

# **Kurnell Precinct - Infrastructure Servicing Strategy Report**

November 2023

**Request for Planning Proposal: Besmaw Planning Proposal - 251, 260R, 278, and 280-282 Captain Cook Drive, Kurnell.**



**trio.**  
PROPERTY GROUP



# Amendment, Distribution & Authorisation Record

## Amendment Record

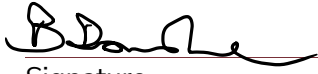

Revision	Description / Details	Date
01	Initial Draft for comment	27 November 2023

## Distribution

This Report Is Prepared for Distribution to:

Copy No	Name / Location	Position	Organisation
1	Finn Smith	Planner	Urbis / Client
2			

## Authorisation Record

Prepared by Project Director	Bill Donohoe Name	 Signature	27/11/23 Date
Review by Project Director	Zoe Melis Name	 Signature	28/11/23 Date

### Prepared for:

Besmaw Pty Ltd

The Proponent details for the Planning Proposal are listed in the following table:

Descriptor Proponent Details	Descriptor Proponent Details
Company Name(s)	Besmaw Pty Ltd
Postal Address	PO Box 1630, North Sydney 2059
ABN	67 008 481 187
Nominated Contact	Duncan McComb
Contact Details	Email: dmccomb@besmaw.com.au



# 1. Executive Summary

This Kurnell Precinct Infrastructure Servicing Strategy Report has been prepared by Trio Property Group Pty Limited to accompany a proponent initiated Planning Proposal (Planning Proposal) in support of the proposed amendment to State Environmental Planning Policy (Precincts—Central River City) 2021 (SEPP Precincts) and Sutherland Shire Local Environmental Plan 2015 (SSLEP 2015).

The Planning Proposal aims to translate and amend current land uses zones under the applicable controls to be consistent with the standard instrument Local Environmental Plan zones and enable additional uses to accommodate a diverse range of land uses at 251, 260R, 278, and 280-282 Captain Cook Drive, Kurnell (the site). The Planning Proposal will establish a new mixed-use community encompassing residential, employment, tourism, education, cultural facilities, ecological regenerative zones and public open space areas.

This report has been prepared to determine the capacities of the existing servicing infrastructure within the precinct and to investigate options for the servicing of the ultimate development based on the forecast project yields and total development footprint. The study commenced in late 2022 and continued though until November 2023.

In March 2023 the proponent submitted a Scoping Proposal to Sutherland Shire Council to commence the formal Planning Proposal process, in accordance with the LEP Making Guidelines. The Scoping Proposal provided a comprehensive 'status update,' outlining the concept master plan, the intended development outcome, the proposed planning controls and the environmental considerations which were to be further resolved.

As part of the Scoping Proposal process, Council referred the Scoping Proposal package to the DPE, State agencies, and several internal Council teams for review and comment. The advice received from these stakeholders has provided clear directives on the necessary updates and key focus areas within the technical documentation.

Separate to the Scoping Proposal package, extensive and ongoing engagement with relevant State Agencies has occurred since November 2022, with the objective of clarifying and resolving any of the outstanding considerations.

Besmaw has engaged Trio Property Group Pty Limited (assisted by Stantec Australia and the Utility agencies) to prepare an Infrastructure Servicing Strategy Report to address the feedback received from the DPE and state agencies and reflects the engagement undertaken to date.

Investigations undertaken by Trio Property Group, Stantec Australia and the utility agencies have concluded that the proposed development scheme for the Besmaw Planning Proposal site can be adequately serviced for power, telecommunications, water, sewer, and gas if required.

The investigations carried out over the last 12 months included consultation with both the incumbent (or Business as Usual) service authorities, as well as the investigation of strategies with private utility providers as alternate servicing strategy options. The findings of the enquiries, studies and reports are contained within.



# 2. Project Overview

## 2.1 INTRODUCTION

Trio Property Group working with Civil Engineering company Stantec Australia were engaged to investigate the servicing options and feasibility for the proposed development at Kurnell, as part of the planning proposal.

Trio Property Group was engaged to project manage and coordinate all enquiries with the individual agencies. Stantec Australia was engaged to provide technical input to the studies, and to assist with the interpretation of options, including the feasibility of each.

## 2.2 THE SITE

The land to which this planning proposal relates is 251, 260R, 278, and 280-282 Captain Cook Drive, Kurnell and is located within the Sutherland Shire Local Government Area (LGA).

The location of the site and aerial map is shown in **Figure 1**

The key features of the site are summarised in **Table 1**.

**Figure 1** Site Aerial and Map



Source: Group GSA



**Table 1** Site Description

<b>Feature</b>	<b>Lot 2 North</b>	<b>Lot 2 South</b>	<b>Lot 8</b>	<b>Lot 9</b>
Street Address	251 Captain Cook Drive	280-282 Captain Cook Drive	278 Captain Cook Drive	260R Captain Cook Drive Kurnell
Legal Description	Lot 2 in DP1030269	Lot 2 in DP559922	Lot 8 in DP586986	Lot 9 DP 586986
Site Area	16ha	160ha	34.5ha	82m <sup>2</sup>
	Total Area: Approximately 210.5 hectares			
<b>Local Government Area</b>	Sutherland Shire			

## 2.3 PROPOSED DEVELOPMENT –INITIAL MASTERPLAN (2022) - UPPER LIMIT VERIFICATON

An earlier State-led rezoning process relating to Nos 251 and 280-282 Captain Cook Drive, Kurnell was lodged with the Department of Planning and Environment (DPE) in 2020.

This process investigated the urban capability of the site through an amendment to State Environmental Planning Policy (Kurnell Peninsula) 1989 now consolidated into the State Environmental Planning Policy (Precincts – Central River City) 2021 as it relates to the site (SEPP Amendment). In August 2022, DPE advised Sutherland Shire Council (Council) and the proponent that the site and concept master plan that supported the SEPP Amendment has Strategic Merit.

Since then, the proponent and the consultant team have been undertaking intensive and ongoing consultation with the DPE, a number of State agencies, the Council and the local community to update and refine the master plan.

The initial options analysis modelling undertaken to confirm the sites service ability was based on an upper limit forecast yield derived from an early masterplan, Stantec were requested to calculate the peak demand for the site's power needs. The Electrical Demand supply letter was then used as the basis to inform Ausgrid and aid as a key input to their investigations into the existing and future capacity of their network to meet the ultimate demands of the proposed development.

The land use and upper limit development yields are illustrated in **Figure 2**. It's important to note that this earlier master plan was considered the upper limit of the proposal. Given, it has been determined that the upper limit of development can be serviced, other options within or under those limits would likely also be feasible and serviceable.



**Figure 2: Land Use and Yield Table**

Land Use	Upper Yield
Seniors Housing	498 dwellings
Aged care	218 dwellings
High Density Residential	3,406 dwellings
Prestige Housing	48 dwellings
High Density Hospitality	401 dwellings
Eco Tourist Villas/ Hotel	520 dwellings
Serviced Apartment	798 dwellings
Commercial	6,184 sqm
Retail	6,239 sqm
Community Facilities	2,304 sqm

The table above catered for an upper limit Gross Floor Area (GFA) of development to be 600,000m<sup>2</sup>.

This plan was assumed to be the upper limit of the proposal and subject to testing by other disciplines through the course of the investigations, and studies. The final design and siting were likely to change and be improved, as the planning investigations advanced. These refinements have resulted in the final masterplan, discussed in the next section.

## **2.4 PROPOSED DEVELOPMENT – FINAL MASTERPLAN (2023)**

Upon reviewing inputs from the consultant team, the initial master plan underwent refinement and enhancement. GroupGSA prepared an updated master plan in late 2023, addressing queries from relevant agencies including the State Design Review Panel, refining land uses, and reducing the upper limit of Gross Floor Area (GFA) and the total dwelling yields. This revised plan aimed to incorporate feedback, improve overall design considerations, and align more closely with the requirements and recommendations from involved agencies.

Given the revised master plan has a reduced GFA and overall dwelling yield, the results from the upper limit testing can be relied upon to confirm the sites serviceability.

The land use and upper limit development yields are shown in **Figure 3**

The Final masterplan is shown in **Figure 4**



**Figure 3: Land Use and Yield Table (GFA and Dwellings)**

**GFA**

Precinct	Retail (GFA)	Medium Density Residential (GFA)	Residential (GFA)	Townhouses (GFA)	Seniors - ILUs (GFA)	Seniors - Indigenous (GFA)	Seniors - RACF (GFA)	Tourism (GFA)	Education (GFA)	Cultural (GFA)	TOTAL GFA (sqm)
Precinct A - Town Centre North	6,885	0	125,997	0	19,970	0	0	15,226	15,771	0	183,847
Precinct B - Town Centre South	0	30,478	56,457	11,810	21,699	0	10,385	13,639	0	610	145,078
Precinct C - Bate Bay North	1,057	4,745	38,270	2,881	13,875	0	0	0	0	0	60,828
Precinct D - Bate Bay South	1,395	5,305	24,917	13,194	10,434	0	0	0	0	0	55,244
Precinct E - Boat Harbour	0	8,339	40,448	21,167	10,618	0	0	33,479	0	453	114,504
Precinct F - Quibray Bay	469	12,727	16,804	0	0	2,520	0	0	0	262	32,782
<b>TOTAL GFA (sqm)</b>	<b>9,806</b>	<b>61,594</b>	<b>302,892</b>	<b>49,052</b>	<b>76,595</b>	<b>2,520</b>	<b>10,385</b>	<b>62,344</b>	<b>15,771</b>	<b>1,324</b>	<b>592,283</b>
	9,806	413,538		89,501			62,344				575,188
<i>Targets</i>	<i>20,000</i>	<i>350,000</i>		<i>110,000</i>			<i>70,000</i>				<i>550,000</i>

**Dwellings**

Precinct	Medium Density Residential	Residential	Townhouses	Seniors - ILUs	Seniors - Indigenous	Seniors - RACF	Tourism (Hotel rooms/ Eco cabins)	TOTAL NO. of Dwellings
Precinct A - Town Centre North	0	1,177	0	158	0	0	98	1,335
Precinct B - Town Centre South	293	469	62	172	0	122	115	1,118
Precinct C - Bate Bay North	42	350	16	106	0	0	0	514
Precinct D - Bate Bay South	48	222	72	80	0	0	0	422
Precinct E - Boat Harbour	79	372	108	82	0	0	374	641
Precinct F - Quibray Bay	120	153	0	0	30	0	0	303
<b>TOTAL NO. of Dwellings</b>	<b>582</b>	<b>2,743</b>	<b>258</b>	<b>598</b>	<b>30</b>	<b>122</b>	<b>587</b>	<b>4,333</b>
				*manually adjusted for Indigenous Seniors			Including Tourism	4,920

Unit numbers rounded to the nearest whole number

**Figure 4: GroupGSA Masterplan (2023)**





---

## 3. Servicing Investigations & Strategy

The section below describes the process and chronology of the investigations and findings of the study. The initial servicing strategy was based on the PTW Architects 2022 upper limit masterplan. Upon receipt of the final masterplan from GroupGSA in late 2023, a review of the initial findings was undertaken that determined no change to the proposed strategy, due to a slight reduction in development yield and GFA.

### 3.1 WATER AND SEWER

Sydney Water Corporation's (SWC) Development Services Section was approached to prepare a report confirming the existing service capacity and options to upgrade their infrastructure to meet the demand of the proposed development. A feasibility study was commenced by SWC in late 2022, with the aim of determining both the capacity of the existing system, and options for meeting proposed water and sewer demand for the new development. Unfortunately, at the end of this extended process, SWC was unable to confirm both and suggested that we engage an experienced and accredited SWC modeler to determine the same.

Enquiries with the parties advised by SWC from their approved consultant list were made. All but one was unable to undertake and work within at least 6 months and turned down the brief. Only one may have been able to undertake the works, however they were not able to accept the commercial terms of the landowner, Besmaw.


When Besmaw were unable to engage an accredited SWC modelling consultant, Stantec Australia were requested to undertake a high level assessment on the Water and Sewer system. Stantec Australia determined that based on their review of the SWC feasibility letter and their own enquiries as to the pressure in the existing main, that water servicing was possible for the development, however this could only be determined accurately by undertaking a modelling exercise.

A summary of the Stantec Australia report containing commentary on the strategies to meet the serving needs of the initial upper limit masterplan, dated 7/6/2023 can be found in **Appendix A**.

The report contains several key reference items bundled into their report. These have been labelled and include.

- **Item 1** – Stantec Australia Covering letter 7/6/23.
- **Item 2** – NBN confirmation email from Kareena Prado, Senior Accounts manager dated 9/12/2022.
- **Item 3** - Jemena Gas confirmation email from Heale Hilton, Network Development Specialist, dated 6/6/2023.
- **Item 4** – Ausgrid System Planning Advice, prepared by Daniel McDonald, Contestable Projects Coordinator, dated 23/4/2023.
- **Item 5** - Stantec Australia High Level Assessment of Water and Sewer servicing letter dated 12/5/2022 and based on SWC Feasibility letter dated 31/3/2023.
- **Item 6** – Sydney Water Corporation (SWC) Feasibility Letter dated 31/3/2023.

As the investigations in the SWC servicing options had reached an impasse due to the need for further modelling and the unavailability of accredited SWC modelers, the Trio Property Team recommended alternate servicing strategies allowed under the Water Industry Competition Act 2006 (WICA). This



strategy would include the engagement of a private utility company to meet the servicing needs of development in lieu of the “Business as Usual” Sydney Water solutions.

An alternate private utility company, Altogether, was approached to determine if they were able to service the development. After initial discussions and investigations, they confirmed they would be able to service the development by constructing their own onsite water and sewer treatment plant, referred to as a “Local Water Centre’ or LWC, which would include reuse of treated sewer to supply recycled water to the proposed development.

A copy of their Phase 1 report based on the latest masterplan is included in **Appendix B**. This report concludes that Altogether will be able to service the development for water and sewer services.

In their letter of 23/11/23 contained in **Appendix D**, Stantec Australia make the following comment in relation to the Altogether servicing report for water and wastewater.

*“A change in the Potable and Wastewater servicing strategy has been made due to Sydney Water’s unwillingness to confirm serviceability of the Kurnell site. An alternative provider, Altogether, has provided a servicing strategy which has confirmed that it will supply the site with water and sewer services to meet the demands of the proposal.” (Appendix D)*

## 3.2 POWER

Trio Property Group contacted Ausgrid’s Customer Connections Section in late 2022 and commenced enquiries. Those enquiries resulted in a proposal and brief from Ausgrid to investigate both the existing capacity within their network, and to determine feasible options for the new power supply to the development. Stantec undertook a review of the Ausgrid letter report and states,

*“In their letter Ausgrid confirmed that the site can be serviced by installing a new Cable Run from the Kurnell South Zone Substation approximately 2.1km away. Ausgrid estimated the construction cost for this option to be 3.26 million with an uncertainty factor of +/- 40%. Two Level 1 ASP’s were contacted to discuss the price of installing five cables in an eight way duct bank. Their high-level estimates ranged from \$5-8 million dollar.” (Appendix A – Item 1 – June 2023)*

Stantec Australia have confirmed that the electrical demand has reduced slightly based on the final masterplan and that the findings in their June report are still valid for the new scheme. Trio Property forwarded the updated demand letter to Daniel McDonald, Contestable Projects Coordinator from Ausgrid who confirmed that the report based on the earlier upper limit masterplan is still valid. Refer email dated 22/11/2023 located in **Appendix C**.

In November 2023, Stantec Australia were requested to provide a letter confirming the servicing strategy would still be valid for the final masterplan their letter dated 23/11/23 is located in **Appendix D**. Stantec Australia makes the following comment,

*“The change in yield, with updated Electrical Demand..., marginally decreased the overall load of the site and as such Ausgrid can still service the site.” (Appendix D)*

No further analysis work was required, and the findings based on the initial upper limit masterplan are still valid for the final masterplan.

---

### 3.3 NBN

Stantec Australia directly contacted the National Broadband Network (NBN) to enquire into the serviceability of the site. They were able to confirm the following as noted in their letter report dated 7/6/23 in **Appendix A**. Stantec Australia states,

*“National Broadband Network (NBN) were approached to confirm serviceability of communications to the Kurnell site. Senior Account Manager Kareena Prado from NBN confirmed that the Kurnell site could be serviced by NBN. NBN confirmed that there would be no additional back haul costs to bring fibre to the boundary.” (Appendix A – Item 1 – June 2023)*

The advice as provided by NBN is included in Appendix A – Item 2. After reviewing the final masterplan Stantec Australia has made the following comment in their letter dated 23/11/23,

*“Communications - Advice provided in Letter....(7/6/23) remains true and NBN can service the site” (Appendix D)*

No further analysis work was required, and the findings based on the initial upper limit masterplan are still valid for the final masterplan.

### 3.4 GAS

Stantec Australia directly contacted Jemena to enquire into the serviceability of the site. They were able to confirm the following as noted in their letter report dated 7/6/23 in **Appendix A**. Stantec Australia states,

*Jemena was approached to provide advice on the serviceability of gas to the Kurnell site. Network Development Specialist, Neale Hilton confirmed that there is currently no suitable residential medium pressure network to connect to but confirmed that site can be serviced. To service the Kurnell site a district regulator station will need to be constructed and located within a suitable road reserve which will connect to the existing High Pressure Main running along Captain Cook Drive, then distribute a plastic medium pressure 210kPa network. Jemena provided informal advice regarding the initial construction, installation of District regulator and connection to the High-Pressure Gas main would be a minimum \$2.1 million and this does not include internal street reticulation. (Appendix A – Item 1 – June 2023)*

The advice as provided by Jemena can be found in Appendix A - Item 3. After reviewing the final masterplan Stantec Australia has made the following comment in their letter dated 23/11/23,

*“Gas - Advice provided in Letter.... (7/6/23) remains true and Jemena can service the site.” (Appendix D)*

No further analysis work was required, and the findings based on the initial upper limit masterplan are still valid for the final masterplan.



---

## 4. Conclusion

Investigations undertaken by Trio Property Group, Stantec Australia and the utility agencies have concluded that the proposed development scheme for the Besmaw Kurnell site can be adequately serviced for power telecommunications, water, sewer, and gas if required.

The investigations carried out over the last 12 months included consultation with both the incumbent (or Business as Usual) service authorities, as well as the investigation of strategies with private utility providers as alternate servicing strategy options.

The early servicing advice was based in the initial masterplan and confirmed servicing of the site was possible. Trio Property Group, in consultation with Stantec Australia and Ausgrid have confirmed that based on the final masterplan with a slightly reduced dwelling yield and GFA that the initial conclusion is still valid.



**Appendices**

# Appendix A:

## Stantec Australia Report dated 7/6/23.

The report contains the following items.

- **Item 1** – Stantec Australia Covering letter 7/6/23.
- **Item 2** – NBN confirmation email from Kareena Prado, Senior Accounts manager dated 9/12/2022.
- **Item 3** - Jemena Gas confirmation email from Heale Hilton, Network Development Specialist, dated 6/6/2023.
- **Item 4** – Ausgrid System Planning Advice, prepared by Daniel McDonald, Contestable Projects Coordinator, dated 23/4/2023.
- **Item 5** - Stantec Australia High Level Assessment of Water and Sewer servicing dated 12/5/2022 and based on SWC Feasibility letter dated 31/3/2023.
- **Item 6** – Sydney Water Corporation (SWC) Feasibility Letter dated 31/3/2023.



## Item 1

Our Ref: Kurnell Feasibility Besmaw

Contact: Bobby Fitzgerald

07/06/2022 (Should be 07/06/2023)

Trio Property Group

Attention: Bill Donohoe

16 Burelli Street  
Wollongong NSW 2500  
Australia

PO Box 1285  
Wollongong NSW 2500  
Australia

Phone: 61 2 4228 4133

Fax: 61 2 4228 6811

### **RE: Kurnell Feasibility Letter**

Dear Bill,

Below is Stantec's assessment regarding the servicing of the Kurnell Site. Utility Authorities for Water, Wastewater, Gas, Electricity and Communications were consulted as per the below. Each Authority has provided advice based on the below breakdown.

Land Use	Upper Yield
Seniors Housing	498 dwellings
Aged care	218 dwellings
High Density Residential	3,406 dwellings
Prestige Housing	48 dwellings
High Density Hospitality	401 dwellings
Eco Tourist Villas/ Hotel	520 dwellings
Serviced Apartment	798 dwellings
Commercial	6,184 sqm
Retail	6,239 sqm
Community Facilities	2,304 sqm

### **Communications**

National Broadband Network (NBN) were approached to confirm serviceability of communications to the Kurnell site. Senior Account Manager Kareena Prado from NBN confirmed that the Kurnell site could be serviced by NBN. NBN confirmed that there would be no additional back haul costs to bring fibre to the boundary. The advice as provided by NBN is included on the back of this letter.

### **Gas**

Jemena was approached to provide advice on the serviceability of gas to the Kurnell site. Network Development Specialist, Neale Hilton confirmed that there is currently no suitable residential medium pressure network to connect to but confirmed that site can be serviced. To service the Kurnell site a district regulator station will need to be constructed and located within a suitable road reserve which will connect to the existing High Pressure Main running along Captain Cook Drive, then distribute a plastic medium pressure 210kPa network. Jemena provided informal advice regarding the initial construction, installation of District regulator and connection to the High-Pressure Gas main would be a minimum \$2.1 million and this does not include internal street reticulation. The advice as provided by Jemena can be found at the back of this letter.

