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To: LOGOS Development Management Pty Ltd

Project: 28-30 Burrows Road, St Peters – Service Infrastructure Assessment

Our Ref: SY075517.000

Date: September 2022

Table of Contents

EXECUTIVE SUMMARY 3

1.0 INTRODUCTION 4

 1.1 SEARS REQUIREMENTS 5

2.0 SERVICE AUTHORITIES: 5

3.0 POTABLE WATER AND WASTE WATER 5

 3.1 POTABLE WATER 5

 3.2 WASTE WATER 6

 3.3 ALEXANDRA CANAL 6

4.0 ELECTRICITY 6

5.0 TELCOMMUNICATIONS 6

6.0 EXPECTED IMPACTS ON EXISTING INFRASTRUCTURE 6

7.0 INFRASTRUCTURE STAGING & DELIVERY PLAN 7

 7.1 SYDNEY WATER INFRASTRUCTURE 7

 7.2 ELECTRICITY 7

 7.3 TELCO 7

 7.4 COST 7

APPENDIX A POTABLE WATER & WASTE WATER DEMAND 8

APPENDIX B ELECTRICAL DEMAND 10

Revision:

Issue	Date	Comment
A	09/2022	Issue for comment

EXECUTIVE SUMMARY

Servicing Capability

- Potable Water
 - ▲ Estimated Potable Water Demand
 - Average Day Demand 13kl/day
 - Max Day Demand 26kl/day
 - ▲ A 500mm trunk water main exists in Burrows Road across the frontage of the site. Sites along Burrows Road are connected by offtakes from this existing 500mm trunk main including 28-30 Burrows Road.
- Waste Water
 - ▲ Estimated Waste Water Demand 12kl/day
 - ▲ The subject site, like other sites along Burrows Road, operate private sewer systems. In this case the subject site has the benefit of an easement for sewerage purposes over adjoining Lot 13 DP32332 where a collection tank for sewer is located. This tank is discharged by a private rising main to Sydney Waters waste water reticulation network in Campbell Road.
- Electricity
 - ▲ The clients electrical design consultant, Barnwell Cambridge Pty Ltd, have assessed the electrical demand at 3MVA (Refer to Appendix B).
 - ▲ Ausgrid has determined the site can be supplied from the current electrical network with the establishment of 3 chamber substations to supply the development.
- Telco
 - ▲ NBN is the network provider for the area and has established underground fibre optic cables within Burrows Road.
- Gas
 - ▲ No gas reticulation is required to service the proposed development.

