Redbank site, which then also extends through the Redbank Expansion Area (Kemsley Park).

Existing Zone Substation

- Endeavour Energy's North Richmond Zone Substation is located on Pecks Road, approximately 850 metres to the east of the site. Originally, prior to the establishment of the Redbank project the substation had over 8 MVA firm capacity available which is sufficient to service the Redbank site. At that time we also understand that the incoming transmission lines along the eastern boundary of the site were actually 132kV transmission lines whilst only being energized at 33kV, confirming that the incoming supply can be increased to cover increased demand, whether that be from Redbank and from a future site, such as in this case being the Redbank Expansion Area (Kemsley Park),
- With the additional load imposed by the Redbank project, there have been additional feeder connections completed at the North Richmond Zone Substation to accommodate the imposed Redbank load since 2008.

Infrastructure completed to date and NOW underway

- South-East boundary
 - i. directly adjacent to the southeastern common boundary of Redbank with the Redbank Expansion Area (Kemsley Park), incoming electrical feeder / electrical reticulation network has been installed throughout Southern Heights (DA 0498/18 - 254 lots) and completed in late 2023. This Southern Heights network is now being added to by the new Southern Valley (DA 0216/16 - 375 lots) reticulation that will be provided progressively directly up to the southeastern common boundary.
- North-East corner boundary
 - ii. directly adjacent to the northeastern common (corner) boundary of Redbank with the Redbank Expansion Area (Kemsley Park)), an incoming electrical feeder / electrical reticulation network has been installed throughout Yeomans (DA 0216/16 - 255 lots) completed in mid-2019. Direct connection of the incoming HV feeder to be extended into the Redbank Expansion Area (Kemsley Park) from the existing pad mount substation **EE36490** is planned.
- North-West boundary
 - iii. directly adjacent to the northwestern common boundary of Redbank with the Redbank Expansion Area (Redbank Expansion Area (Kemsley Park)), an incoming electrical feeder / electrical reticulation network has been installed throughout Belmont (DA 0467/15 - 57 lots) and completed in mid-2018. Direct connection of the incoming HV feeder to be extended into the Redbank Expansion Area (Redbank Expansion Area (Kemsley Park)) from the existing pad mount substation **EE35613** is planned.
- In all cases electrical feeder / electrical reticulation network is installed underground throughout Redbank within the road reserves, which will then be extended also underground

within the road reserves within the Redbank Expansion Area (Redbank Expansion Area (Kemsley Park)),

- Distribution line to the centre of Redbank and Redbank Expansion Area (Redbank Expansion Area (Kemsley Park))
 - iv. This line has been progressively removed and installed underground to suit the current Redbank urban layout since **2014**. With Southern Valley, this line will extend from underground to overhead, ready for its continuation underground in the future within the urban layout within the Redbank Expansion Area (Redbank Expansion Area (Kemsley Park)) if required by Endeavour Energy,
- fronting Grose Vale Rd
 - v. Within the scope of Southern Valley, there is a component known as Grose Vale Road-West which is the fronting road on the south-western boundary of Redbank. Grose Vale Road extends further to the west and also along the south-western boundary of Redbank Expansion Area (Redbank Expansion Area (Kemsley Park)). With Southern Valley there is the requirement for a new intersection at the future intersection Grose Vale Rd / Keyline Rd directly adjacent to the southeast corner of the Redbank Expansion Area (Redbank Expansion Area (Kemsley Park)). It is possible that street lighting may be required to extend along Grose Vale Rd along both the Southern Valley frontage and along the future Redbank Expansion Area (Redbank Expansion Area (Kemsley Park)) frontage. If this is required indirect connection of the street lighting network along South Valley will be from the existing pole mount substation **EE5475**.

Lot Capacity & Program

- there is sufficient electrical supply available to service an anticipated 300-350 lots within Redbank Expansion Area (Redbank Expansion Area (Kemsley Park),
- with a successful rezoning of the Redbank Expansion Area (Redbank Expansion Area (Kemsley Park)), the details of proposed staging and timing of the electrical infrastructure will be confirmed with Notices of Arrangement to be finalised between Redbank Communities and Endeavour Energy, with a successful rezoning in 2025, a concurrent with rezoning-DA lodgement in 2025 and DA consent in early 2026, then delivery of infrastructure from 2026 through to 2029, please refer to Appendix B for a graphical representation of the electrical infrastructure.