## **Electrical**

Ausgrid were approached to confirm electrical serviceability of the Kurnell site. Ausgrid provided advice in the form of an official letter under project number AN-24702. The Ausgrid letter can be found at the back of this letter. In their letter Ausgrid confirmed that the site can be serviced by installing a new Cable Run from the Kurnell South Zone Substation approximately 2.1km away. Ausgrid estimated the construction cost for this option to be 3.26 million with an uncertainty factor of +/- 40%. Two Level 1 ASP's were contacted to discuss the price of installing five cables in an eight way duct bank. Their high-level estimates ranged from \$5-8 million dollars. A greater breakdown can be seen in Letter 003 – found at the back of this letter.

## **Potable & Wastewater**

Sydney Water were approached to confirm water servicing of the Kurnell site. A feasibility application as lodged with Sydney Water and Sydney Water responded with a feasibility letter. Sydney Water's feasibility letter can be found at the back of this letter. The Kurnell Site is fronted by numerous Water and Wastewater Services along Captain Cook Drive. Potable Water in this area is supplied by the Kurnell Reservoir and Wastewater is treated at the nearby Cronulla Sewage Treatment Plant. Sydney Water confirmed in their letter that none of the Wastewater services are suitable for connection but the DN300 Cast Iron Cement Lined Main is available for connection. A high-level assessment of this potable water main has been conducted by Stantec and shows that the existing pressure and flow through this main is sufficient to service the Kurnell site in isolation, however the current draw on this main from upstream and downstream customers remains an unknown. Sydney Water have specified in their feasibility Letter that Hydraulic Modelling needs to be completed to confirm the existing capacity of this main before they will provide official advice. Similarly, a high-level assessment of the wastewater servicing was conducted by Stantec in the absence of Hydraulic modelling. Due to the topography between the site and the Cronulla Treatment Plant Stantec estimate that a rising main will be required to deliver the wastewater flows from the Kurnell Site to the Treatment Plant. Cronulla Sewage Treatment Plant's capacity is unknown currently. Give the above it is likely the site can be serviced. This advice given is high level only and hydraulic modelling is a requirement to progress the serviceability of the Kurnell Site with Sydney Water further. A greater breakdown of these High-Level Sydney Water Servicing Options can be found in Letter 003 at the back of this letter.

Yours Faithfully

Robert Fitzgerald

**Bobby Fitzgerald**

---

**From:** Kareena Prado <kareenaprado@nbnco.com.au>  
**Sent:** Friday, 9 December 2022 11:44 AM  
**To:** Bobby Fitzgerald  
**Subject:** RE: 251 & 280-282 Captain Cook Drive Kurnell, NSW, 2231 - Masterplan Query - DEV-00187990

Hello Bobby,

I have received the planning assessment back today.

There is not additional Back haul costs to bring the fibre to the boundary.

Once the developer is in a position to progress with the site we can discuss the requirements, a commercial offer and agreement with them.

Please do not hesitate to contact me

Kind Regards

**Kareena Prado**  
**Senior Account Manager (NSW/ACT) – New Developments**  
**M +61 428 537 208 | E [kareenaprado@nbnco.com.au](mailto:kareenaprado@nbnco.com.au)**  
100 Mount Street, North Sydney NSW 2060  
**Cammeraygal Country**



**nbn acknowledges and pays respects to the traditional custodians of all the lands upon which we work.**

Notice to recipient: This e-mail is intended only to be read or used by the addressee. It is confidential and may contain information that is subject to legal professional privilege or protected by copyright. If you are not the addressee indicated in this message (or responsible for delivery of the message to that person), you may not copy or deliver this message to anyone, and you should destroy this message and kindly notify the sender by reply e-mail. Copyright, confidentiality and legal professional privilege are not waived or lost by reason of mistaken delivery to you. Emails to/from nbn co limited ABN 86 136 533 741 may undergo email filtering and virus scanning, including by third party contractors, however, nbn co limited does not guarantee that any email or any attachment is secure, error-free or free of viruses or other unwanted or unexpected inclusions. Any views expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of nbn co limited.

PLEASE CONSIDER OUR ENVIRONMENT BEFORE PRINTING

---

**From:** Kareena Prado  
**Sent:** Thursday, 8 December 2022 12:27 PM  
**To:** Bobby Fitzgerald <[robert.fitzgerald@cardno.com.au](mailto:robert.fitzgerald@cardno.com.au)>  
**Subject:** RE: 251 & 280-282 Captain Cook Drive Kurnell, NSW, 2231 - Masterplan Query - DEV-00187990

Hello Bobby,

Great to speak with you today.

I have lodged the feasibility application DEV-00187990 and sent to planning for assessment.

As **nbn** is a build to demand program we absolutely can provide FTTP to this site.

Once this comes back from planning I will know what is needed to uplift the capacity to cater for this site and if there is any costs to bring that capacity to the boundary.

Please do not hesitate to contact me

Kind Regards

**Kareena Prado**

**Senior Account Manager (NSW/ACT) – New Developments**

**M +61 428 537 208 | E [kareenaprado@nbnco.com.au](mailto:kareenaprado@nbnco.com.au)**

100 Mount Street, North Sydney NSW 2060

**Cammeraygal Country**



**nbn acknowledges and pays respects to the traditional custodians of all the lands upon which we work.**

Notice to recipient: This e-mail is intended only to be read or used by the addressee. It is confidential and may contain information that is subject to legal professional privilege or protected by copyright. If you are not the addressee indicated in this message (or responsible for delivery of the message to that person), you may not copy or deliver this message to anyone, and you should destroy this message and kindly notify the sender by reply e-mail. Copyright, confidentiality and legal professional privilege are not waived or lost by reason of mistaken delivery to you. Emails to/from nbn co limited ABN 86 136 533 741 may undergo email filtering and virus scanning, including by third party contractors, however, nbn co limited does not guarantee that any email or any attachment is secure, error-free or free of viruses or other unwanted or unexpected inclusions. Any views expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of nbn co limited.

PLEASE CONSIDER OUR ENVIRONMENT BEFORE PRINTING

---

**From:** Bobby Fitzgerald <[robert.fitzgerald@cardno.com.au](mailto:robert.fitzgerald@cardno.com.au)>

**Sent:** Thursday, 8 December 2022 10:38 AM

**To:** Kareena Prado <[kareenaprado@nbnco.com.au](mailto:kareenaprado@nbnco.com.au)>

**Subject:** [External] 251 & 280-282 Captain Cook Drive Kurnell, NSW, 2231 - Masterplan Query

**EXTERNAL SENDER – Be cautious opening Links and Attachments**

Hi Kareena,

I hope you are well. We are working with a developer for a large development site in Kurnell, NSW. The site is currently at planning proposal stage, and part of the planning proposal is reaching out the utility authorities for their feedback on potential servicing, primarily if there is a need for developer funding lead-in works. Currently, the attached is expected to be delivered over 15-20 years, with an estimated start date in 2025. Can you confirm if there exists current capacity to service this development and if not potential upgrades or lead-in requirements? I have included the upper yield for the whole development below and the overall site layout attached.

As a side note, is there an application portal for people like myself to lodge these applications directly. I found NBN's online portal but there was no way to sign up / create an account?

Let me know if you have any questions.

**Bobby Fitzgerald**

**From:** Neale Hilton <Neale.Hilton@jemena.com.au>  
**Sent:** Tuesday, 6 June 2023 2:04 PM  
**To:** Bobby Fitzgerald  
**Subject:** FW: 251 & 280-282 Captain Cook Drive Kurnell, NSW, 2231 - Masterplan Query JEMENA  
**Attachments:** MP-15-0200\_LAND USE & AREA ALLOCATION - DIAGRAMATIC PLAN.pdf

Bobby

Thank you for your advice of this proposal. Jemena appreciates being involved in the forward planning of these developments.

Currently no suitable residential medium pressure network exists in this location. An existing High Pressure(HP) 1050kPa pipeline is located along Captain Cook Drv at the entry to this site. To service the proposal a district regulator station will need to be constructed and located within a suitable road reserve which will connect to the HP network then distribute a plastic medium pressure 210kPa network within the supplied plan. Please note Jemena does not reserve capacity for any individual project.

Jemena does not conduct financial feasibilities at this early stage and can provide formal offers once Development approval has been granted and application made via the Jemena Portal. I estimate the initial construction, installation of District regulator and connection to the HP main would be a minimum \$2.1m and this does not include internal street reticulation.

Regards

**Neale Hilton**

Network Development Specialist –  
Residential Medium Density/High Rise

**Jemena**

Level 14, 99 Walker Street, North Sydney, NSW 2060

M 0402 060 151

[neale.hilton@jemena.com.au](mailto:neale.hilton@jemena.com.au) | [www.jemena.com.au](http://www.jemena.com.au)



**From:** Bobby Fitzgerald <robert.fitzgerald@cardno.com.au>  
**Sent:** Thursday, 2 March 2023 10:40 AM  
**To:** Neale Hilton <neale.hilton@jemena.com.au>  
**Subject:** 251 & 280-282 Captain Cook Drive Kurnell, NSW, 2231 - Masterplan Query JEMENA

**⚠ WARNING:** This email originated from outside of the organisation. Do **not** click links or open attachments unless you recognise the sender and are expecting the content or attachment from the sender.





28 April 2023

Ausgrid – Project Number: AN-24702

Bill Donohoe  
Trio Property Group  
PO Box 447,  
Cammeray, NSW 2062

24-28 Campbell St  
Sydney NSW 2000  
All mail to  
GPO Box 4009  
Sydney NSW 2001  
T +61 2 131 525  
ausgrid.com.au

Dear Bill,

### **System Planning Advice –23.8MVA Kurnell Urban Development**

Further to your Preliminary Enquiry dated 22<sup>nd</sup> of December 2022, Ausgrid's System Planning group have now completed a review of connection options and related network requirements to support the proposed development.

The key considerations and outcomes from this review are described below and will provide important information to assist with finalising electrical requirements for the site and the preparation of a detailed Design Information Package for any associated contestable works.

A range of connection options have been considered and compared based on overall cost as well as general technical suitability and integration within our own network development plans for the area.

Through this process the alternative arrangements have been narrowed down to the following options available for further consideration:

#### **Option 1 – 11kV Supply from Kurnell South ZS<sup>1</sup>.**

#### **Option 2 – 11kV Supply from Cronulla ZS**

Ausgrid will enter the next phase upon the receipt of a formal selection of a supply option for your development. Selection of a suitable supply option for your development will allow Ausgrid to commence design level scoping of your supply requirements and further confirmations of supply option feasibility. This phase will result in the creation of a Design Information Package (DIP) for your proposed development.

Ausgrid's connection processes and related documents are available on the Ausgrid website [www.ausgrid.com.au](http://www.ausgrid.com.au) under "Connections".

The table below provides a preliminary program showing typical milestones and activities for establishing a connection upon receipt of the System Planning Advice.

---

<sup>1</sup> Zone Substation

<b>Milestone or Activity</b>	<b>Coordinated By</b>	<b>Date / Duration</b>
System Planning Advice	Ausgrid	28 April 2023
Select preferred Connection Option	Customer	
Prepare Contestable Design Information	Ausgrid	14 weeks
Develop Contestable Design Package	Customer / ASP3	
Review and Certify Design Package (allow minimum 6 weeks per submission and at least 2 submissions)	Ausgrid / Customer	6 weeks
Prepare Negotiated Connection Offer and Construction / Commissioning Fee Estimates	Ausgrid / Customer	Up to 13 weeks
Construction, Audit & Compliance	Customer / ASP1 / Ausgrid	6 –18 months
Testing and Commissioning	Ausgrid / Customer	12 weeks

## Background and Study Parameters

The options presented in this system planning advice have been developed, as requested by Trio Property Group, to provide feasible connection options to supply 23.8 MVA of future load across the Kurnell Urban Development at 251 & 280-282 Captain Cook Drive, Kurnell.

Planning options and cost estimates have only considered up to the customer's development site. All costs associated with the establishment and relocation of distribution reticulation assets (i.e. kiosk substations, low voltage (LV) assets etc) within the subdivision development area and any private network downstream of the connection point have been excluded from the planning estimates as these would be common to all options.

Connection options can be affected by other developments, future network augmentation, load growth and policy changes. This planning advice does not reserve capacity on the network for the customer.

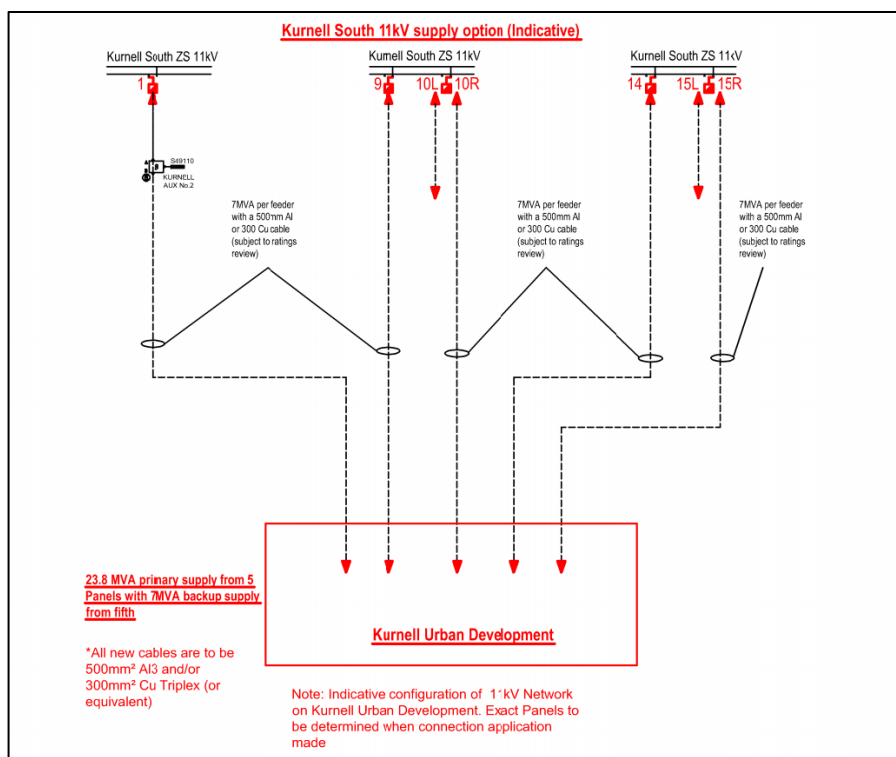
This document investigates permanent N-1 supplies via neighbouring zone substations as shown in Figure 3.

## Option 1 – 11kV Supply from Kurnell South ZS

This option requires installation of five 500AL3 cables and a new 8-way duct line spare ducts line from Kurnell South ZS to the proposed development site.

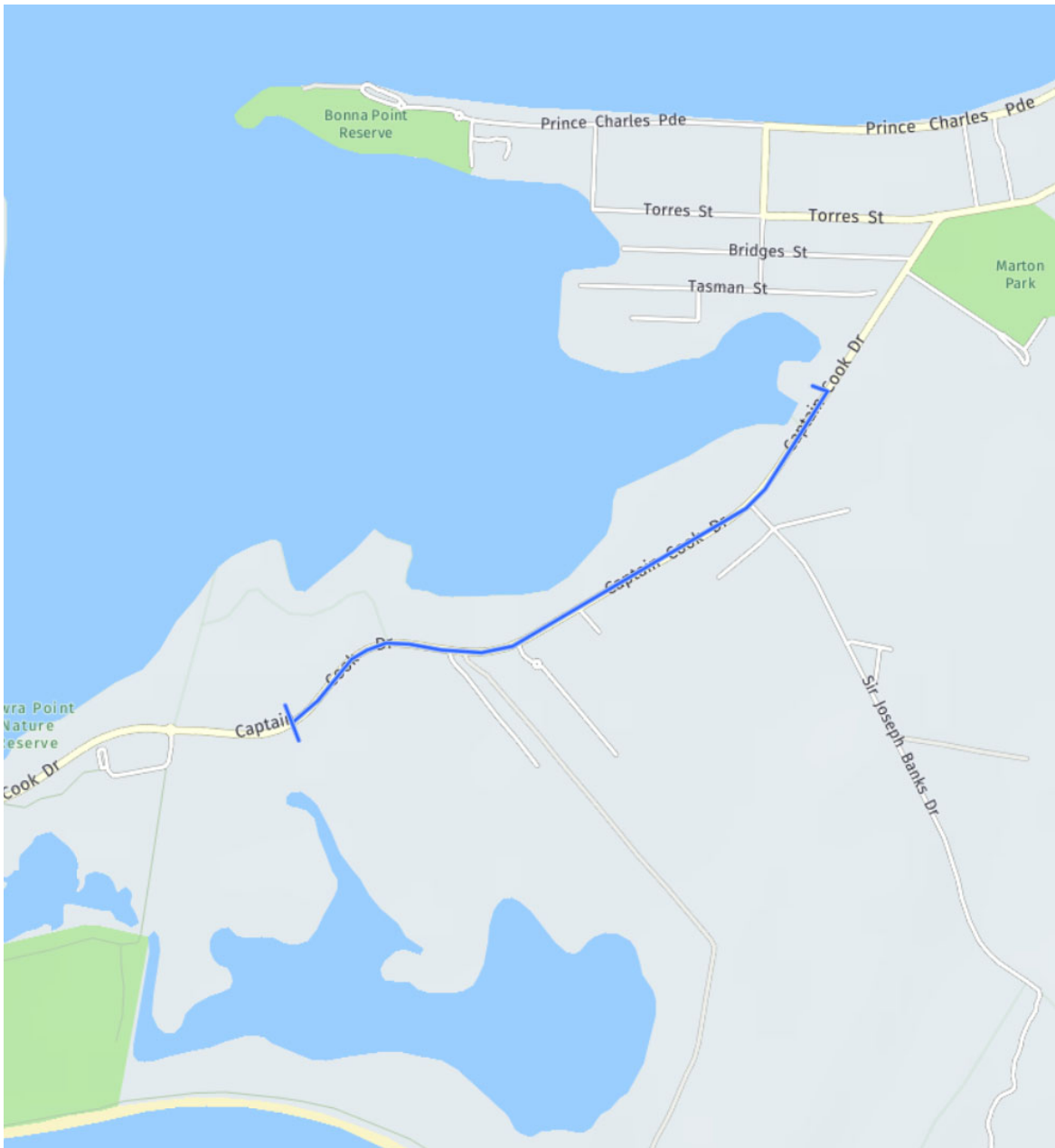
Four of the 11kV feeders will supply up to 23.8MVA, while the fifth 11kV feeder will provide a backup supply (N-1) to the development. There are currently three spare 11kV feeder panels at Kurnell South ZS one single banked and two double banked panels available.

The estimated length of the 11kV cable run will be 2.1km and an indicative route is shown in Figure 2.



**Figure 1 – Option 1 – Kurnell South ZS Connection**

There are moderate design and construction challenges when exiting out of Kurnell South ZS due to reconfiguration of existing network, Ausgrid assets, other services, and physical structures in the area. A customer funded study will be required to confirm the feasibility of this option before proceeding. If feasible, the estimated construction cost for this option is \$3.26M. Note the accuracy level of this estimate is +/-40%. The cost may be substantially more if a direct route is not possible.



**Figure 2 - Option 1 - Indicative Cable Route Kurnell South ZS**

DESCRIPTION	LENGTH (KM)	COST
5 new cables Kurnell South Zone approximate distance 2.1 KM	10.5	\$1,012,500
New trenching and cable installation	3.0	\$2,124,000
5 x 11kV Panel Configuration and commissioning Kurnell South Zone	-	\$125,000
<b>TOTAL</b>	-	<b>\$3,261,500</b>

**Table 1 - Option 1 - Indicative scope of works and estimated costs**



## Option 2 – 11kV Supply from Cronulla ZS

Cronulla ZS is not considered a viable connection option for N-1 supply for the following reasons: Cronulla ZS does not have capacity to supply the additional 23.8 MVA requested in this application (section 2.4). Cronulla ZS has no spare 11kV Circuit Breakers available to connect the requested load. Installation of additional transformer and 11kV switchgroup is required at Cronulla ZS to remove the above restrictions.

Shifting load from Cronulla ZS to Caringbah ZS to free up spare capacity and panels was considered. However, due to the need for extensive cable laying and network reconfiguration, this option would be more expensive than Option 1.

Considering the above network issues the cost of this connection will be above \$10M and as a result this connection option was not progressed further and has been discounted.

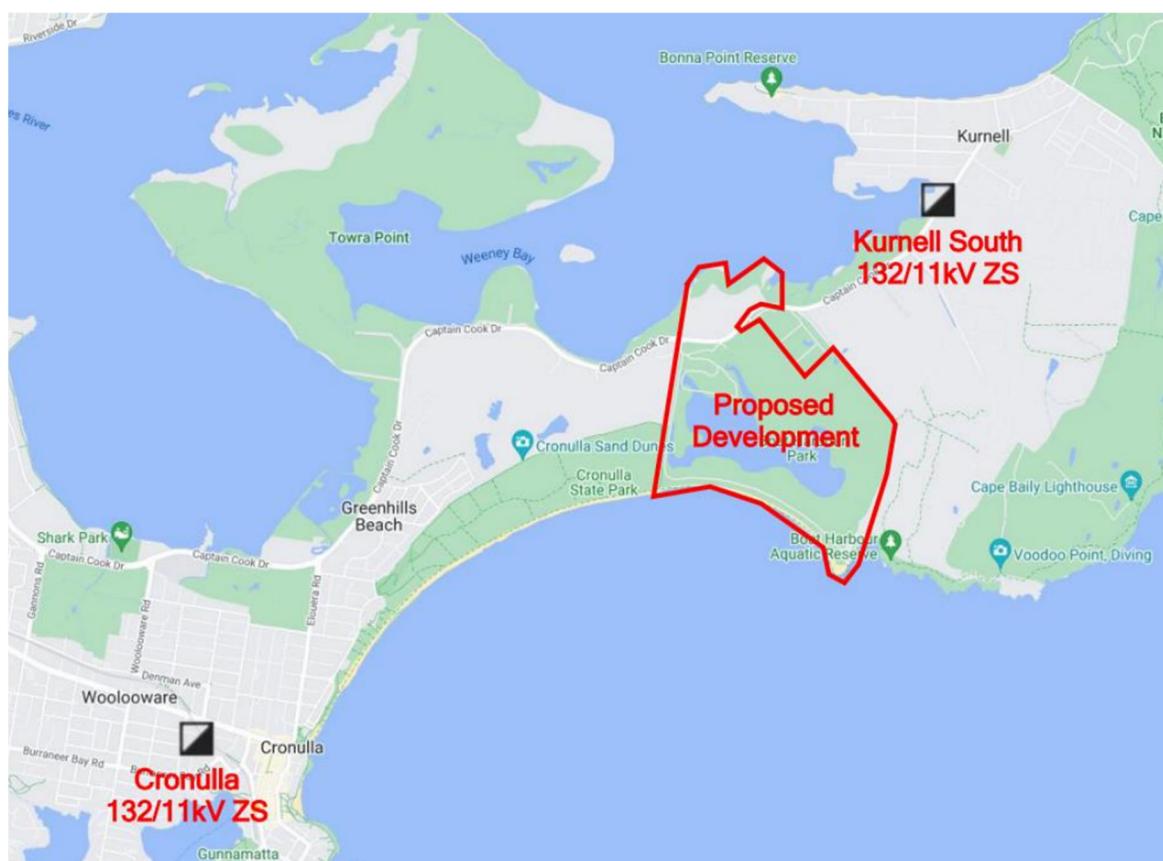


Figure 3 - Option 2 - Overview of Neighbouring Zone Substations

## Summary

Under Ausgrid's current connections policy, the connection applicant is required to fund all dedicated connection and customer premises works. Ausgrid will fund non-contestable network assets provided appropriate tariff and revenue security arrangements are in place to ensure that a reasonable return is earned on this investment.

The following table summarises the planning estimates for the considered supply options. Note that the planning estimates indicated below are based on Real 2022/23 dollars. Note the accuracy level of this estimate is +/-40%. The cost may be substantially more if a direct route is not possible.

OPTION	OPTION DESCRIPTION	PLANNING ESTIMATE (\$M)
1	11kV Supply from Kurnell South ZS	\$3.26 Subject to detailed technical studies to confirm route feasibility and costs.
2	11kV Supply from Cronulla ZS	\$10.00 This connection option was not considered feasible and has been discounted.

**Table 2 - Summary of Planning Estimates**

The planning estimates are based on standard ranges and unit rates used by Ausgrid to develop budgetary requirements across a large portfolio of projects. Individual project costs may vary considerably subject to specific design requirements, site conditions as well as outcomes of a competitive tendering and procurement process. The planning estimates do not provide accurate costs for individual options but rather give an indication of expected costs assuming a direct route between the zone substation and the development site with no impediments along the route.

These estimates do not include any costs for easement acquisitions that may be required for the feeder works. All costs associated with the establishment and relocation of distribution reticulation assets (i.e. kiosk substations, low voltage (LV) assets etc) within the subdivision development area and any private network downstream of the connection point have been excluded from the planning estimates as these would be common to both options.

## Costing Envelopes and Funding Arrangements

The planning cost estimates are based on standard ranges and unit rates used by Ausgrid to develop budgetary requirements across a large portfolio of projects with an expected accuracy level of +/- 40%. Individual project costs may vary considerably subject to specific design requirements, site conditions as well as a competitive tendering and procurement process.

The planning estimates do not provide accurate costs for individual options but rather give an indication of expected costs assuming a direct route between the zone substation and the development site with no impediments along the route.

Under Ausgrid's existing *Connection Policy*, the connection applicant is required to fund all dedicated connection and customer premises works. Works within live substations are excluded from contestable works subject to a detailed risk assessment. A risk assessment will be carried out prior to the issuing of Design Information for the project to clarify the scope and funding arrangements of the Ausgrid works in accordance with this policy.

## Responsibility for Costs and Contestability - General

Under current legislative arrangements in NSW, connection applicants are required to contribute to the cost of developing and establishing a connection. This may include costs for Ausgrid design related services and costs for Ausgrid connection related ancillary services, as well as responsibility for arranging and funding dedicated contestable connection works. For large load connections, this may also include costs for augmentation of upstream shared network assets.

Design and construction of dedicated extensions to the distribution network, or alterations to an existing connection are arranged and funded by connection applicants who are also permitted their choice of Accredited Service Providers (ASPs) following the normal contestability processes.

The fees to assess a Connection Application will be dependent on the chosen connection option and may vary based on the timing. The fees are required to cover the reasonable costs of developing a Connection Offer. The connection fees are estimated in accordance with Ausgrid's Connection Policy in accordance with the Australian Energy Regulator (AER) determined rates.

Further background and detailed information in relation to network connections, contestability and related topics as well as details of our Deemed Standard Connection Contract can be found on the Ausgrid website <http://www.ausgrid.com.au> under "Connections".

For any Ausgrid funded works, the proponent may be required to arrange a Guarantee of Minimum Revenue in favour of Ausgrid prior to commencement of any related work. This is to provide security if the facility does not achieve the necessary revenue for underpinning these augmentation works.

## Project Feasibility and Development

Further detailed assessments will need to be undertaken in the near future to ensure these projects can be implemented as described and within the required timeframes. In the event that significant feasibility issues are identified the proposed connection arrangements described earlier may need to be altered.

Technical requirements for the connection will need to be ascertained through a range of assessments which will need to be undertaken by the proponent and also by Ausgrid to finalise a Design Information Package (DIP). This DIP will form the basis of developing certified connection designs, Ausgrid will consider your application to be complete and will commence the preparation of a Negotiated Connection Offer for your development.

To commence the detailed review of technical requirements and the preparation of the associated design information, formal advice of your preferred connection option is required to be provided. On receipt of this advice Ausgrid will enter into the technical review and design phase for the proposed works through the establishment of a Design Contract for contestable works. This design contract will advise of ongoing *Ancillary Fees* based on your selected option and in accordance with Ausgrid's *Connection Policy*.

## Next Steps

To progress your application further, please select one of the supply options and formally advise Ausgrid of your selection. On receipt of this advice, Ausgrid will prepare a Design Information Package to allow you to enter the technical review and design phase of the works. Please note that the outcomes described in the options above are highly dependent on the loads advised in your enquiry. Should your loads not be reflective of the actual installation proposed, a review of the above options may be advisable to avoid over investment in the proposed assets.

After reviewing this information, it may be advisable to arrange a meeting with Ausgrid to discuss this response and to help address any immediate concerns. Accordingly, please do not hesitate to contact the undersigned should you wish to discuss any aspect of this information.

Yours sincerely,

*Daniel McDonald*

Daniel McDonald  
Contestable Project Co-ordinator  
0459880405  
Ausgrid



## Appendix - Additional Technical Data

Substation	Summer Firm	Summer Forecast 2029	Summer Forecast 2035	Summer Forecast 2041
Cronulla ZS	53.5 MVA	71.6 MVA (134%)	71.1 MVA (133%)	67.1 MVA (125%)
Kurnell South ZS	38.1 MVA	31.1 MVA (81.6%)	31.1 MVA (81.6%)	30.8 MVA (80.8%)

**Table 3 - Forecast Zone Substation Utilisation – Inclusive of proposed development**

Substation	Address	Estimated route length to Proposed development (km)
Cronulla ZS	24 Caronia Ave, Cronulla NSW 2230	7.66
Kurnell South ZS	171 Captain Cook Dr, Kurnell NSW 2231	2.1

**Table 4 - Estimated route length to proposed development**

### Fault Levels

Table 5 details the current system maximum three phase fault levels for the bus sections at each substation. These are indicative values to be confirmed when the connection application is submitted.

All 11kV equipment installed as part of this project should have a fault duty of at least 20kA for 3.0 sec, to align with Ausgrid's current standard contract specification.

Location	Voltage (kV)	3 $\phi$ Fault Level (kA)
Cronulla ZS	11	7.056
Kurnell South ZS	11	6.659

**Table 5 - System Fault Levels**

### Land Requirements (Easements, Acquisitions and Disposals)

Any easement requirements are to be determined by further route investigations and negotiated/secured as part of project development in coordination with Corporate Property per NS143 requirements.

### Operational details

Operational details are to be determined at the connection stage of this project.

### Communications, Metering and Protection

These requirements are to be determined at the connection stage of this project.

## Item 5

Our Ref: Kurnell Feasibility Besmaw

Contact: Bobby Fitzgerald

12/05/2022

Trio Property Group

Attention: Bill Donohoe

16 Burelli Street  
Wollongong NSW 2500  
Australia

PO Box 1285  
Wollongong NSW 2500  
Australia

**RE: High Level Sydney Water Servicing Options**

Phone: 61 2 4228 4133

Fax: 61 2 4228 6811

Dear Bill,

Below is Stantec's high level assessment of Water and Sewer lead-in servicing options & costs.

### **Potable Water**

There is an existing DN300 Cast Iron Cement Lined Main, installed 1953 that runs along Captain Cook Drive as well as an existing DN500 Cast Iron Cement Lined Main, installed 1963. As confirmed by Sydney Water in Feasibility Letter dated 31<sup>st</sup> March under Case Number 203663, the existing DN300 Potable Water main running along Captain Cook Drive is available for connection. The DN300 Potable Water line is supplied for the Kurnell Reservoir (WS0199) approximately 4 kilometres to the Development's East.

A pressure and flow enquiry received by Sydney Water at the location on Captain Cook Drive at the front of the Proposed Development indicated the maximum permissible flow and the point of the Development is 120 litres per second. From a high-level assessment, this means there is enough flow to supply the Proposed Development which has an estimated water demand of approximately 2992 kL/day without regard for downstream water users. Sydney Water have made clear that this line does supply many downstream users and so this information cannot be solely relied upon. Hydraulic Modelling needs to be completed to properly quantify the spare capacity within the main.

### *Summary;*

- From Sydney Water received Pressure and Flow there is enough capacity in the main to service the Proposed Development without regard for downstream water usage.
- Sydney Water have a disclaimer in the provided Pressure and Flow Enquiry that disclaims that the information provided should not be construed as availability for supply.
- Sydney Water have made clear in the provided Feasibility Letter under CN203663 that Hydraulic Modelling needs to be completed to verify the spare capacity in the existing DN300 main.
- Stantec recommend that Hydraulic Modelling be completed to confirm the feasibility of utilising the existing DN300 main for connection.

### **Sewer**

There is an existing DN300 Ductile Iron Cement Lined Vacuum Sewer that runs along Captain Cook Drive. As confirmed by Sydney Water in Feasibility Letter dated 31<sup>st</sup> March under Case Number 203663, this asset is not available suitable for connection and there are no existing Sydney Water Sewer assets that are available for connection. The end state of Development will generate approximately 2337 kL/day of waste. The size of a sewer needed to service the equivalence of this loading is a DN375 uPVC Sewer running at a 1% grade. Cronulla Sewer Treatment Plant lies approximately 3 kilometres to the west of the Proposed Development Site. A check of the topography between the Proposed Development Site and Sewer Treatment Plant using GIS is shown below. A review of this section indicates that the implementation of a Gravity Sewer Lead-In is unlikely to be feasible due to the required depth of the gravity sewer. Similarly, existing sewers to the east that feed SPS0676 are nominated as vacuum sewers. Sydney water have specified in the Feasibility Letter provided that these vacuum

sewers are not suitable to service the Proposed Development and it is unlikely SPS0676 would be able to take the additional loading of the development without augmentation. As such a Sewer Rising Main is likely to be required to pump direct to the Cronulla Sewer Treatment Plant. A high-level construction cost of this options shown below. Sydney Water have indicated the capacity of the Cronulla Sewer Treatment Plant is unknown and hydraulic modelling should be completed the determine both the capacity of the Plant and the servicing option in conjunction with Sydney Water. It is unknown at this Stage if Sydney Water would contribute funding to the delivery of both the pump station and the sewer rising main. It is likely Sydney Water would be open to conversations regarding potential funding at the completion of the hydraulic modelling.

Item	Per Metre Rate (\$)	Length (m)	Cost (\$)
Pre-Packaged Pump Station	-	-	\$ 250,000.00 <sup>[3]</sup>
Sewer Rising Main (OD450 PE)	\$ 700.00	3000	\$ 2,100,000.00 <sup>[1]</sup>
Contingency	-	-	\$ 470,000.00 <sup>[2]</sup>
<b>Total</b>			<b>\$ 2,820,000.00</b>

Table 1 – Cost Estimate for Pressure Sewer Trunk Infrastructure

[1] The above costs exclude latent conditions like rock.

[2] A contingency of 20% has been allowed for

[3] Assuming this pump station is privately owned and not delivered by Sydney Water.



Figure 1 – GIS Surface Data Along Captain Cook Drive Between Development & Cronulla STP. Chainage Zero is the Proposed Development

### Summary

- There are no existing Sydney Water sewer mains to service the Proposed Development as per Feasibility Letter CN203663.
- Cronulla Sewer Treatment Plant lies approximately 3km East of the Proposed Development along Captain Cook Drive.
- Due to topography between the Proposed Development and Cronulla Sewer Treatment Plant it is likely a pressurized trunk main will be required to service the development.
- Stantec recommend Hydraulic Modelling be carried out to determine capacity in the Cronulla Sewer Treatment Plant in line with Feasibility Letter CN203663.

### Upcoming Sydney Water Infrastructure Contributions

Sydney Water are introducing Infrastructure Contributions being gradually reintroduced from 1 July 2024. These Developer Contribution charges are currently being exhibited on the below website. They will be capped at 25 per cent of the full charge in 2024-25 and 50 per cent in 2025-26, with full contributions from 1 July 2026. These costs are attributed on a per ET basis. Currently the Proposed Development Site is earmarked at \$17,373 per ET although this number would have been established prior to Sydney Water being aware of this proposed development.

<https://www.sydneywatertalk.com.au/infrastructure-contributions>

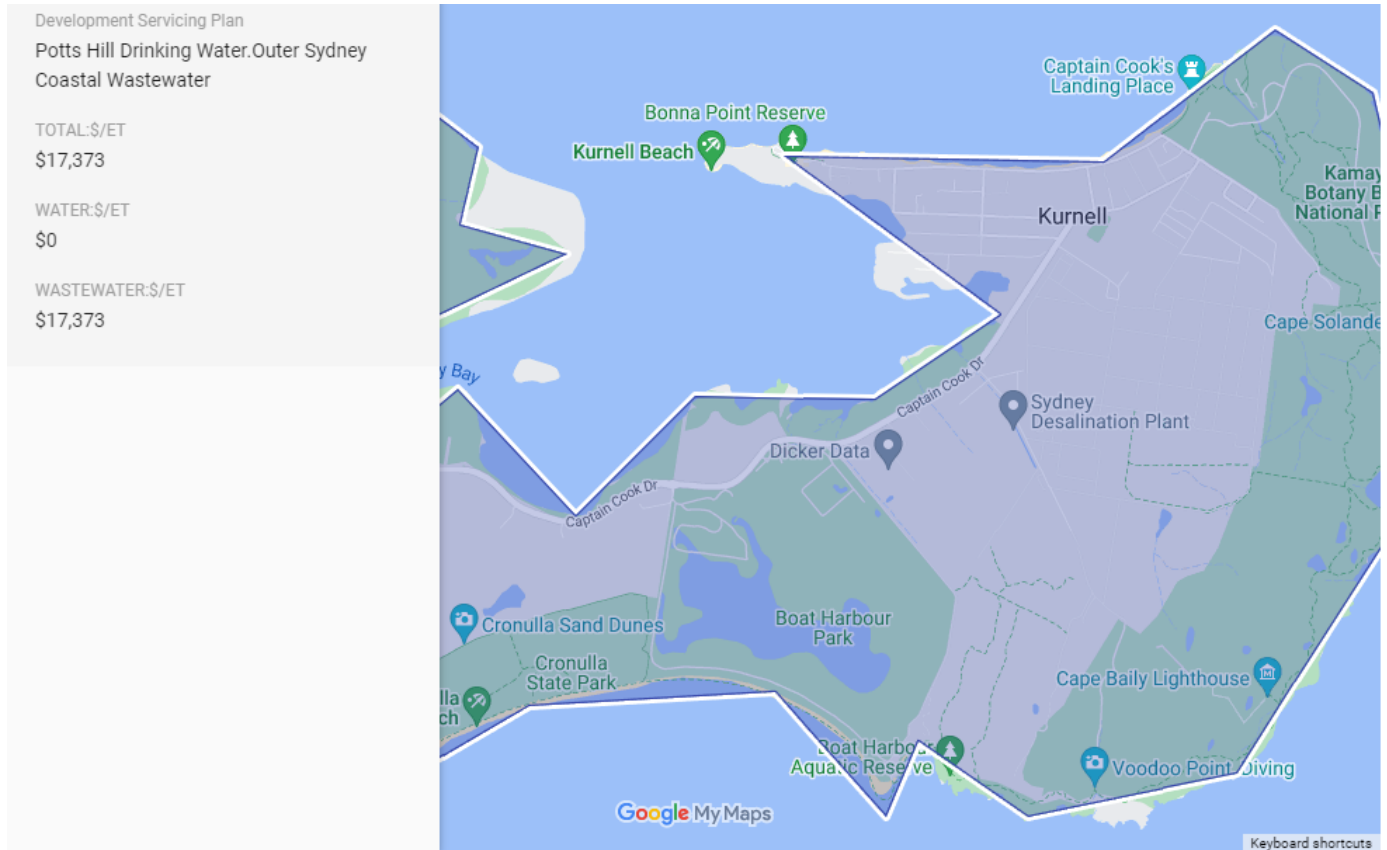


Figure 2 – Sydney Water Developer Contributions from <https://www.sydneywatertalk.com.au/infrastructure-contributions>