Telecommunications

Consultation

- following on from the servicing of the Kingsford Smith Village (80 bed ACF & 197 Seniors Houses) and Redbank (914 urban lots connected / 1399 urban lots zoned) **since 2010**, ongoing stage-based consultation with NBN has been undertaken with subsequent provisions within the

constructed pit and pipe network within Redbank and connection to adjacent Grose Vale Road to fulfill the medium term requirement to fully service the Redbank Expansion Area (Kemsley Park).

Existing Pit and Pipe Network

- this network extends through Kingsford Smith Village (80 bed ACF & 197 Seniors Houses) to Redbank (914 urban lots connected / 1399 urban lots zoned) and will be progressively extended through to Redbank Expansion Area (Kemsley Park) with the current delivery of the latest stage of Southern Valley within Redbank,

Infrastructure completed to date and NOW underway

- South-East boundary
 - vi. directly adjacent to the southeastern common boundary of Redbank with the Redbank Expansion Area (Kemsley Park), the NBN pit and pipe network has been installed and is fully operational throughout Southern Heights (DA 0498/18 - 254 lots) and completed in late-2023. This Southern Heights network is now being added to by the new Southern Valley (DA 0216/16 - 375 lots) reticulation that will be provided progressively directly up to the southeastern common boundary.
- North-East corner boundary
 - vii. directly adjacent to the northeastern common (corner) boundary of Redbank with the Redbank Expansion Area (Kemsley Park)), the NBN pit and pipe network has been installed and is fully operational throughout the Yeomans (DA 0216/16 - 255 lots) completed in mid-2019.
- North-West boundary
 - viii. directly adjacent to the northwestern common boundary of Redbank with the Redbank Expansion Area (Redbank Expansion Area (Kemsley Park)), the NBN pit and pipe network has been installed and is fully operational throughout Belmont (DA 0467/15 - 57 lots) and completed in mid-2018.
- In all cases the NBN pit and pipe network has been installed and is fully operational underground throughout Redbank within the road reserves, which will then be extended also underground within the road reserves within the Redbank Expansion Area (Redbank Expansion Area (Kemsley Park)),

Lot Capacity & Program

- there is sufficient NBN capacity to service an anticipated 300-350 lots within Redbank Expansion Area (Kemsley Park),

- with a successful rezoning of the Redbank Expansion Area (Kemsley Park), the details of the proposed staging and timing of the pit and pipe network will be confirmed with an update to the current Master Development Agreement (MDA) to be finalised between Redbank Communities and NBN, with a successful rezoning in 2025, a concurrent with rezoning-DA lodgement in 2025 and DA consent in early 2026, then delivery of infrastructure from 2026 through to 2029, please refer to Appendix B for a graphical representation of the NBN infrastructure.

If there are any questions or if any further information is required, please do not hesitate to contact the undersigned.