Yours Faithfully,  
Robert Fitzgerald





Kumell Water Tower

SPS0076

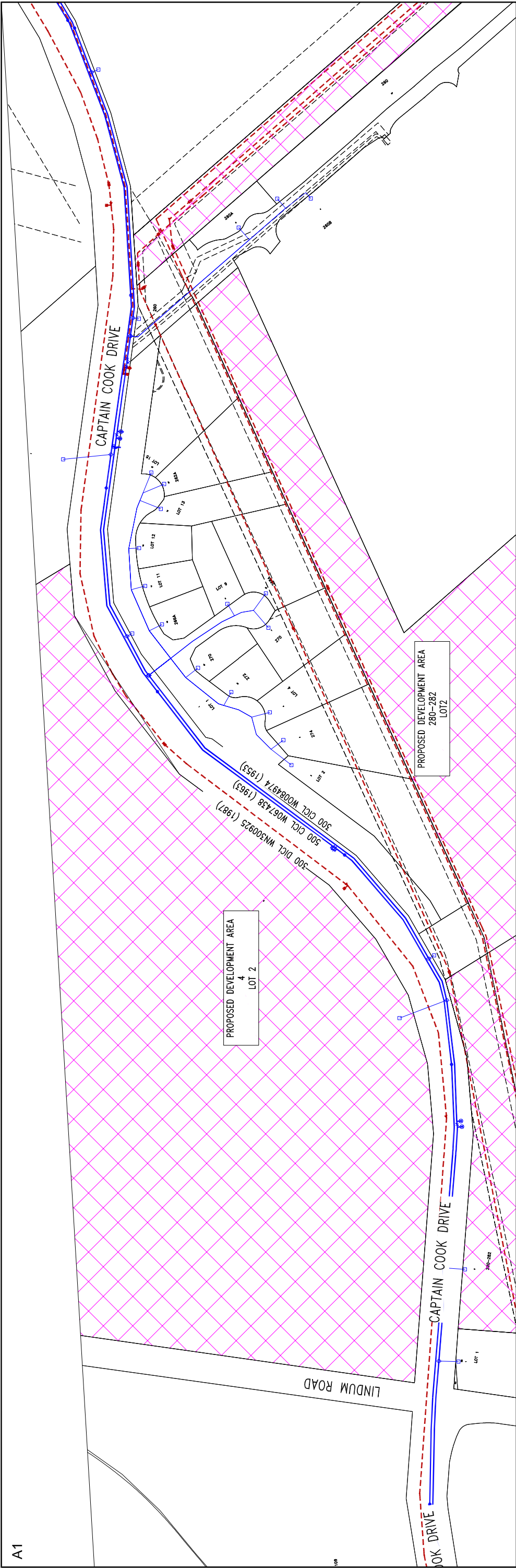
Proposed Development Site

Existing DN300 Water Main available to connect to

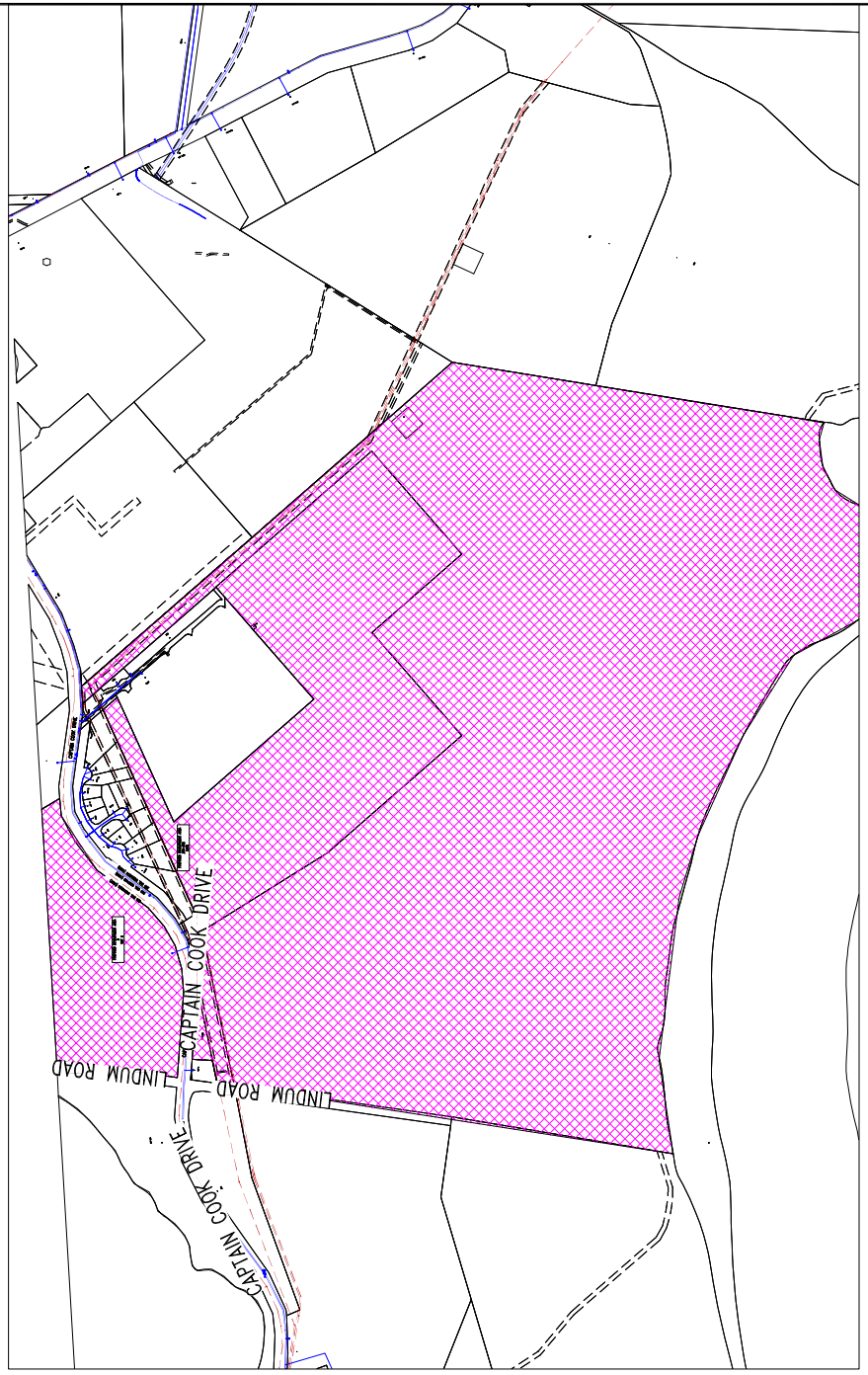
Concept Sewer Alignment from Development to Sewer Treatment Plant

Cronulla STP





EXISTING SMC ASSETS  
SCALE 1:1500



OVERALL SITE PLAN

EXISTING LOTS (Proposed Development of)	
(1) LOT 2	DP 559922
(2) LOT 2	DP 1030269
(3)	
(4)	
(5)	
(6)	

DEVELOPMENT TYPE	MUNICIPALITY
FEASIBILITY	SUTHERLAND SHIRE

NUMBER OF PROPOSED LOTS / UNITS	PRE ALLOCATED PLAN NUMBER
Total Lots #	
Total Units #	

MAP EDITION Map # Gld #	U.E. DIRECTORY

Water Services Co-ordinator:	Water Services Co-ordinator:
CARDNO (NSW/ACT) PTY LTD 16 BURELLI ST WOLLONGONG 2500 (02) 4228 4133 (02) 4228 8811	202633

A1

Case Number: 203663

31 March 2023

Trio Property Group  
c/- CARDNO NSW ACT PTY LTD.

## Feasibility Letter

**Developer:** Trio Property Group  
**Your reference:**  
**Development:** Lot 2 DP559922 280-282 Captain Cook Dr, Kurnell  
**Development Description:** Mixed residential / commercial development planned to be delivered over 15 years. Currently in planning stage. Development expected to start at Captain Cook Drive and continued to be staged outwards from CCD. Entirety of site expected to drain back towards Captain Cook Drive.  
**Your application date:** December 8, 2022

Dear Applicant

This Feasibility Letter (Letter) is a guide only. It provides general information about what our requirements could be if you applied to us for a Section 73 Certificate (Certificate) for your proposed development. **The information is accurate at today's date only.**

We have not allocated any system capacity to your proposal from the investigation into this Feasibility advice. This advice is only an indication of our systems and possible requirements as of today. Where there is system capacity, it may have been fully utilised by the time you obtain a Consent. The requirements applied to any approved Development proposal may differ significantly in the future since the original advice was issued.

If you obtain development consent for that development from your consent authority (this is usually your local Council) they will require you to apply to us for a Section 73 Certificate. You will need to

submit a new application (and pay another application fee) to us for that Certificate by using your current or another Water Servicing Coordinator (WSC).

We'll then send you either a:

- Notice of Requirements (Notice) and Developer Works Deed (Deed)  
or
- Certificate.

These documents will be the definitive statement of our requirements.

There may be changes in our requirements between the issue dates of this Letter and the Notice or Certificate. The changes may be:

- if you change your proposed development eg the development description or the plan/site layout, after today, the requirements in this Letter could change when you submit your new application
- if you decide to do your development in stages then you must submit a new application (and pay another application fee) for each stage.

## What You Must Do To Get A Section 73 Certificate In The Future.

To get a Section 73 Certificate you must do the following things. You can also find out about this process by visiting [Plumbing, building & developing](#) page on our website.

1. **Obtain Development Consent from the consent authority for your development proposal.**
2. **Engage a Water Servicing Coordinator (WSC).**

**You must engage your current or another authorised WSC** to manage the design and construction of works that you must provide, at your cost, to service your development. If you wish to engage another WSC (at any point in this process) you must write and tell us.

You'll find a list of WSC's at [Listed providers](#) on our website.

The WSC will be your point of contact with us. They can answer most questions that you might have about the process and developer charges and can give you a quote or information about costs for services/works (including our costs).

### 3. **Developer Works Deed**

**After** the WSC has submitted your new application, they'll receive the our Notice and Developer Works Deed. You and your accredited Developer Infrastructure Providers (Providers) will need to sign and lodge both copies of the Deed with your nominated Coordinator. After we've signed the documents, one copy will be returned to the WSC.

The Deed sets out for this project:

- your responsibilities
- our responsibilities
- the Provider's responsibilities.

**You must do all the things that we ask you to do in that Deed.** This is because your development does not have water and sewer services and you must construct and pay for the following works extensions under this Deed to provide these services.

**Note:** The Coordinator must be fully authorised by us for the whole time of the agreement.

## 4. Water and Sewer Works

### 4.1 Water

Your development must have a frontage to a water main that is the right size and can be used for connection.

We've assessed your application and found that:

- The site is not identified as a growth precinct by the NSW Government. As this site is not part of larger growth determination, the site is not under Growth Servicing Investment Plan (GSIP). Sydney Water does not have any strategies to bring additional capacity to the site or undertake works to provide for additional system capacity
- A DN300 watermain in Captain Cook Drive is traversing the site. This main is available to service the site subject to further modelling assessment confirming capacity, staging and connection requirements by the developer.
- This mixed development has high water demand. The DN300 main in Captain Cook Drive is drawing water from Kurnell Reservoir (WS0199) and acts as a single feed line. This DN300 main is currently servicing vast areas downstream. A hydraulic modelling assessment of DN300 main will need to be carried out to quantify the spare capacity. If any capacity deficiencies, then develop solution to service their developments
- **You must construct a water main extension to serve your development.** These works must be constructed by a constructor with the appropriate capability. Your Coordinator will be able to provide further advice about this.

### 4.2 Sewer

Your development must have a sewer main that is the right size and can be used for connection. That sewer must also have a connection point within your development's boundaries.

We've assessed your application and found that:



- There are no existing Sydney Water services to the site and there is not any existing connection.
  - There are no gravity sewers close to this site to construct a lead-in sewer. Kurnell Vacuum Sewer rising main is traversing this site which cannot be used to service this development.
  - The site is not identified as a growth precinct by the NSW Government. As this site is not part of larger growth determination, the site is not under Growth Servicing Investment Plan (GSIP). Sydney Water does not have any strategies to bring additional capacity to the site or undertake works to provide for additional system capacity
  - The mixed development has a high sewer demand. Cronulla STP's capacity assessment will need to be carried out to quantify the availability of any spare capacity.
  - The developer will need to carryout detailed hydraulic modelling to identify Cronulla Sewerage System capacity especially STP deficiency if any and develop solution to service their developments.
- 
- **You must construct a wastewater main extension to serve your development.** The terms of the Deed define this extension as 'Major Works'.
  - Your development may require adjustment/deviation of a "live" wastewater or water main. If so you must work with your WSC to ensure that:
    - Your Building Plans are approved prior to temporary pipework and excavation
    - You submit your temporary pipework design (if required) with your permanent wastewater deviation design for approval
    - Accept in writing to bonding conditions that will be provided in the Bond Agreement
    - Submit your Bond and signed Bond Agreement
    - Submit the Construction Commencement Notice for construction of the temporary pipework
    - Have your temporary pipework constructed by a listed provider, and then
    - Complete your permanent deviation works.

## 5. Ancillary Matters

### 5.1 Asset adjustments

After we issue this Notice (and more detailed designs are available), we may require that the water main/sewer main/stormwater located in the footway/your property needs to be adjusted/deviated. If this happens, you'll need to do this work as well as the extension we have detailed above at your cost. The work must meet the conditions of this Notice and you will need to complete it **before we can issue the Certificate**. We'll need to see the completed designs for the work, and we'll require you to lodge a security. The security will be refunded once the work is completed.

### 5.2 Entry onto neighbouring property

If you need to enter a neighbouring property, you must have the written permission of the relevant property owners and tenants. You must use our **Permission to Enter** form(s) for this. You can get copies of these forms from your WSC or on our website. Your WSC can also negotiate on your behalf. Please make sure that you address all the items on the form(s) including payment of compensation and whether there are other ways of designing and constructing that could avoid or reduce their impacts. You will be responsible for all costs of mediation involved in resolving any disputes. Please allow enough time for entry issues to be resolved.

### 5.3 Costs

Construction of these **future** works will require you to pay project management, survey, design, and construction costs **directly to your suppliers**. Additional costs payable to us may include:

- water main shutdown and disinfection
- connection of new water mains to our system(s)
- design and construction audit fees
- contract administration, Operations Area Charge & Customer Redress prior to project finalisation
- creation or alteration of easements etc
- water usage charges where water has been supplied for building activity purposes prior to disinfection of a newly constructed water main.

Note: Payment for any Goods and Services (including Customer Redress) provided by Sydney Water will be required prior to the issue of the Section 73 Certificate or release of the Bank Guarantee or Cash Bond.

Your WSC can tell you about these costs.

## 6. Multi-level individual metering requirements

Your development may require Multi-Level individual metering. This means that you must:

1. comply at all times and in all respects with the requirements of our “*Multi-level Individual Metering Guide*”. You can find this in the [Meters & metered standpipes](#) page on our website.
2. provide and install plumbing and space for individual metering in accordance with our “*Multi-level Individual Metering Guide*”.
3. if and when you implement a strata/ stratum plan (or strata/ stratum subdivide) you must:
  - a. engage an Accredited Metering Supplier (“**AMS**”) to provide individual metering in accordance with the “*Multi-level Individual Metering Guide*” and meet the cost of the meters and metering system.
  - b. transfer the meters and metering system to us once the Testing Certificate has been issued by us to the AMS and the AMS has confirmed that payment for the meters and metering system has been paid in full.

**Before the Section 73 Certificate can be issued**, you will be required to sign an undertaking to show that you understand and accept these metering requirements and associated costs.

Visit [Meters & metered standpipes](#) to see the *Multi-level individual metering guide* and find out more.

## **OTHER THINGS YOU MAY NEED TO DO**

Shown below are other things you need to do that are NOT a requirement for the Certificate. They may well be a requirement from us in the future because of the impact of your development on our assets. You must read them before you go any further.

### **Approval of your building plans**

Please note that your building plans must be approved. This can be done on our Tap in™ system [Sydney Water Tap in™](#) or call 13 20 92.

This is not a requirement of the Certificate, but the approval is needed because construction/building works may impact on our existing assets (e.g. water and sewer mains). In any case, these works MUST NOT commence until we have granted approval.

Your WSC can tell you about the approval process including:

- Possible requirements
- Their costs
- Timeframes.

We recommend that you apply for Building Plan Approval early as in some instances your WSC may need to refer your building plans to us for detailed review. You'll be required to pay us for the costs associated with the detailed review.

**Note: You must obtain our written approval before you do any work on our systems. We'll take action to have work stopped on the site if you do not have that approval. We will apply Section 44 of the *Sydney Water Act 1994*.**

### **Soffit Requirements**

Please be aware that floor levels must be able to meet our soffit requirements for property connection and drainage.

## Requirements for Business Customers for Commercial and Industrial Property Developments

If this property is to be developed for Industrial or Commercial operations, it may need to meet the following requirements:

### Trade Wastewater Requirements

If this development is going to generate trade wastewater, the property owner must submit an application requesting permission to discharge trade wastewater to Sydney Water's sewerage system. You must wait for approval of this permit before any business activities can commence.

The permit application should be emailed to Sydney Water's Business Customer Services at [businesscustomers@sydneywater.com.au](mailto:businesscustomers@sydneywater.com.au)

It is illegal to discharge Trade Wastewater into the Sydney Water sewerage system without permission.

A **Boundary Trap** is required for all developments that discharge trade wastewater where arrestors and special units are installed for trade wastewater pre-treatment.

If the property development is for Industrial operations, the wastewater may discharge into a sewerage area that is subject to wastewater reuse. Find out from Business Customer Services if this is applicable to your development.

### Backflow Prevention Requirements

Backflow is when there is unintentional flow of water in the wrong direction from a potentially polluted source into the drinking water supply.

All properties connected to Sydney Water's supply must install a testable **Backflow Prevention Containment Device** appropriate to the property's hazard rating. Property with a high or medium hazard rating must have the backflow prevention containment device tested annually. Properties identified as having a low hazard rating must install a non-testable device, as a minimum.

Separate hydrant and sprinkler fire services on non-residential properties, require the installation of a testable double check detector assembly. The device is to be located at the boundary of the property.

Before you install a backflow prevention device:

1. Get your hydraulic consultant or plumber to check the available water pressure versus the property's required pressure and flow requirements.
2. Conduct a site assessment to confirm the hazard rating of the property and its services. Contact PIAS at NSW Fair Trading on **1300 889 099**.

For installation you will need to engage a licensed plumber with backflow accreditation who can be found on the Sydney Water website:

<http://www.sydneywater.com.au/Plumbing/BackflowPrevention/>

### **Water Efficiency Recommendations**

Water is our most precious resource and every customer can play a role in its conservation. By working together with Sydney Water, business customers are able to reduce their water consumption. This will help your business save money, improve productivity and protect the environment.

Some water efficiency measures that can be easily implemented in your business are:

- Install water efficiency fixtures to help increase your water efficiency, refer to WELS (Water Efficiency Labelling and Standards (WELS) Scheme, <http://www.waterrating.gov.au/>
- Consider installing rainwater tanks to capture rainwater runoff, and reusing it, where cost effective. Refer to <http://www.sydneywater.com.au/Water4Life/InYourBusiness/RWTCalculator.cfm>
- Install water-monitoring devices on your meter to identify water usage patterns and leaks.
- Develop a water efficiency plan for your business.

It is cheaper to install water efficiency appliances while you are developing than retrofitting them later.

### **Contingency Plan Recommendations**

Under Sydney Water's [customer contract](#) Sydney Water aims to provide Business Customers with a continuous supply of clean water at a minimum pressure of 15meters head at the main tap. This is equivalent to 146.8kpa or 21.29psi to meet reasonable business usage needs.

Sometimes Sydney Water may need to interrupt, postpone or limit the supply of water services to your property for maintenance or other reasons. These interruptions can be planned or unplanned.



Water supply is critical to some businesses and Sydney Water will treat vulnerable customers, such as hospitals, as a high priority.

Have you thought about a **contingency plan** for your business? Your Business Customer Representative will help you to develop a plan that is tailored to your business and minimises productivity losses in the event of a water service disruption.

For further information please visit the Sydney Water website at:

<http://www.sydneywater.com.au/OurSystemsandOperations/TradeWaste/> or contact Business Customer Services on **1300 985 227** or [businesscustomers@sydneywater.com.au](mailto:businesscustomers@sydneywater.com.au)

## Fire Fighting

Definition of fire fighting systems is the responsibility of the developer and is not part of the Section 73 process. It is recommended that a consultant should advise the developer regarding the fire fighting flow of the development and the ability of our system to provide that flow in an emergency. Sydney Water's Operating Licence directs that our mains are only required to provide domestic supply at a minimum pressure of 15 m head.

A report supplying modelled pressures called the Statement of Available pressure can be purchased through [Sydney Water Tap in](#)<sup>TM</sup> and may be of some assistance when defining the fire fighting system. The Statement of Available pressure may advise flow limits that relate to system capacity or diameter of the main and pressure limits according to pressure management initiatives. If mains are required for fire fighting purposes, the mains shall be arranged through the water main extension process and not the Section 73 process.

## Large Water Service Connection

A water main will be available, once you have completed your drinking water main construction to provide your development with a domestic supply. The size of your development means that you will need a connection larger than the standard domestic 20 mm size.

To get approval for your connection, you will need to lodge an application with [Sydney Water Tap in](#)<sup>TM</sup>. You, or your hydraulic consultant, may need to supply the following:

- a plan of the hydraulic layout
- a list of all the fixtures/fittings within the property
- a copy of the fireflow pressure inquiry issued by us
- a pump application form (if a pump is required)
- all pump details (if a pump is required).

You'll have to pay an application fee.

We don't consider whether a water main is adequate for fire fighting purposes for your development. We can't guarantee that this water supply will meet your Council's fire fighting requirements. The Council and your hydraulic consultant can help.

### **Disused Water Service Sealing**

You must pay to disconnect all disused private water services and seal them at the point of connection to our water main. This work must meet our standards in the Plumbing Code of Australia (the Code) and be done by a licensed plumber. The licensed plumber must arrange for an inspection of the work by a NSW Fair Trading Plumbing Inspection Assurance Services (PIAS) officer. After that officer has looked at the work, the drainer can issue the Certificate of Compliance. The Code requires this.

### **Other fees and requirements**

The requirements in this Notice relate to your Certificate application only. We may be involved with other aspects of your development and there may be other fees or requirements. These include:

- plumbing and drainage inspection costs  
the installation of backflow prevention devices;
- trade waste requirements
- large water connections and
- 
- council fire fighting requirements. (It will help you to know what the fire fighting requirements are for your development as soon as possible. Your hydraulic consultant can help you here.)

**No warranties or assurances can be given about the suitability of this document or any of its provisions for any specific transaction. It does not constitute an approval from us and to the extent that it is able, we limit its liability to the reissue of this Letter or the return of your application fee. You should rely on your own independent professional advice.**

# **Appendix B:**

## **Altogether Water and Sewer Servicing Report**



Request for Planning Proposal:

## Utilities Servicing Strategy

Drinking Water  
Wastewater  
Recycled Water

**251, 260R, 278 and 280-282 Captain Cook Drive,  
Kurnell, NSW**

4 December 2023

Prepared for **Besmaw Pty Ltd**

The proponent details for the Planning Proposal are listed in the following table:

<b>Descriptor Proponent Details</b>	<b>Descriptor Proponent Details</b>
Company Name(s)	Besmaw Pty Ltd
Postal Address	PO Box 1630, North Sydney 2059
ABN	67 008 481 187
Nominated Contact	Duncan McComb
Contact Details	Email: dmccomb@besmaw.com.au

This report has been prepared on behalf of Altogether Gorup by:

David Whitting	Head of Growth
Jamin Tappouras	Development Solutions Consultant

## Contents

1. Executive Summary .....	4
2. Introduction .....	5
3. Background .....	6
3.1 Development context.....	6
3.2 The Site .....	7
3.3 Planning framework.....	9
3.4 The planning proposal .....	9
3.5 Utility Demand from proposed development.....	11
3.6 Development Program – Utility Services.....	14
3.7 About Altogether.....	15
3.7.1 Utility specialists.....	15
3.8 Developer Collaboration .....	16
3.9 Adding Value.....	17
4. Existing Servicing Situation .....	18
4.1 Drinking Water Supply .....	18
4.2 Wastewater .....	19
4.3 Recycled water.....	21
4.4 Overall.....	21
5. Altogether’s Solution.....	22
5.1 A one stop shop approach.....	22
5.2 Integrated Water Cycle Management .....	23
5.3 Pressure Sewer .....	23
5.4 On Lot Infrastructure and Network Infrastructure .....	24
5.5 The Scheme Proposal: Wastewater & Recycled Water to serve the whole Precinct. ....	25
5.6 The Scheme Proposal: Drinking Water.....	27
5.7 Scheme Water Balance: Stormwater & Irrigation.....	27
1.1.1 Interim Wastewater Servicing .....	28
1.2 Community Utilities Hub.....	29
1.3 Scheme Capacity & Compliance Certification .....	29
1.4 Local Water Centre Details.....	30
2. Adding Further Value .....	32

# altogether.

- 2.1 Effective Capex Management ..... 32
- 2.2 Sydney Water Negotiations: Avoided/Deferred Costs..... 32
- 3. Retail Customer Management..... 33
  - 3.1 Sales & Marketing Coordination..... 33
  - 3.2 Retail Pricing & Customer Support ..... 34
  - 3.3 Service Delivery & Billing ..... 34
- 4. Program, Planning & Approvals..... 35
  - 4.1 Planning & Approvals..... 35
  - 4.2 Local Council Considerations ..... 35
- 5. Altogether’s Primary Obligations ..... 36
- 6. Developer’s Primary Obligations ..... 38
- 7. Conclusion..... 40



## 1. Executive Summary

This Phase 1 Utilities Servicing Strategy for delivery of wastewater, drinking water and recycled water report has been prepared by Altogether Group Pty Ltd ('Altogether') to accompany a proponent-initiated Planning Proposal (Planning Proposal) in support of the proposed amendment to State Environmental Planning Policy (Precincts—Central River City) 2021 (SEPP Precincts) and Sutherland Shire Local Environmental Plan 2015 (SSLEP 2015).

The Planning Proposal aims to translate and amend current land uses zones under the applicable controls to be consistent with the standard instrument local environmental plan zones and enable additional uses to accommodate a diverse range of land uses at 251, 260R, 278, and 280-282 Captain Cook Drive, Kurnell ('the site'). The Planning Proposal will establish a new mixed-use community encompassing residential, employment, tourism, education, cultural facilities, ecological regenerative zones and public open space areas.

The report has been prepared to confirm the capability of the following key Project objectives:

1. Provision of drinking water, wastewater and recycled water services to the Site.
2. Delivery of a superior sustainability outcome over traditional utility delivery
3. Timely developer lead delivery, inclusive of delay risk management.
4. Optimising value add opportunities and delivering competitive advantage.

In March 2023 the proponent submitted a Scoping Proposal to Sutherland Shire Council to commence the formal Planning Proposal process, in accordance with the LEP Making Guidelines. The Scoping Proposal provided a comprehensive 'status update,' outlining the concept master plan, the intended development outcome, the proposed planning controls and the environmental considerations which were to be further resolved.

As part of the Scoping Proposal process, Council referred the Scoping Proposal package to the DPE, State agencies, and several internal Council teams for review and comment. The advice received from these stakeholders has provided clear directives on the necessary updates and key focus areas within the technical documentation.

Separate to the Scoping Proposal package, extensive and ongoing engagement with relevant State Agencies has occurred since November 2022, with the objective of clarifying and resolving any of the outstanding considerations.

Besmaw has engaged Altogether to prepare a Phase 1 Utilities Servicing Strategy to address the feedback received from the DPE and state agencies and reflects the engagement undertaken to date.

## 2. Introduction

Altogether provide drinking water, wastewater and recycled water utility services for multiple development precincts within NSW. Altogether have conducted a review of the Kurnell project to assess suitability to provide Besmaw a strategy to provide these utility services.

In preparing this Servicing Strategy, Altogether has taken due account of:

1. Project due diligence documentation and information provided by Besmaw, and the wider project team via Pope Property and Urbis on behalf of Besmaw.
2. Its own research & knowledge, consultant investigations and knowledge of existing Sydney Water plans and asset investment procedures.
3. The matters outlined by the DPE, state agencies and Council following the Scoping proposal review and feedback.

Altogether's unique offering provides a comprehensive technical and sustainability outcome. The associated commercial proposal includes:

- Indicative, high level delivery program for scheme establishment
- Indicative commercial parameters to assist Besmaw with feasibility assessments.

Should Besmaw wish to proceed with commercial engagement, a Phase 2 Proposal would be prepared that includes:

- A full detailed Utility Services delivery plan based on the project delivery timeline.
- A firm commercial offer, inclusive of Developer Service Plan (DSP) and statutory approval program
- A Commercial proposal which would commit the parties to progress the Utility Services delivery strategy and create a Site specific Project Delivery Agreement
- Commitment by Altogether to actively participate in appropriate regulatory authority consent processes.

Altogether is pleased to present this Servicing Strategy. We and are confident in our ability to deliver a Scheme that meets Besmaw's and DPIE's expectations in terms of timely delivery, risk management, sustainability and value for money.

We trust you will find the following information and strategy details self-explanatory and look forward to working with you to ensure that the Kurnell Project is a resounding success.

## 3. Background

### 3.1 Development context

Besmaw Pty Ltd (Besmaw), the landowner of 251, 260R, 278 and 280-282 Captain Cook Drive, Kurnell has initiated a Department of Planning and Environment (DPE) led process to review and amend State Environmental Planning Policy (Kurnell Peninsula) 1989 (SEPP Kurnell Peninsula) as it applies to the site.

The aim of the SEPP Kurnell Peninsula review process is to set the strategic land use framework for the site, within the context of the broader Kurnell Peninsula and South District. The review process commenced in June 2017, and a scope of works for technical studies was issued by the DPE on 25 September 2017 to inform the master planning process. The scope of works identified a number of technical studies required to be undertaken, including biodiversity, bushfire, flooding and water cycle management, Indigenous heritage, non-Indigenous heritage, land capability, hazards and air quality, noise and vibration, traffic and transport and economic feasibility.



Figure 1 Development site context

## 3.2 The Site

The land to which this planning proposal relates is 251, 260R, 278, and 280-282 Captain Cook Drive, Kurnell and is located within the Sutherland Shire Local Government Area (LGA).

The key features of the site are summarised in Table 1.

**Table 1 Site Description**

<b>Feature</b>	<b>Lot 2 North</b>	<b>Lot 2 South</b>	<b>Lot 8</b>	<b>Lot 9</b>
Street Address	251 Captain Cook Drive	280-282 Captain Cook Drive	278 Captain Cook Drive	260R Captain Cook Drive Kurnell
Legal Description	Lot 2 in DP1030269	Lot 2 in DP559922	Lot 8 in DP586986	Lot 9 DP 586986
Site Area	16ha	160ha	34.5ha	82m <sup>2</sup>
	Total Area: Approximately 210.5 hectares			
<b>Local Government Area</b>	Sutherland Shire			

Besmaw is undertaking ongoing land management, including weed eradication within the Site. Lot 2 North contains a small area of wetlands identified in State Environmental Planning Policy (SEPP) No. 14 - Coastal Wetlands. We understand that the remainder of the lot does not contain any areas of significant vegetation or endangered ecological communities.

Lot 2 South is bound by Captain Cook Drive to the north, industrial zoned land to the northeast (including the Sydney Water Desalination Plant), Kurnell Village and the Caltex Bulk Fuel Terminal, Kamay Botany Bay National Park to the east, Bate Bay to the south, Wanda Reserve to the west.

Lot 2 South has an area of approximately 160 hectares and comprises the following uses:

- Extractive operations that provide a fine building sand to the Sydney market. In addition to the extraction, rehabilitation activities are undertaken including filling of the extraction area with VENM, management of the frontal dune system to Bate Bay, removal of noxious weeds, and planting of endemic species to protect the dunes.
- A collection of dwellings to the north of Boat Harbour, known as the Boat Harbour cabins, used for permanent and vacation accommodation.

The property title of Lot 2 South extends down to mean high water mark in Bate Bay.





Figure 2 Site aerial and map

## 3.3 Planning framework

### State Environmental Planning Policies

SEPP Precincts - Central River City 2021 is the principal environmental planning instrument applying to the site.

**Table 2 Zoning**

Title	Zoning
Lot 2 North	6(c) Private Recreation Part of Lot 2 North contains an area nominated under Resilience and Hazards SEPP 2021
Lot 2 South	Subject to multiple zonings as follows: <ul style="list-style-type: none"> <li>• Part 4(a) General Industrial</li> <li>• Part 6(b) Public Recreation along the Bate Bay foreshore;</li> <li>• Part 7(b) Special Development;</li> <li>• Part 9(a) Regional Open Space over the Boat Harbour land</li> </ul>
Lot 8	Part 4(a) General Industrial
Lot 9	Part 4(a) General Industrial

## 3.4 The planning proposal

The Planning Proposal aims to translate and amend current land uses zones under the applicable controls to be consistent with the standard instrument local environmental plan zones and enable additional uses to accommodate a diverse range of land uses at the site. The Planning Proposal will establish a new mixed-use community encompassing residential, employment, tourism, education, cultural facilities, ecological regenerative zones and public open space areas.

The site is currently governed by State Environmental Planning Policy (Kurnell Peninsula) 1989. A Project Control Group (PCG) has been established with the Department to facilitate a proponent-initiated SEPP amendment process, as it relates to the Besmaw site.

The intent of the SEPP amendment is to translate the land use zones and permissible uses (including residential accommodation) presently applying to the site, into Standard Instrument zones. This will enable the site, which is presently identified as a “deferred matter” under Sutherland local environmental plan 2015 (the LEP), to be zoned under that LEP and SEPP Precincts - Central River City 2021 as it relates to the Besmaw site to be repealed.



# altogether.

To facilitate the SEPP amendment, a range of technical studies have been prepared in provide evidence based planning in accordance with the 'scope of works' issued by the Department in September 2017 and the technical methodologies which were endorsed by the PCG on 25 July 2019.

Besmaw have assembled a team of experts to prepare a masterplan and planning proposal which aims to translate and amend current land uses zones under the applicable controls to be consistent with the Standard Instrument Local Environmental Plan zones and enable additional uses to accommodate a diverse range of land uses at the site. The Planning Proposal will establish a new mixed-use community encompassing residential, employment, tourism, education, cultural facilities, ecological regenerative zones and public open space areas.



**Figure 3 Indicative development masterplan**

## 3.5 Utility Demand from proposed development.

This Servicing Strategy supports the proposed development on the site. The indicative development masterplan proposes residential and non-residential development over four precincts including with 6 location catchments:

Precinct	Location	Catchment
1	Town Centre North	A
	Town Centre South	B
2	Bate Bay North	C
	Bate Bay South	D
3	Boat Harbour	E
4	Quibray Bay	F

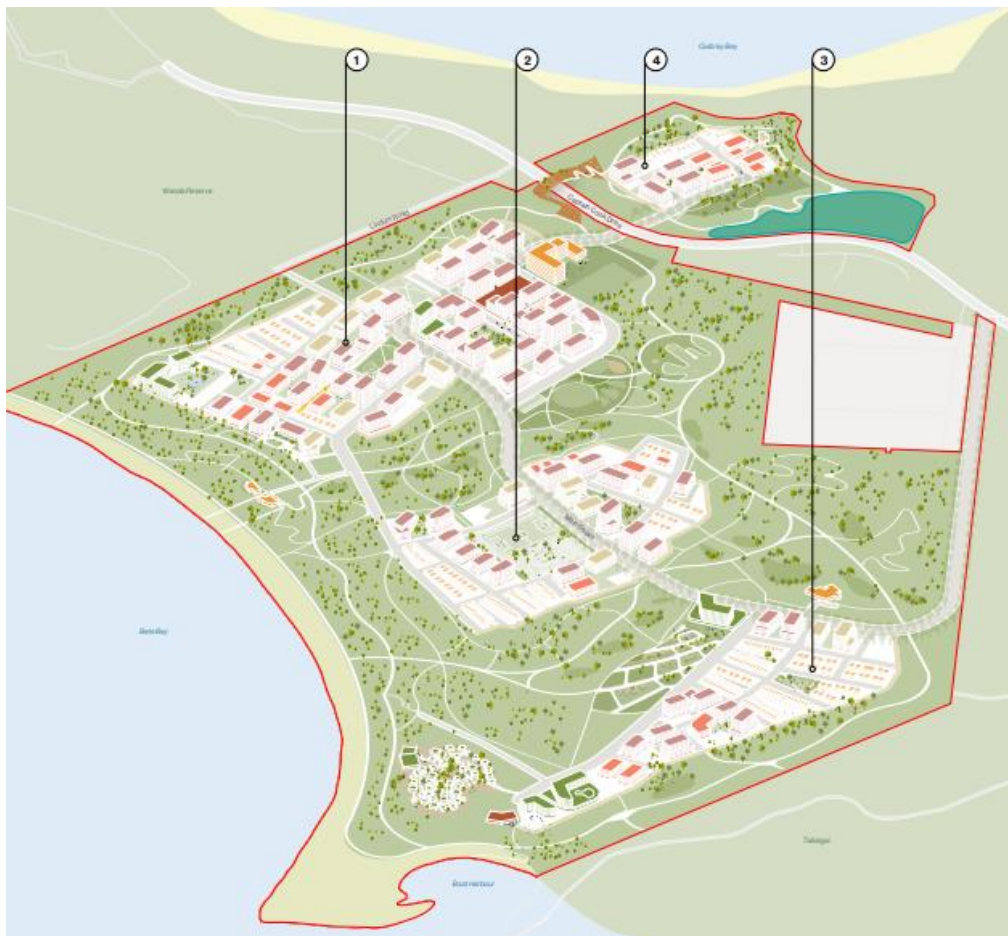


Figure 4 Extract of Indicative development masterplan showing four precincts

# altogether.

Table 3 and Table 4 detail the proposed development, and Table 5 calculates the utility demand from this development.

Table 3 Proposed Residential Dwellings by No

Dwellings									
Precinct	Medium Density Residential	Residential	Townhouses	Seniors - ILUs	Seniors - Indigenous	Seniors - RACF	Tourism (Hotel rooms/ Eco cabins)	TOTAL NO. of Dwellings	
Precinct A - Town Centre North	0	1,177	0	158	0	0	98	1,335	
Precinct B - Town Centre South	293	469	62	172	0	122	115	1,118	
Precinct C - Bate Bay North	42	350	16	106	0	0	0	514	
Precinct D - Bate Bay South	48	222	72	80	0	0	0	422	
Precinct E - Boat Harbour	79	372	108	82	0	0	374	641	
Precinct F - Quilbray Bay	120	153	0	0	30	0	0	303	
<b>TOTAL NO. of Dwellings</b>	<b>582</b>	<b>2,743</b>	<b>258</b>	<b>598</b>	<b>30</b>	<b>122</b>	<b>587</b>	<b>4,333</b>	
Unit numbers rounded to the nearest whole number							*manually adjusted for Indigenous Seniors	Including Tourism	<b>4,920</b>

Table 4 Proposed Residential and Non-Residential development by Gross M2

GFA											
Precinct	Retail (GFA)	Medium Density Residential (GFA)	Residential (GFA)	Townhouses (GFA)	Seniors - ILUs (GFA)	Seniors - Indigenous (GFA)	Seniors - RACF (GFA)	Tourism (GFA)	Education (GFA)	Cultural (GFA)	TOTAL GFA (sqm)
Precinct A - Town Centre North	6,885	0	125,997	0	19,970	0	0	15,226	15,771	0	183,847
Precinct B - Town Centre South	0	30,478	56,457	11,810	21,699	0	10,385	13,639	0	610	145,078
Precinct C - Bate Bay North	1,057	4,745	38,270	2,881	13,875	0	0	0	0	0	60,828
Precinct D - Bate Bay South	1,395	5,305	24,917	13,194	10,434	0	0	0	0	0	55,244
Precinct E - Boat Harbour	0	8,339	40,448	21,167	10,618	0	0	33,479	0	453	114,504
Precinct F - Quilbray Bay	469	12,727	16,804	0	0	2,520	0	0	0	262	32,782
<b>TOTAL GFA (sqm)</b>	<b>9,806</b>	<b>61,594</b>	<b>302,892</b>	<b>49,052</b>	<b>76,595</b>	<b>2,520</b>	<b>10,385</b>	<b>62,344</b>	<b>15,771</b>	<b>1,324</b>	<b>592,283</b>
	9,806	413,538			89,501			62,344			575,188
Targets	20,000	350,000			110,000			70,000			550,000

# altogether.

Table 5 below analyses the indicative masterplan to determine an indicative utility load, equating to approximately 3097 equivalent tenement (ET).

Table 5 Equivalent Tenement utility demand

Location		MD Units	Resi Unit	Townhous	Senior ILUs	Seniors RA	Tourism	Total	Non Resi GFA (m2)		
									Cultural	Educatio	Retail
A Town Centre Nth	Stu/1 bed		294	-	32	-	98	424			
	2 bed		530		79			609			
	3 bed		353		47			401			
	<b>Total</b>		<b>1,177</b>		<b>158</b>		<b>98</b>	<b>1,433</b>	15,771	15,779	6,885
B Town Centre Sth	Stu/1 bed	73	117		34	85	115	425			
	2 bed	132	211		86	37		466			
	3 bed	88	141	31	52			311			
	4 Bed			31				31			
<b>Total</b>	<b>293</b>	<b>469</b>	<b>62</b>	<b>172</b>	<b>122</b>	<b>115</b>	<b>1,233</b>			-	
C Bate Gate North	Stu/1 bed	11	88		21			119			
	2 bed	19	158		53			229			
	3 bed	13	105	8	32			157			
	4 bed			8				8			
<b>Total</b>	<b>42</b>	<b>350</b>	<b>16</b>	<b>106</b>			<b>514</b>			1,057	
D Bate Gate South	Stu/1 bed	12	56		16			84			
	2 bed	22	100		40			162			
	3 bed	14	67	36	24			141			
	4 bed			36				36			
<b>Total</b>	<b>48</b>	<b>222</b>	<b>72</b>	<b>80</b>			<b>422</b>			1,395	
E Boat Harbour	Stu/1 bed	20	93		16	-	374	503			
	2 bed	36	167		41			244			
	3 bed	24	112	54	25			214			
	4 bed			54				54			
<b>Total</b>	<b>79</b>	<b>372</b>	<b>108</b>	<b>82</b>		<b>374</b>	<b>1015</b>			-	
F Quibray Bay	Stu/1 bed	30	38			21		89			
	2 bed	54	69			9		132			
	3 bed	36	46					82			
	<b>Total</b>	<b>120</b>	<b>153</b>					<b>303</b>			469
<b>Sub Total</b>		<b>582</b>	<b>2,743</b>	<b>258</b>	<b>598</b>	<b>152</b>	<b>587</b>	<b>4,920</b>			
	Stu/1 bed							1,644			
	2 bed							1,841			
	3 bed							1,306			
	4 bed							129			
	<b>TOTAL UNITS</b>							<b>4,920</b>			
								<b>2,949</b>	<b>79</b>	<b>70</b>	<b>78</b>
	<b>TOTAL ET</b>										<b>3,097</b>

## 3.6 Development Program – Utility Services

We anticipate that Besmaw will seek to proceed with development activities without delay once the appropriate planning approvals are granted. Essential utility services availability can often be a significant constraint to timely development. Altogether's unique solution as demonstrated in this Servicing Strategy removes this constraint and provides Besmaw with certainty that substantially mitigates project risk.

Whilst indicative, Altogether considers that the key milestones shown in Table 6 are achievable. Once relevant planning consents are in place, we are confident in our ability to meet the required delivery milestones. Our staged rollout of key infrastructure ensures timely availability of services for incoming residents and users.

**Table 6 Utility Services Key Milestones**

MILESTONE	DATE	CARRIAGE (PRIMARY)	CONDITION PRECEDENT
Complete Phase 2 Strategy	June 2024	Altogether	Besmaw Direction following Phase 1
CTS execution	Sept 2024	Both Parties	
Commence SWC US agreement (USA)	Oct 2024	Both Parties	CTS execution
PDA execution	Dec 2024	Both Parties	
WICA application	April 2025	Altogether	
WICA approval	April 2026	Altogether	
First compliance certificates	June 2026	Altogether	USA agreement & WICA approval
First stage registration	Mid 2027	Besmaw	Services Available



# altogether.

## 3.7 About Altogether

Altogether is Australia's leading independent multi-utility, providing infrastructure that facilitates the efficient delivery of affordable and sustainable communities of the future.