Yours faithfully



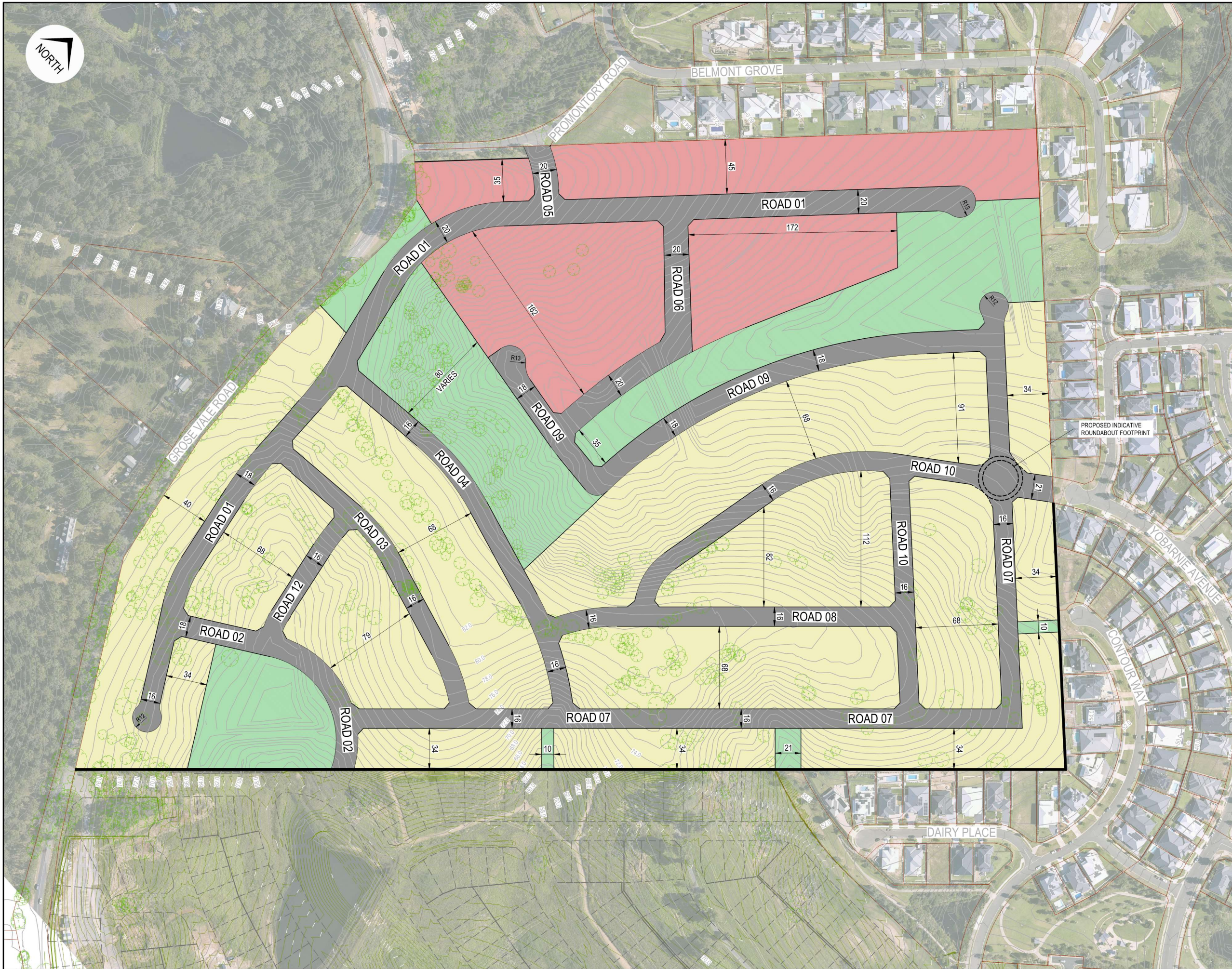
Orion Group

Technical Director - Water Servicing – Florian Jaehne

E: f.jaehne@theoriongroup.au

P: 0498 493 479

Appendix A – Road Structure and Proposed Zoning Plan

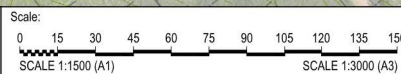


SITE BOUNDARY	
PROPOSED ROAD RESERVE	
EXISTING CONTOURS	
FUTURE CONTOURS	
EXISTING LOT BOUNDARY	
FUTURE LOT BOUNDARY	
PROPOSED R2 ZONING	
PROPOSED R5 ZONING	
OPEN SPACE RE1 ZONING	

Title: ROAD STRUCTURE AND PROPOSED ZONING PLAN

Project No.	Set No.	Milestone	Plan	Revision
24-0120	01	CD	001	03

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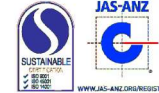
For



By



ABN:25 604 069 981 PO Box:7936, BAULKHAM HILLS NSW 2153 T:(02) 8660 0035 E:info@theoringroup.au



Project:

REDBANK EXPANSION AREA
PLANNING PROPOSAL

	Title
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Appendix B – Grose Vale Road Electrical Supply