Owned by leading infrastructure asset manager HRL Morrison & Co, Altogether has an enviable track record and financial backing, inclusive of both Australian & New Zealand government superannuation funds. Our customer centric, flexible and responsive approach enables Altogether to deliver a superior outcome in terms of timeliness, value for money and sustainability that gives our business partners key competitive advantage.

Altogether's ability to deliver cost effective and timely servicing solutions has been proven in a range of challenging locations. We work in close partnership with developers to understand and resolve key development constraints and critical path items, and to deliver utilities solutions which reduce up front capital expenditure, improve sustainability outcomes, increase efficiency and deliver certainty.

Altogether is able to provide the following whole of lifecycle solutions to customers:

- drinking water, wastewater, recycled water, energy and telecommunications services
- ready online access for customers
- comprehensive customer services, including incident and emergency call centre, customer billing, enquiries and complaints.

Altogether creates efficient localised, community-focused multi utility networks through:

- Harvesting multiple local resources (for example wastewater, stormwater, solar).
- Matching recycled water quality to water use requirements.
- Balancing water and energy supply to demand.
- Designing and implementing systems in partnership with developers.
- Harnessing the synergies available from co-location of multiple utilities, and
- Providing next-generation solutions which facilitate ready adoption of new technologies and approaches.

As a result, Altogether facilitates a number of positive sustainability outcomes, inclusive of drought proofing communities, energy resilience, insulation from rising consumption costs and active community engagement.

### 3.7.1 Utility specialists

Altogether is licensed under the *Water Industry Competition Act 2006* (WICA) to own and operate water infrastructure and to provide multiple water services including drinking water, recycled water, and wastewater services at several communities across New South Wales. It has demonstrable experience managing complex water utility schemes in new communities, for example at Box Hill in Sydney's Northwest Growth Corridor, Central Park at Broadway and Huntlee in the Hunter Valley. Details on current WICA licenses held are the table below.

Altogether is also a licensed energy retailer under the National Electricity Rules and owns and operates embedded electrical networks. Altogether retails electricity directly to customers along the Australian eastern seaboard.

Altogether is also a telco carrier. We partner with licensed carrier and carriage service providers for voice and internet services and services to residential and commercial premises. Altogether can offer smart, bundled multi utilities that provide cost effective, high quality and future tolerant local community services.



**Table 7 WICA Licenses held by Altogether**

Project	Type	Size	WICA License issued
Pitt Town	Greenfield residential housing	900 dwellings	Nov 2010
Central Park	Infill residential apartments, commercial and retail	2,000+ dwellings and 100,000m2 GFA retail	March 2012
Discovery Point	Infill residential apartments	2,000+ dwellings	Dec 2013
Cooranbong	Greenfield residential housing and town center	2,500 dwellings and 10,000m2 GFA village centre	June 2014
Huntlee	Greenfield residential housing and town center	7,500 dwellings and 200,000m2 GFA mixed use town centre	March 2015
Box Hill	Greenfield residential housing and town center	5,000+ dwellings and 25,000+m2 GFA village centre	May 2016
Shepherds Bay	Infill residential apartments	2,000+ dwellings	Aug 2017
Glossodia	Greenfield residential housing	580 dwellings	June 2020

### 3.8 Developer Collaboration

Altogether employs a collaborative approach with developers to ensure smooth delivery and construction of utility infrastructure. We:

- Assist in the obtaining of timely approvals which maximise the development potential of the property courtesy of collaborative land use planning and the delivery of a sustainable development outcome.
- Assist with development design and approval processes to ensure that land dedicated is appropriate for Scheme infrastructure through detailed Scheme master planning. We work closely to ensure utility infrastructure minimises land take and is delivered in a timely, coordinated manner.
- Assist with design specifications and standards for Developer Infrastructure quality assurance, inspection and dedication processes, issues/facilitate notices of requirements and certificates of compliance on a staged basis to expedite delivery processes.
- Operate and maintain our infrastructure in the same manner as a public authority. In delivery of an integrated, intelligent network, Altogether is able to ensure its activities are predictive, responsive and comprehensive.
- Collaborate closely on sales & marketing collateral including information packages for customers, builders, plumbers, and electricians and training and education sessions.

# altogether.

## 3.9 Adding Value

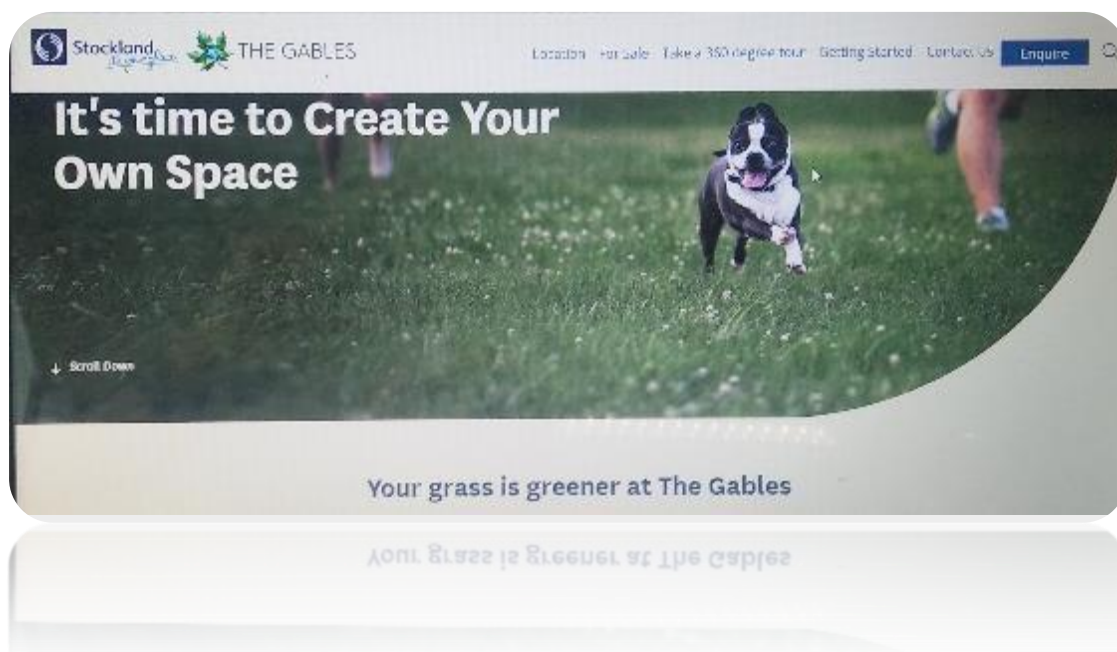
Altogether has an enviable track record of adding value to the projects it services.

Altogether's Community Utility Hubs are attractive facilities that integrate seamlessly into the communities they serve. Often used as components of project sales & marketing campaigns, they serve as a reminder of the community's resilience, and become focal points for locals to learn more about how sustainable practices can provide multiple benefits.



Altogether's Local Water Centre – Box Hill, NSW

From facilitation of timely development, to cost effective infrastructure solutions, removal of constraints on development staging, rendering communities drought tolerant and resilient, to the market advantages of reduced utility bills: Altogether provides the competitive advantage developers increasingly seek as a means of differentiation.



## 4. Existing Servicing Situation

Sydney Water's servicing arrangements for the Precinct are taken from a combination of published Sydney Water servicing strategies, draft Developer Service Plans, and public information provided to the Dept of Planning during the rezoning process. They will require confirmation as part of the Phase 2 proposal preparation process.

### 4.1 Drinking Water Supply

In response to Besmaw application for services, Sydney Water's initially has advised the following regarding Drinking Water Service:

***The site is not identified as a growth precinct by the NSW Government. As this site is not part of larger growth determination, the site is not under Growth Servicing Investment Plan (GSIP). Sydney Water does not have any strategies to bring additional capacity to the site or undertake works to provide for additional system capacity.***

***A DN300 watermain in Captain Cook Drive is traversing the site. This main is available to service the site subject to further modelling assessment confirming capacity, staging and connection requirements by the developer.***

***This mixed development has high water demand. The DN300 main in Captain Cook Drive is drawing water from Kurnell Reservoir (WSO 199) and acts as a single feed line. This DN300 main is currently servicing vast areas downstream. A hydraulic modelling assessment of DN300 main will need to be carried out to quantify the spare capacity. If any capacity deficiencies, then develop a solution to service their developments.***

Additional enquiries on behalf of Besmaw have provided further information relevant to drinking water supply.

***A pressure and flow enquiry received by Sydney Water at the location on Captain Cook Drive at the front of the Proposed Development indicated the maximum permissible flow of the Development is 120 liters per second. From a high-level assessment, this means there is enough flow to supply the Proposed Development which has an estimated water demand of approximately 2992 kl/day without regard for downstream water users.***

***Sydney Water has made clear that this main does supply many downstream users and so this information cannot be solely relied upon. Hydraulic Modelling needs to be completed to properly quantify the spare capacity within the main.***

Future hydraulic modelling will also assess the additional available water within Sydney Water's network made available by the load reductions from reduced activities on the Caltex Refinery site.

In April 2023 Sydney Water Corporation released draft Developer Service Plans, following the NSW Government's decision to reimplement DSP's following recommendations from the Productivity Commission.

The staged implementation of DSP's is proposed to commence from 1 July 2024, with 25% applied until 30 June 2025, 50% until 30 June 2016 and 100% from 1 July 2026. The Greater Sydney Drinking Water Draft DSP is applicable to the Kurnell site, and contribution amounts are summarised Table 9.

The drinking water DSP originally exhibited by Sydney Water applicable to Kurnell being part of the Greater Sydney Water Drinking Water DSP was at \$5,282 per ET. After industry consultation Sydney Water has proposed a revised DSP of \$3,282 per ET.

Table 8 Sydney Water Revised Drinking Water Contribution Prices

**Table 1: Exhibited vs final drinking water DSPs and infrastructure contribution prices**

Exhibited DSP area	Revised DSP area	Exhibited price	Revised price
Greater Sydney Drinking Water	No change	\$5,311	\$3,282
Potts Hill	No change	\$0	\$0
Prospect East	No change	\$0	\$0
Illawarra	No change	\$0	\$0

Table 9 Sydney Water Revised Drinking Water Contribution Prices – Introduction Phases

Table 1-1 – Drinking water infrastructure contribution prices for this DSP area (\$2022-23)

	1 July 2023 to 30 June 2024	1 July 2024 to 30 June 2025	1 July 2025 to 30 June 2026	1 July 2026 onward
Maximum price calculated under the 2018 Determination (\$/ET)	\$3,281.85	\$3,281.85 + CPI <sub>1</sub>	\$3,281.85 + CPI <sub>2</sub>	\$3,281.85 + CPI <sub>x</sub>
Percentage of maximum price to be charged	0%	25%	50%	100%
Maximum price that can be levied on new development (\$/ET)	\$0	\$820.46 + CPI <sub>1</sub>	\$1,640.93 + CPI <sub>2</sub>	\$3,281.85 + CPI <sub>x</sub>

Note: the price is also adjusted each financial year based on changes in the Consumer Price Index (CPI) compared to the March Quarter 2023.

In section 5.6 below, Altogether provide details on how we are able to provide a drinking water service to the proposed development, based on the advice and information re constraints and limitations provided by Sydney Water.

## 4.2 Wastewater

In response to Besmaw application for services, Sydney Water's initially has advised the following regarding Wastewater Service:

***There are no existing Sydney Water services to the site and there is not any existing connection.***

***There are no gravity sewers close to this site to construct a lead-in sewer. Kurnell Vacuum Sewer rising main is traversing this site which cannot be used to service this development.***

***The site is not identified as a growth precinct by the NSW Government. As this site is not part of larger growth determination, the site is not under Growth Servicing Investment Plan (GSIP). Sydney Water does not have any strategies to bring additional capacity to the site or undertake works to provide for additional system capacity.***

***The mixed development has a high sewer demand. Cronulla STP's capacity assessment will need to be carried out to quantify the availability of any spare capacity.***

***The developer will need to carryout detailed hydraulic modelling to identify Cronulla Sewerage System capacity especially STP deficiency if any and develop solution to service their developments.***

***You must construct a wastewater main extension to serve your development.***

In April 2023 Sydney Water Corporation released draft Developer Service Plans, following the NSW Governments decision to reimplant DSP's following recommendations from the Productivity Commission.

The staged implementation of DSP's is proposed to commence from 1 July 2024, with 25% applied until 30 June 2025, 50% until 30 June 2016 and 100% from 1 July 2026.

The wastewater DSP originally exhibited by Sydney Water applicable to Kurnell being part of the Outer Sydney Coastal wastewater DSP was at \$17,373 per ET. After industry consultation Sydney Water has proposed a revised DSP of \$2,382 per ET.

Table 10 Sydney Water Revised Waste Water Contribution Prices

**Table 2: Exhibited vs final wastewater DSPs and infrastructure contribution prices**

DSP area	Revised DSPs	Exhibited price	Revised price
Greater Macarthur	Greater Macarthur		\$40,778
	West Camden	\$40,782	\$4,816
Nepean River	Minor boundary adjustment	\$21,276	\$16,020
Richmond	No change	\$38,218	\$49,292
Lower South Creek	Minor boundary adjustment	\$8,443	\$6,183
Norwest	No change	\$3,522	\$3,692
Berowra Creek	No change	\$15,538	\$6,482
Sydney Coastal	Bondi		\$0
	Malabar	\$2,060	\$189
	North Head		\$588
Outer Sydney Coastal	No change	\$17,373	\$2,382
Southern Illawarra	No change	\$25,556	\$13,481
Northern Illawarra	No change	\$0	\$0

**Table 11 Sydney Water Revised Wastewater Contribution Prices – Introduction Phases**

Table 1-1 – Wastewater infrastructure contribution prices for this DSP area (\$2022-23)

	1 July 2023 to 30 June 2024	1 July 2024 to 30 June 2025	1 July 2025 to 30 June 2026	1 July 2026 onward
Maximum price calculated under the 2018 Determination (\$/ET)	\$2,381.70	\$2,381.70 + CPI <sub>1</sub>	\$2,381.70 + CPI <sub>2</sub>	\$2,381.70 + CPI <sub>x</sub>
Percentage of maximum price to be charged	0%	25%	50%	100%
Maximum price that can be levied on new development (\$/ET)	\$0	\$595.43 + CPI <sub>1</sub>	\$1,190.85 + CPI <sub>2</sub>	\$2,381.70 + CPI <sub>x</sub>

Note: the price is also adjusted each financial year based on changes in the Consumer Price Index (CPI) compared to the March Quarter 2023.

In section 5.5, Altogether provide details of how the delivery of a decentralized waste water recycling facility on the site will eliminate the risks and obstacles associated with connection to Sydney Waters Cronulla WWTP.

Any DSP offered by Sydney Water is a headworks charge only to cover the provision of service from the relevant treatment facility. Any augmentation of Sydney Water assets, and any other costs to transfer water are to be covered by the developer.

### 4.3 Recycled water

The most effective way to meet BASIX requirements for alternative water is by using a permanent recycled water source. Rainwater capture, storage and distribution is generally ineffectual and comparatively expensive as a result of its reliance on regular, moderate rainfall events.

Regional planning objectives to increase the tree canopy to assist combat heat island effect also add to the merit for the benefits of recycled water use within the site.

Sydney Water Corporation treats wastewater to tertiary level at the Cronulla WWTP, before discharging to the environment. If requested, Sydney Water can implement a scheme to provide recycled water provided that the developer funds any required upgrades at the Cronulla WWTP.

A return rising main to return recycled water to Kurnell from Cronulla WWTP would also need to be funded by the developer.

Engagement with Sydney Water regarding recycled water is not required as Altogether's strategy will provide recycled water for use within the site.

### 4.4 Overall

The process to assess both costs and risks associated with delivery of water services to this site at Kurnell via a traditional approach is complex. Over the last decade, Sydney Water has struggled to find effective wastewater treatment solutions for new development areas, especially in precincts that are of considerable distance from existing treatment assets.

Sydney Water has noted in their advice to the applicant that this site is noted not identified as a growth precinct by the NSW Government. As such, the site is not under Growth Servicing Investment Plan (GSIP). Sydney Water does not have any strategies to bring additional capacity to the site or undertake works to provide additional system capacity.

The complexity, risk and unreliability of Sydney Water's processes to connect essential services substantively increases project risk. Altogether's solution provides a compelling alternative with defined costs, timing certainty and substantive sustainability credentials.



## 5. Altogether's Solution

### 5.1 A one stop shop approach

Altogether takes a circular economy, multi utilities approach to delivery of community based essential utility services solutions. Utilising best practice technology and benefiting from years of experience, we can deliver solutions tailored to specific needs. Altogether's infrastructure is tried and tested, and readily scalable in response to specific project needs and/or changing circumstances. Importantly, we have a range of options for delivery of interim facilities that both facilitate early connections and enable us to put forward attractive servicing contribution plans.

Our facilities at Huntlee and Cooranbong demonstrate how a multi utility solution can be successfully integrated as the centerpiece of a high quality residential estate and have been catalysts for a more cooperative approach by public utilities to facilitation of land releases.



The Huntlee facility at the project main entrance, opposite the Huntlee Sales & Marketing Centre

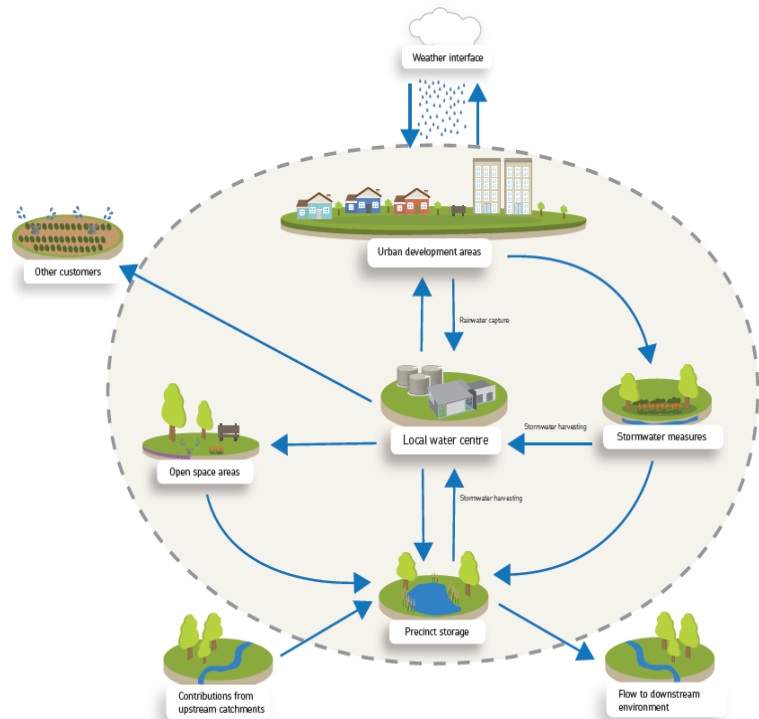
Altogether is fully empowered to stand in the place of SWC in all regards, from design and approval of infrastructure, to issue of certificates of compliance, operation, maintenance and customer billing. We have a demonstrable track record of successful delivery in all facets, and a commitment to customer service and responsiveness that stands us well apart from the business as usual approach. This all translates to developer competitive advantage.

# altogether.

## 5.2 Integrated Water Cycle Management

Altogether takes a fully integrated water cycle management approach to water and wastewater servicing. This interdependent system is most effective when one entity has control over all water sources and uses within a catchment area taking into consideration:

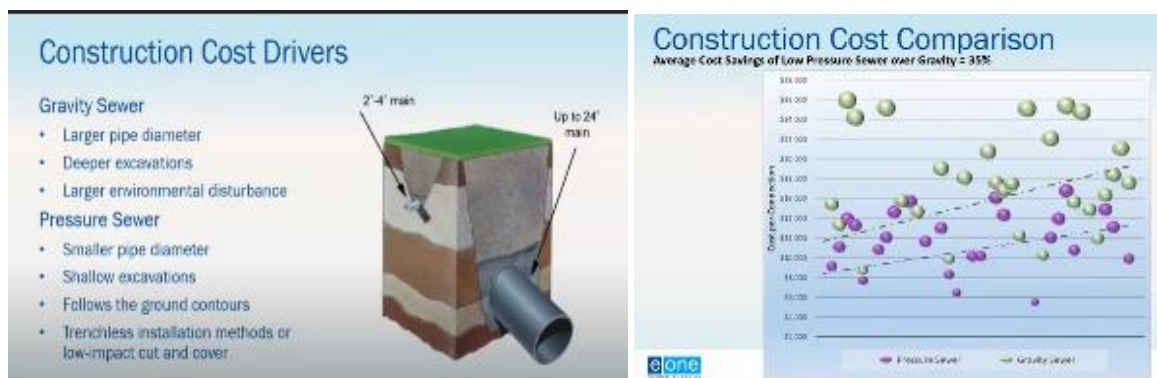
- water sensitive urban design
- water efficiency and sustainability
- sewage flow reduction
- use and storage of local water resources
- minimising potable water use
- maximising recycled water markets
- overall impact on the environment

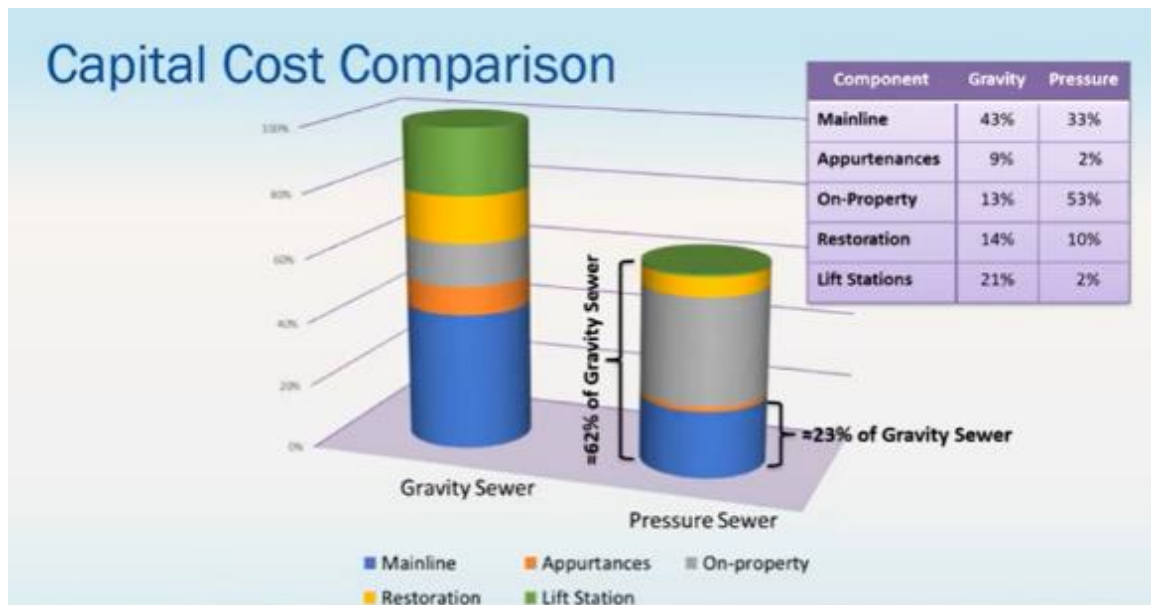


## 5.3 Pressure Sewer

Amongst the many benefits of the pressure sewer network are its ease of construction and relative cost advantage over traditional gravity mains systems. It negates topography as a constraint to development staging, affording the developer enormous flexibility in delivery. The flexibility of the pressure sewer system not only reduces construction cost on a like for like basis, but eliminates the need for up front, costly lead-ins. In addition, local contractors are well versed in and comfortable with the process and use of materials.

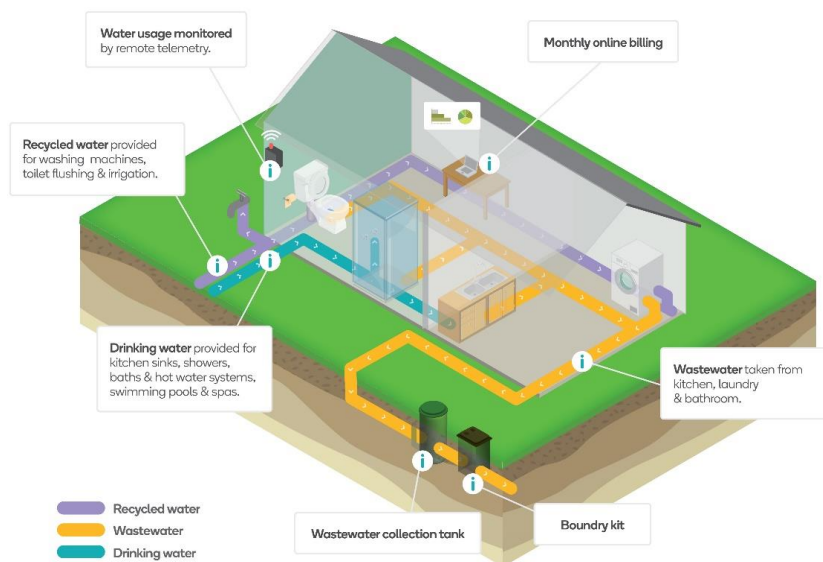
In terms of relative cost advantages, quantification of savings is dependent on the circumstances of each individual site. That said, work from the USA shows that across a broad range of sites, pressure systems are on average more than one third cheaper across the entire system (inclusive of On Lot Infrastructure). An analysis of the two systems is contained in a 60min YouTube segment at the following link: <https://m.youtube.com/watch?feature=youtu.be&v=gZ91lPBARK>, excerpts from which are shown following:





### 5.4 On Lot Infrastructure and Network Infrastructure

The Scheme requires the developer to install network infrastructure within both the public domain and within individual residential lots (“**On-Lot Infrastructure**”). The On Lot Infrastructure plays a key role in the Scheme, not only pressurizing the system and macerating wastewater, but providing a network of decentralised storage facilities that Altogether is able to effectively manage from the LWC central control room.



Altogether’s scheme removes any need for customers to provide rainwater tanks to enable compliance with BASIX requirements. This removes the aesthetic, ineffectiveness, maintenance and space constraints of the rainwater tanks within the development.



# altogether.

## 5.5 The Scheme Proposal: Wastewater & Recycled Water to serve the whole Precinct.

Altogether will harvest, treat and reuse wastewater from the project using a pressure sewer reticulation network. This eliminates the need for gravity trunk mains and pump stations. Because pressure sewer uses much smaller diameter, flexible pipework than traditional gravity sewer mains, it can be laid flexibly in trenches at minimum depth. This reduces cost and exposure to in-ground construction risk for the Developer, provides flexibility in staging and speeds up construction.

Unlike traditional gravity sewer schemes, the pressure sewer reticulation network prevents infiltration into the network. It eliminates the need for wet weather overflow points for overflow of raw sewage to the environment during extreme wet weather events and increases efficiency.

Altogether recognises wastewater as a valuable local resource. At the LWC it is treated through a multiple-barrier treatment process to produce high-quality recycled water utilising first-class robust treatment processes including fine screening, a bioreactor, ultra-filtration membranes and ultraviolet and chlorine disinfection. The high-grade recycled water produced is redistributed to the community for reuse at private dwellings and in addition, for irrigation, dust suppression and street cleaning.

Altogether's LWCs integrate seamlessly into project streetscapes, and meet all acoustic, odour, aesthetics and environmental impact requirements. They become valuable components of the local community's sense of wellbeing.



**Altogether's Local Water Centre – Watagan Park (Cooranbong, NSW): co-located with project display village**

Altogether retains full responsibility for the LWCs, their design, construction, and operation. Besmaw's responsibility is limited to provision of the internal reticulation network and ensuring all customers are connected to the required standards.

# altogether.



## Altogether's Local Water at Pitt Town, NSW

The benefits of a recycled water system are numerous, and include:

- The substantial reduction in project drinking water consumption which in turn underwrites system supply, reducing future network augmentation.
- The ability for Besmaw's residential buildings to achieve BASIX compliance without the space, maintenance and aesthetic impacts of on lot stormwater storage tanks.
- Rendering the Project drought tolerant and in doing so, ensuring that even in periods of strict water restrictions, both private and public landscape areas are able to be maintained to a high standard.
- Reducing the heat island effect.
- The substantial enhancement of project sustainability credentials, something that is of increasing value from both corporate, rezoning (statutory authority approvals) and market differentiation perspectives.

The merits of an Altogether pressure sewer network include:

- The flexibility provided by the pressure sewer network in terms of elimination of landform as a constraint / determinant of development programs.
- The control of servicing capacity (inclusive of potential future upgrades) that delivers competitive advantage when considering either future acquisitions or the activities of competitors.
- The ability for Besmaw to insulate itself from Sydney Water DSP charges for wastewater.
- The comfort of knowing Besmaw is working with a true delivery partner committed to the timely delivery of services, certificates of compliance, marketing assistance and customer support.

## 5.6 The Scheme Proposal: Drinking Water

The availability of drinking water near the site has been confirmed by Sydney Water. The assessment of available water capacity within the adjacent main has confirmed that 120 liters per second is available.

Altogether will be the water utility for the site as licensed under the Water Industry Competition Act. Altogether will provide a pass-through service for drinking water, buying in bulk from Sydney Water and retailing to network customers.

Bulk water is purchased at the 'gate' meter on a utility-to-utility basis under a Utility Services Agreement ("USA"). Altogether already has multiple USAs in place with public water authorities for this purpose on other Schemes.

Under such an approach, Altogether's distribution of high-quality recycled water at Kurnell would significantly reduce the drinking water consumption for the precinct. As the supply of recycled water is constant and uninterrupted, (as opposed to rain water) this would or reduce the amount of drinking water consumption on the site.

Altogether will be responsible for storing and maintain boundary pressure at development within the site, and will also be responsible for all customer service and operations, meeting all regulatory requirements under the WICA license as regulated by IPART.

## 5.7 Scheme Water Balance: Stormwater & Irrigation

Effective temporary and permanent water balance arrangements are essential to the efficient and effective operation of the Scheme. Water balance involves the management of seasonal variations in production of wastewater by comparison to use of recycled water. Subject to climatic influences, it commonly sees small surpluses of Scheme recycled water in winter, and shortfalls in summer. This will be managed via periodic discharge of high-quality recycled water to the project stormwater management system, for periodic drawdown in the event of temporary peak season demand. Irrigation of public and communal open space areas using recycled water is also an essential component.

Altogether will work closely with Besmaw's stormwater designers (Ergis) to integrate systems to ensure the project water cycle is effectively managed in terms of common storage areas, open space irrigation, natural treatment and stormwater harvesting as a recycled water source. Altogether is happy to manage any irrigation networks facilitated by Besmaw provided that the necessary approvals are put in place.

Egis has prepared a Stormwater Design Strategy for the site, which will integrate well with Altogether's stormwater harvesting activities and further enhance a sustainable water balance for reuse on the site.

The stormwater strategy is to provide suitably designed on-site detention (OSD) systems for each individual block and each development precinct. Individual detention system will be sized for the runoff from each precinct. Detention systems for all buildings within the precincts will be provided, with additional detention facilities provided for paved and public domain spaces, as required. These systems will meet relevant Site Storage Requirement (SSR) and Permissible Site Discharge (PSD) requirements.

The stormwater runoff on the external area and the flows captured from the outlet of individual precincts will pass through additional detention systems provided on the greater site area. These detention systems would take the form of detention basins and be established along with bioretention systems. Altogether will harvest stormwater and discharge recycled water via the bioretention systems.



# altogether.

The individual precincts within the larger development will include arrangements for water-sensitive urban design (WSUD) systems to meet water quality targets. The water quality objectives for the internal development will prioritise reduction of pollutants, sediments and nutrients from the stormwater being discharged from the site, including any stormwater blended with excess recycled water during winter months.

The Stormwater Design Strategy will also seek to retain organic matter (greater than 50mm) along with oil and grease for storm events up to the 1 in 3-month ARI storm category. The primary water sensitive urban design (WSUD) devices to be implemented for the first phase of treatment within the precincts would include underground rainwater tanks and Gross Pollutant Traps (GPTs). These devices efficiently cater for runoff from buildings and roads and become the primary and secondary forms of treatment, before being discharged to bioretention systems and wetlands.

The water sensitive urban design (WSUD) controls that will be designed for this stage would include bioretention systems and wetlands. These would be employed primarily to ensure that either neutral or beneficial impacts can be provided on the existing waterway.

The Egis report indicates that bioretention systems covering approximately 3% of the total site area or wetlands encompassing approximately 7% of the total site area, subject to baseline testing and monitoring. The WSUD strategy would be to provide a combination of bioretention swales, basins and wetlands along the treatment train to ensure that the system enables a Neutral or Beneficial Effect (NorBE) on the receiving environments.

The availability of a constant source of recycled water from Altogether's Local Water Centre creates the opportunity to greatly reduce or eliminate the need for rainwater storage from buildings run off, and may in turn allow combined stormwater treatment strategies for building run off and pavement and roadway areas.

Integration of irrigation to open space will give the ability to create lush, green, and vibrant places within the site. This will enhance the circular water balance, as run-off from irrigation will make its way into the bioretention systems and wetlands, available to be harvested and reused again and again.

## 1.1.1 Interim Wastewater Servicing

If required, wastewater can be conveyed to an Interim Servicing Facility ('ISF') early in the project lifecycle. The ISF operates as a temporary sewage storage and off-site tankering facility, catering to a maximum 75ET demand. This can allow for accelerated development should it be required.



The ISF plays an important role in ensuring early servicing delivery for Kurnell site given that initially, there may be insufficient wastewater to enable effective operation of recycled water facilities. During this period, drinking water is temporarily used in the recycled water system to ensure continuity of service. This has no impact on BASIX certification.

## 1.2 Community Utilities Hub

The Scheme has been tailored to ensure that Besmaw can proceed with its development program without delay. This entails:

- The delivery of Scheme infrastructure in stages,
- The flexibility to separate delivery of temporary Scheme from the permanent LWC and ongoing stages. This enables the temporary plant to be facilitated either via more flexible plot dimensions and/or a lease of adjoining lands.

Besmaw is expected to provide the following Community Utility Hub ('CUH') land facilities:

- ISF : 3,500sqm
- Permanent CUH: 8000sqm

This Servicing Strategy identifies a recommended site.

Note the Permanent CUH site will need to be regular in shape and suitable for intended use. All associated planning approvals (inclusive of zoning if required) are also the Developer's responsibility, with Altogether supporting and providing all necessary design, specification and/or technical support.

The ISF site can be incorporated as part of the Permanent CUH. Alternately, it will be handed back to Besmaw shortly after commissioning of the permanent LWC.

## 1.3 Scheme Capacity & Compliance Certification

All Scheme capacity is administered by Altogether, who retains responsibility to ensure sufficient capacity is available to meet Besmaw's requirements. This will in turn require that Besmaw provide Altogether with accurate and timely forecasts both of its development program and anticipated rate of sale.

## 1.4 Local Water Centre Details

Altogether has reviewed the proposed development and nominated a site for the local water centre, located in Precinct A – Town Centre North. The local water centre will have frontage to Lindum Road. Access can be provided from within the adjacent development precinct or from Lindum Road



Figure 5 Local Water Centre Location

Altogether recommends that the site be zoned SP2 for planning and approval purposes.

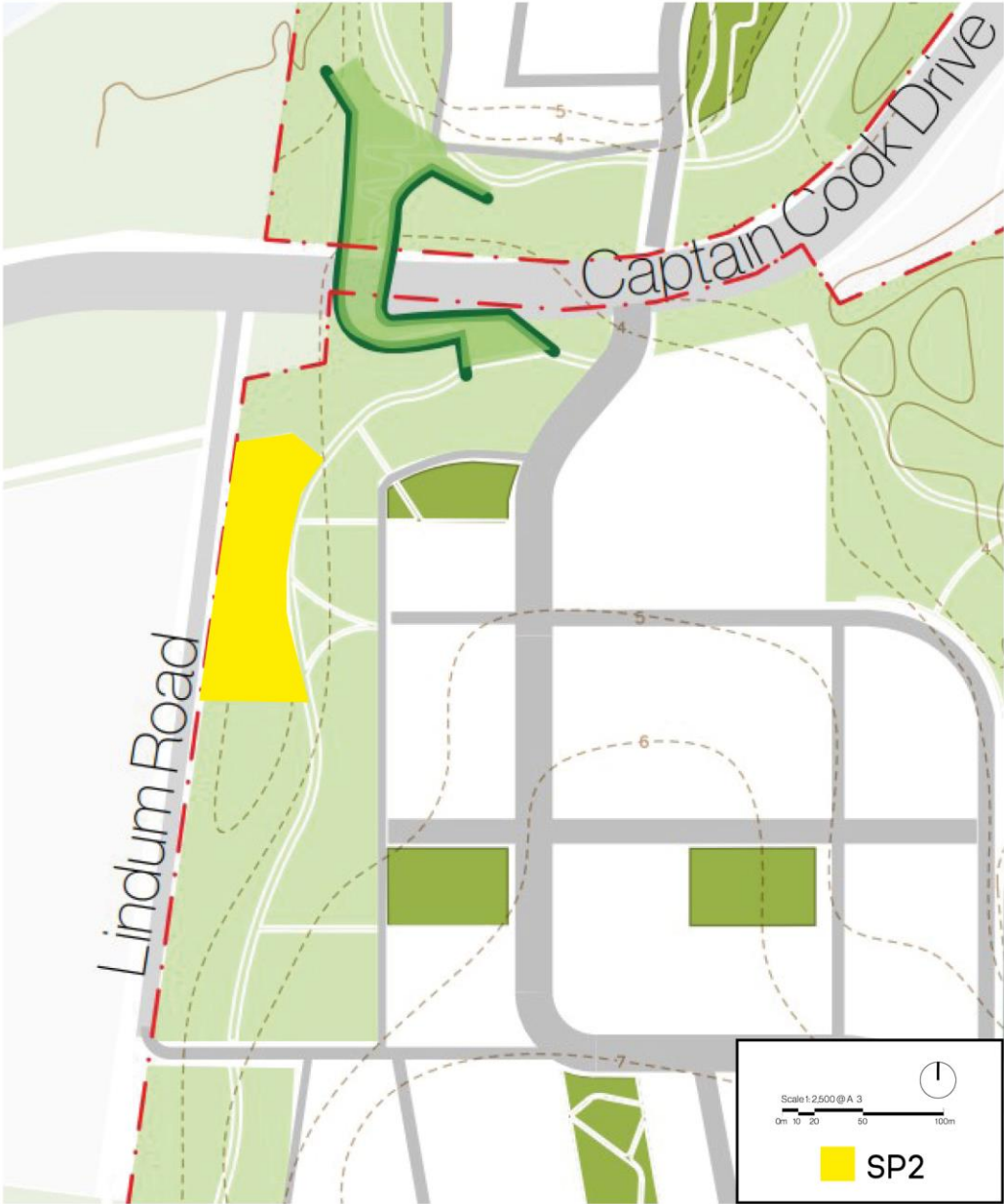


Figure 6 Extent of SP2 Zoning

## 2. Adding Further Value

### 2.1 Effective Capex Management

The cashflow flexibility afforded by Altogether's DSP funding model in addition ensures that Besmaw can effectively manage cashflow to align with project development and sales programs.







An additional key attribute of the Scheme is the flexibility it provides to Besmaw in relation to its development program. No longer constrained by topography or essential utility services delivery uncertainty/delays, Besmaw is free to establish a development program tailored to its needs. Altogether has successfully assisted developers establish multiple sales fronts to provide to allow sales and production of different product in different substages. The flexibility can allow services to be utilised in substages several kilometers apart.

[I don't think it is discussed below...]

### 2.2 Sydney Water Negotiations: Avoided/Deferred Costs

In April 2023 Sydney Water Corporation released draft Developer Service Plans, following the NSW Government's decision to reimplement DSP's following recommendations from the Productivity Commission.

The staged implementation of DSP's is proposed to commence from 1 July 2024, with 25% applied until 30 June 2025, 50% until 30 June 2016 and 100% from 1 July 2026.

 <b>Planning status of proposed development</b>	 <b>Timing of proposed development</b>	 <b>Funding arrangements</b>
 <p><b>1. On NSW Government's land release program, including infill areas, or in Sydney Water's Growth Servicing Plan (GSP)</b></p>	<p>Aligns with specific delivery date presented in the GSP maps.</p> <p>Earlier than GSP timing or where no specific delivery date has been determined by Sydney Water (ie a date range is presented in the GSP maps).</p>	<p>Sydney Water funds and builds infrastructure as shown in the GSP.</p> <p>A commercial agreement may be required where the developer funds and builds infrastructure, then transfers it to Sydney Water to own and operate.</p> <p>Please contact us for a confidential discussion on commercial options and delivery timeframes.</p>
 <p><b>2. Accelerated greenfield development or other land release that is to be at 'no cost to the Government'.</b></p>	<p>Anytime</p>	<p>Developer funds and builds infrastructure, then transfers it to Sydney Water. We set up a reimbursement schedule, initially as new dwellings connect to the new infrastructure. Once half the dwellings are connected and all infrastructure has been constructed, we pay all remaining costs of building infrastructure in a single payment.</p>
 <p><b>3. Not on NSW Government's program or in an area where no planning has begun.</b></p>	<p>Anytime</p>	<p>Developer funds and builds infrastructure and then transfers it to Sydney Water. Commercial agreement is required for transfer and operation of assets. It is likely there will be no repayment or reimbursement schedule for this infrastructure.</p>

Sydney Water has no immediate capital works programs to service new development in Kurnell. In the event Sydney Water is able and willing to meet the increased demand created by the project, Besmaw will be required to fund all associated investigations, designs and augmentation and/or lead-in works. Given these works are unlikely to benefit other parties, full cost recovery from Besmaw can be assumed.



## 3. Retail Customer Management

### 3.1 Sales & Marketing Coordination

Altogether will work closely with Besmaw to ensure its sales & marketing campaigns and materials fully and appropriately disclose all relevant requirements in relation to the Scheme.



Altogether has a full range of information brochures, together with an easy to navigate website that makes the process easy, even for those not yet familiar with Altogether’s services.

Not only is it important that Besmaw Corporation’s purchasers are familiar with the process for obtaining and connecting services, but as other developers have found, the benefits of drought tolerance, resilience, sustainability and most of all, lower consumption costs are tangible marketing differentiators.

### Hunlee Advantages worth over \$16.5k\*



**Hunlee Water**  
WITH RECYCLED WATER INCLUDED IN YOUR PURCHASE! (NO RAINWATER TANK REQUIRED)



**Front yard landscaping**  
A BEAUTIFUL BONUS FOR YOUR NEW HOME. ALL THE HARD WORK IS DONE AT NO EXTRA COST!



**Natural Gas**  
RETICULATED NATURAL GAS LINE PROVIDED TO EVERY LOT.



**Side and rear fencing**  
YOU WON'T HAVE TO SPEND ON FENCING. IT'S INCLUDED.



**High speed internet**  
THE COST OF FIBRE TO THE PREMISES IS ALSO INCLUDED.

[LEARN MORE](#)

## 3.2 Retail Pricing & Customer Support



Altogether has a pricing policy commitment to providing parity for customers receiving the same services by the incumbent provider within the region. The following pricing would be included in a Altogether WICA licence application to IPART if submitted now, representing current charges for individual dwellings (applicable to home owners or their tenants/occupants).

## 3.3 Service Delivery & Billing



Altogether provides a quarterly billing cycle to all customers, and has a dedicated customer service & support team that prides itself on delivery of superior customer experience results. Our web site is easy to use and makes the process of registration for services, billing, payment, and maintenance hassle free.

Altogether regularly surveys customer satisfaction ratios in relation to its retail services, and continues to achieve approval ratings substantially in excess of industry standards. Unsatisfied with this, our approvals ratings are continually improving as part of Altogether's commitment to customer service excellence.

## 4. Program, Planning & Approvals

### 4.1 Planning & Approvals

An application for a license under the Water Industry Competition Act can be lodged with IPART at any time. The process for assessment leading to the recommendation by IPART to provide the license will depend on a range of factors. Altogether is the leading proponent of licenses for new development areas.

Altogether note that while a WICA license can provide services to any zoned land, the ideal zoning for the establishment of new assets for a new development is SP2. We recommend that once the final allocation of LWC sites for the project are made, amendments to the rezoning be made with DPIE to ensure sewage treatment facilities and water recycling facilities are permissible.

Further, pursuant to the Transport and Infrastructure SEPP 2021, Altogether, as a licensed network operator under WICA, has 'development without consent' powers:

1. in prescribed zones for sewage treatment plant and water recycling facilities; and
2. on all land for sewage and recycled water reticulation (including interim sewer servicing tanks).

In prescribed zones, Altogether does not need to seek the consent of the local government authority under Part 4 of the *Environmental Planning and Assessment Act 1979* ("EPAA"). The activities are however subject to environmental impact assessment under Part 5 of the EPAA and these are determined by the NSW Minister for Energy and Utilities.

We do recommend that Environmental Assessment of the reticulation networks and on lot infrastructure be included in the consent package along with roads and other services to expedite the approval process.

### 4.2 Local Council Considerations

Sutherland Council actively promotes the protection of the waterways in the LGA and has an obligation to oversee and manager water quality within the LGA.

To assist the planning and approvals progress on this project, Altogether will be able to assist Besmaw to provide detail and clarity of responsibility limits and interfaces, as critical decisions regarding public/private access, services and titles are progressed.

## 5. Altogether's Primary Obligations

The following obligations are the responsibility of Altogether, which is responsible for all costs and expenses in connection with the performing the same unless otherwise stated.

**Table 12 Primary Obligations of Altogether**

#	DESCRIPTION	OBLIGATION
1	Developer zoning and planning approvals	Provide all necessary support, information and coordination relating to the Scheme to Besmaw to assist in the timely delivery of approvals.
2	Scheme masterplans, specifications and design standards	Prepare Scheme masterplans and design standards in relation to wastewater, recycled water and drinking water network infrastructure for the purposes of Besmaw delivered Infrastructure referred to below.
3	Altogether-delivered Infrastructure	Design, fund, construct, install, and commission: <ul style="list-style-type: none"> <li>• ISF including interim sewerage systems</li> <li>• LWC and Permanent Drinking Water System</li> <li>• Phase Two On-lot Infrastructure</li> </ul>
4	Notice of Requirements	Issue a Notice of Requirements to Besmaw which sets out Altogether's requirements of Developer-delivered Infrastructure which must be satisfied for each stage prior to Altogether's issue of a relevant Compliance Certificate.
5	Inspect Developer delivered Infrastructure	Coordination / liaison for quality control inspections as required by 3 <sup>rd</sup> parties in connection with the detailed design, installation and final approval of developer delivered Infrastructure prior to its dedication to Altogether.
6	Compliance Certification process	Subject to Besmaw complying with all preconditions, timely issue Compliance Certificates committing to water and wastewater services.
7	Building process	Liaise with Council in relation to the inclusion of Altogether's standard conditions in connection with the development approval for building works on lots in the Development.  Attend information sessions arranged by Besmaw for designated construction contracts.  Liaise with dwelling builders for the purposes of connecting each building to the Scheme.
8	Scheme Land – Services	Liaise with Besmaw and its consultants to provide design information for the services required for Scheme Land, including all infrastructure requirements.
9	Sewage tankering	Operate, maintain and manage the Interim Services Facility (ISF) including the management of any sewage tankering operator to meet demand.
10	Operation and Maintenance	Operate and maintain all Scheme assets, including all power, chemicals, consumables, labour, etc. (including all repair and replacement of Scheme assets as required).

# altogether.

11	Services	Supply and maintain the Services to retail Customers in the Development, inclusive of billing and fault repair.
12	Customer Services	Use Altogether's web-based sophisticated customer services utility platform to serve retail customers.
13	Compliance	To the extent they are applicable, ensure on-going compliance with the terms and conditions of the licensing/registration & approvals referred to above.
14	Marketing and Sales	Provide Besmaw with all relevant documentation in relation to the Scheme for the purposes of Besmaw's marketing and sales initiatives, including disclosures and information packs.
15	Plan of Development	Provide all requisite information in relation to the Scheme reasonably requested by Besmaw for the purposes of its planning and approvals processes.



## 6. Developer's Primary Obligations

The following obligations are the responsibility of Besmaw, which is responsible for all costs and expenses in connection with performing the same. Details on these responsibilities are available from Altogether's online documentation via this link: [Developer Works Guideline](#). The Guideline contains links to additional important information inclusive of standard drawings, infrastructure responsibilities matrix and staging diagrams.

**Table 13 Primary Obligations of Besmaw**

#	DESCRIPTION	OBLIGATION
1	Developer Contributions	<p>Pay the Developer Contributions on the due dates / triggers for payment as well as any quality assurance and connection fees and tankering charges. The Developer Contributions are of two types:</p> <ul style="list-style-type: none"> <li>• Developer Contributions: fixed, event and/or time-based development contributions; and</li> <li>• Developer Service Plan ("DSP") payments made prior to the issuance of Certificates of Compliance on a per lot basis.</li> </ul>
2	Besmaw delivered Infrastructure	<p>Produce detailed design drawings and construct in accordance with (among other things) (i) the Scheme masterplans as prepared by Altogether and submitted to and reviewed by Besmaw, and (ii) Altogether's specifications and design standards including connection mains from the ISF and Utilities Plot site to any designated reservoir sites and the Development stages. This will include arranging for the provision of incumbent drinking water and electricity lead-ins for the development (including bulk gate meters). Dedicate Besmaws-delivered Infrastructure to Altogether in accordance with Altogether's asset inspection and dedication process (including relevant quality assurance process) described under Altogether's Developer Infrastructure Works Guideline.</p>
3	Development planning	<p>Consult with Altogether and ensure that Altogether's utility requirements are included in Besmaw's site and/or construction certificate applications, to ensure timely release of lots on completion of Besmaw delivered infrastructure.</p>
4	Development controls	<p>Disclose to residents that they will be part of the Scheme, and ensure Scheme infrastructure is appropriately disclosed and protected.</p>
5	Scheme Masterplans	<p>Work with Altogether and provide information requested in preparing the Scheme masterplans, specifications and design standards.</p>
6	Scheme Land Zoning, Development Consent	<p>Ensure the Scheme Land is zoned (and if required, has a valid development consent) to allow development and operation of the Scheme, inclusive of provision of all necessary environmental reports and/or studies in relation to the Project as may be required.</p>
7	Scheme Land Transfer	<p>Prepare the Utility Plot land required for the purposes of constructing and operating the Scheme, and handover ownership and control to Altogether in a timely manner.</p>
8	Scheme Land Services	<p>Ensure Scheme Land has the services outlined in Appendix C.</p>

9	Water Balance	Provide/facilitate the Scheme Water Balance facilities as set out in the Proposal in a full and timely manner, inclusive of connection (and where appropriate reconnection) to Altogether's Scheme infrastructure, any associated approvals and ongoing maintenance of said facilities.
10	Approvals	Obtain all relevant approvals to ensure timely construction of the Besmaw delivered Infrastructure.
11	Financial & Prudential Information	Provide Altogether (and any relevant Government authority involved in Altogether obtaining the licensing and approvals referred to above) with such financial information, to the extent required by law/regulation, that may be required in relation to financial integrity and creditworthiness.
12	Easements	Procure any required easements required to enable Altogether to deliver and operate the Scheme and to ensure adequate access to and protection of Scheme assets.
13	Marketing and Sales	Ensure that Altogether's marketing and sales disclosure requirements are included in all Besmaw's Corporation's marketing and sales collateral in connection with the Kurnell sit. Ensure that Besmaw customers are required to pay for Phase Two on-lot infrastructure. Provide and maintain a link on the project website to Altogether's marketing collateral, sales contract disclosure documentation, and various information packages including homeowner's package, home builder's information, etc.
14	Scheme Retail Customers	To fully support Altogether's rights and ability to derive an ongoing recurrent revenue stream from all retail customers served by the Scheme.
15	Construction & Irrigation Water	To the extent that it is available, to use (and require use of) surplus recycled water for non-potable construction uses, irrigation of open space and landscape areas.

## 7. Conclusion

This proposal provides Besmaw with the ability to confirm the provision of essential services are available to support the proposed development at Kurnell.

Altogether confirms its capability to meet the following key Project objectives:

1. Provision of drinking water, wastewater and recycled water services for the proposed residential and non-residential uses proposed on the site.
2. Delivery of a superior sustainability utility outcome
3. Timely delivery, inclusive of delay risk management.
4. Optimising value add opportunities and delivering competitive advantage.

The proposal utilises experience gained from Altogether's successful delivery of a range of similar projects. Locally relevant and capable of immediate implementation, it provides for:

- Staged delivery of a Local Water Centre (LWC) capable of providing wastewater and recycled water services.
- A reliable drinking water service based on an interconnection Strategy with Sydney Water Assets on a Utility-to-Utility Basis.
- A Developer Services Plan ('DSP') based funding model allowing Besmaw to defer capital expenditure and make necessary allowances for feasibility purposes.

# Appendix C:

Ausgrid Email dated 22/11/23

**From:** [Daniel McDonald](#)  
**To:** [Bill Donohoe](#)  
**Cc:** [George Shnody](#)  
**Subject:** RE: Revised Masterplan and GFA's - Kurnell PP - Ausgrid Study.  
**Date:** Wednesday, 22 November 2023 10:15:22 AM

---

Good morning,

As discussed on the phone, this slight reduction of forecast capacity does not change Ausgrid's proposed connection options or the strategy for this connection.

Once you formally select one of the options from the System Planning Advice document, we will be able to begin the Contestable Design process for the connection.

Kind regards,

**Daniel McDonald**

Engineer – Infrastructure and Transport  
Customer Connections



M: 0459 880 405

24-28 Campbell St, Sydney NSW 2000, Roden Cutler House.

[dmcdonald@ausgrid.com.au](mailto:dmcdonald@ausgrid.com.au)

---

For Official use only

**From:** Bill Donohoe <[bill.donohoe@trioproperty.com.au](mailto:bill.donohoe@trioproperty.com.au)>  
**Sent:** Tuesday, November 21, 2023 5:41 PM  
**To:** Daniel McDonald <[DMcdonald@ausgrid.com.au](mailto:DMcdonald@ausgrid.com.au)>  
**Subject:** Revised Masterplan and GFA's - Kurnell PP - Ausgrid Study.

Daniel

Thank you for your time on the phone yesterday. As discussed, please find attached the latest masterplan and yields for the Kurnell project. I have also attached Stantec's original Electrical Demand letter from December last year, used for the initial analysis in Ausgrid's report. In addition, I have attached an updated Electrical Demand letter from Stantec received today based on the latest masterplan. A summary of the differences in the dwelling numbers and GFA's are explained by the Urbis planner, Finn Smith in the email below. I have highlighted the key information in yellow. This summary shows that the current plan has a lower dwelling yield and GFA compared to the original analysis.

In summary the initial Electrical Demand used for your initial study was **23.8MVa**, the Electrical Demand for the updated and reduced scheme is now **22.2MVa**.

Could you please review the attached and confirm that you are comfortable that your initial study undertaken still meets Ausgrid's objectives, outcomes and recommendations based on the reduced demand of the new masterplan. If you are able to reply via email by the end of the week that would be of great assistance.

Please call if you need to discuss.

Kind regards

**BILL DONOHOE**  
DIRECTOR



📞 0417 527 929

@ [bill.donohoe@trioproperty.com.au](mailto:bill.donohoe@trioproperty.com.au)



**From:** Finn Smith <[fsmith@urbis.com.au](mailto:fsmith@urbis.com.au)>  
**Sent:** Wednesday, November 8, 2023 3:45 PM  
**To:** Bill Donohoe <[bill.donohoe@trioproperty.com.au](mailto:bill.donohoe@trioproperty.com.au)>  
**Cc:** Sophy Purton <[spurton@urbis.com.au](mailto:spurton@urbis.com.au)>; Clare Brown <[cbrown@urbis.com.au](mailto:cbrown@urbis.com.au)>; Patrick Jones <[pjones@urbis.com.au](mailto:pjones@urbis.com.au)>  
**Subject:** RE: Revised Feasibility Letter - Kurnell PP

Hi Bill,

Thanks for your time over the phone.

Regarding the yields, the figures the feasibility assessment was undertaken against amounted to a total GFA of 600,000 sqm, representing an upper limit. The new yields now total 592,385 sqm. This revision includes a decrease in dwellings, an increase in retail/commercial GFA, and the incorporation of a school. Overall we are reducing the GFA and dwelling yields with more retail / commercial and a school.

I've reviewed the comparison table you provided, and it appears to be accurate for the housing, but the retail commercial is a little different.

Kurnell - Dwelling/Yield Comparison - Old to New plan							
Description	Old Plan			New Plan		Difference	
	No	Measure	Total	Total	Measure	Total	Measure
Seniors Housing	498	Dwellings					
Aged Care	218	Dwellings					
High Density Residential	3406	Dwellings					
Prestige Housing	48	Dwellings					
High Density Hospitality	401	Dwellings					
Eco Tourist Villa hotels	520	Dwellings					
Serviced Apartments	798	Dwellings	5889	4,922	Dwellings	967	Less Dwellings
Commercial	6184	sqm					
Retail	6239	sqm					
Community Facilities	2304	sqm	14727	17096	Sqm	2369	Additional Sqm GFA <sup>^</sup>
						<sup>^</sup> New plan includes educational uses	

I would just add the following:

	Old Plan (sqm)	New plan (sqm)	Difference in new plan (sqm)
Commercial	6184	9806	+2,617
Retail	6239		
Community facility	2304	1,324	- 980
School	0	15,771	+15,771

The GFA for the school includes fields etc so is inflated.

Regards,

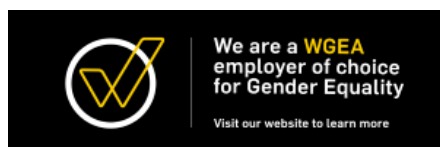
**FINN SMITH** he/him/his  
 SENIOR CONSULTANT

D +61 2 8233 9966  
 M +61 466 368 103  
 E [fsmith@urbis.com.au](mailto:fsmith@urbis.com.au)

**SHAPING  
 CITIES AND  
 COMMUNITIES**



ANGEL PLACE, LEVEL 8, 123 PITT STREET  
 SYDNEY, NSW 2000, AUSTRALIA  
 GADIGAL COUNTRY  
 T +61 2 8233 9900



## **Appendix D:**

**Stantec Australia letter dated 23/11/23**

Our Ref: Kurnell Feasibility Besmaw

Contact: Bobby Fitzgerald

23/11/2023

Trio Property Group

Attention: Bill Donohoe

16 Burelli Street  
Wollongong NSW 2500  
Australia

PO Box 1285  
Wollongong NSW 2500  
Australia

**RE: Kurnell Feasibility Letter for Updated Yields**

Phone: 61 2 4228 4133

Fax: 61 2 4228 6811

Dear Bill,

This letter is to confirm the serviceability of the Kurnell Site based on the newly presented yields in Table 1 and Table 2 below. This Letter confirms that the advice provided in Letter -004 dated 07/06/2022 (incorrectly – the correct is should have been 07/06/2023) remains true and the site can be serviced, although an alternative provider other than Sydney Water has been sought for water and sewer servicing.

**Table 1 – Yield as Dwellings**

Dwellings									
Precinct	Medium Density Residential	Residential	Townhouses	Seniors - ILUs	Seniors - Indigenous	Seniors - RACF	Tourism (Hotel rooms/ Eco cabins)	TOTAL NO. of Dwellings	
Precinct A - Town Centre North	0	1,177	0	158	0	0	98	1,335	
Precinct B - Town Centre South	293	469	62	172	0	122	115	1,118	
Precinct C - Bate Bay North	42	350	16	106	0	0	0	514	
Precinct D - Bate Bay South	48	222	72	80	0	0	0	422	
Precinct E - Boat Harbour	79	372	108	82	0	0	374	641	
Precinct F - Quibray Bay	120	153	0	0	30	0	0	303	
<b>TOTAL NO. of Dwellings</b>	<b>582</b>	<b>2,743</b>	<b>258</b>	<b>598</b>	<b>30</b>	<b>122</b>	<b>587</b>	<b>4,333</b>	
Unit numbers rounded to the nearest whole number							*manually adjusted for Indigenous Seniors	Including Tourism	<b>4,920</b>

**Table 2 – Yield as GFA**

GFA											
Precinct	Retail (GFA)	Medium Density Residential (GFA)	Residential (GFA)	Townhouses (GFA)	Seniors - ILUs (GFA)	Seniors - Indigenous (GFA)	Seniors - RACF (GFA)	Tourism (GFA)	Education (GFA)	Cultural (GFA)	TOTAL GFA (sqm)
Precinct A - Town Centre North	6,885	0	125,997	0	19,970	0	0	15,226	15,771	0	183,847
Precinct B - Town Centre South	0	30,478	56,457	11,810	21,699	0	10,385	13,639	0	610	145,078
Precinct C - Bate Bay North	1,057	4,745	38,270	2,881	13,875	0	0	0	0	0	60,828
Precinct D - Bate Bay South	1,395	5,305	24,917	13,194	10,434	0	0	0	0	0	55,244
Precinct E - Boat Harbour	0	8,339	40,448	21,167	10,618	0	0	33,479	0	453	114,504
Precinct F - Quibray Bay	469	12,727	16,804	0	0	2,520	0	0	0	262	32,782

## Communications

Advice provided in Letter – 004 (7/6/23) remains true and NBN can service the site.

## Gas

Advice provided in Letter – 004 (7/6/23) remains true and Jemena can service the site.

## Electrical

Advice provided in Letter – 004 (7/6/23) remains true. The change in yield, with updated Electrical Demand table shown below, marginally decreased the overall load of the site and as such Ausgrid can still service the site. We understand from Trio Property that Ausgrid has confirmed the same.

**Table 3 – Electrical Load Breakdown**

Dwelling	Yield	Units	Load	VA per Unit	Subtotal Load (kVA)
Medium Density Residential	582	dwelling	3500	VA	2037
Residential	2743	dwelling	3500	VA	9600.5
Townhouses	258	dwelling	3500	VA	903
Seniors ILU	598	dwelling	5000	VA	2990
Seniors Indigenous	30	dwelling	5000	VA	150
Seniors RACF	122	dwelling	5000	VA	610
Tourism	587	dwelling	5000	VA	2935
Education	15771	sqm	110	VA/sqm	1734.81
Cultural	1324	sqm	110	VA/sqm	145.64
Retail	9806	sqm	110	VA/sqm	1078.66
<b>Total (kVA)</b>					<b>22184.61</b>
<b>Total (mVA)</b>					<b>22.2</b>

## Potable & Wastewater

A change in the Potable and Wastewater servicing strategy has been made due to Sydney Water's unwillingness to confirm serviceability of the Kurnell site. An alternative provider, Altogether, has provided a servicing strategy which has confirmed that it will supply the site with water and sewer services to meet the demands of the proposal.

Yours Faithfully

Robert Fitzgerald

[www.trioproperty.com.au](http://www.trioproperty.com.au)

[info@trioproperty.com.au](mailto:info@trioproperty.com.au)



**trio.**

PROPERTY GROUP