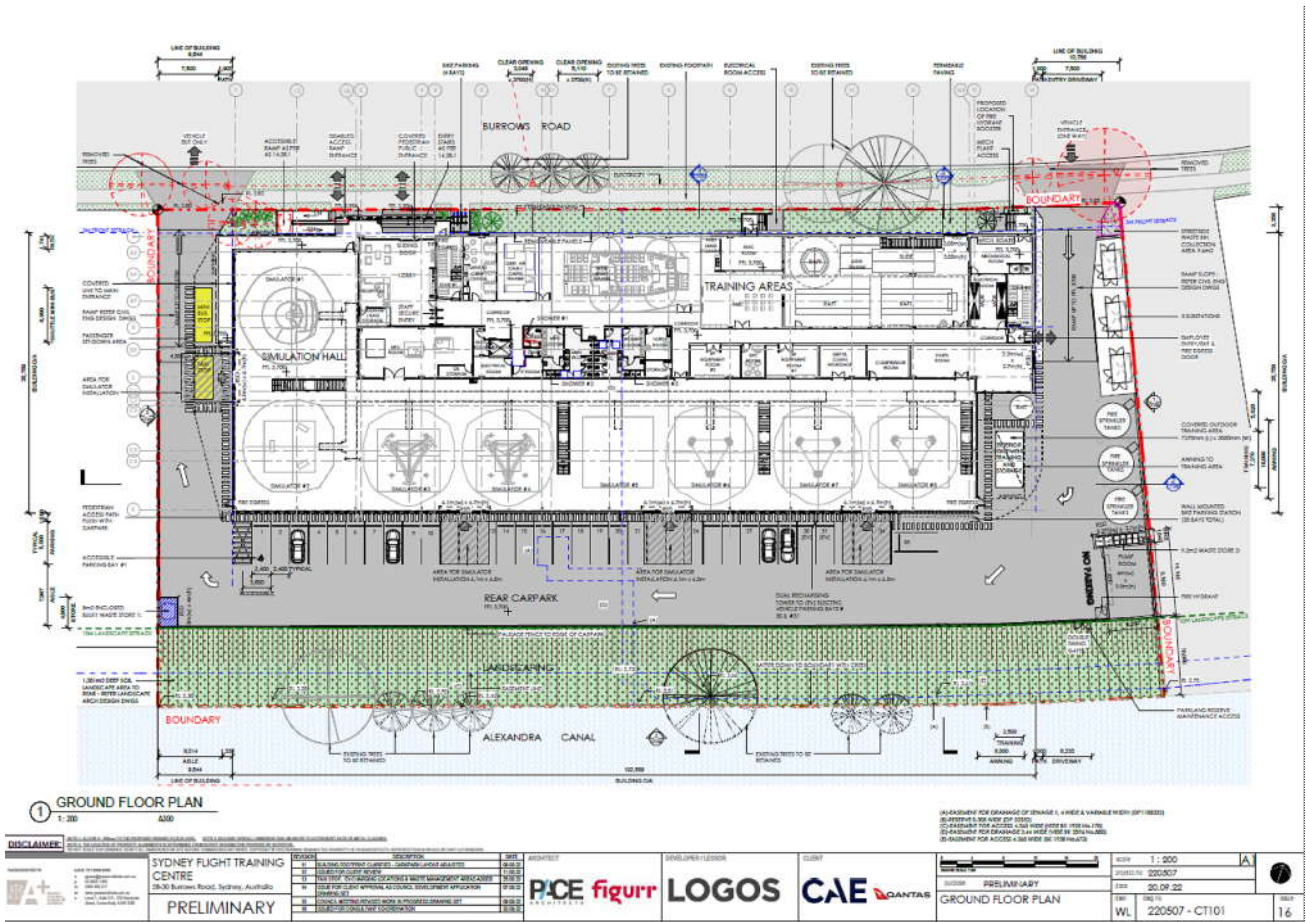
1.0 INTRODUCTION

It is anticipated that a State Significant Development (SSD) application will be made to Department of Planning, Industry and Environment. As part of that application the Department has issued SEARS requirements for the proposed development under application No. SSD-47601708.

The proposed development consists of a three level flight training centre consisting of mechanical plant rooms, training areas, flight simulation hall with 8 installed flight simulators and ancillary rooms to support the operations of the simulators. Gross floor area is estimated at 6,510m².

The site is described as Lot 2 DP212562 and Lot 15 DP32332 located within a well-established and well serviced industrial precinct. Substantial infrastructure has been installed by the utility service operators that will provide adequate capacity to service the proposed development.

Concept architectural layout has been provided that is the basis of comments within this report. The architectural (Ground Floor) is shown as follows:



1.1 SEARS REQUIREMENTS

Sears requirements outlined in SSD-47601708 from the Department of Planning, Industry & Environment have been used. Those requirements outline key issues one of which is the following:

Infrastructure Requirements & Utilities	How It Is Addressed	Section of this Report
Assess the impacts of the development on existing utility infrastructure & service provider assets surrounding the site. Infrastructure Delivery, Management and Staging Plan	Identify existing services through site inspection and utilising existing service utility plans	Section 3, 4, 5 & 6
Identify any infrastructure upgrades required onsite and offsite to facilitate the development and any arrangements to ensure that the upgrades will be implemented on time and be maintained.	Determine demand requirements for the development, determine if any upgrades or infrastructure amplifications required.	Appendix A & B
Provide infrastructure staging plan, description of how infrastructure requirements would be coordinated, funded and delivered to facilitate the development.	Assess existing infrastructure if staging of any upgrades (if required) will be required and if so what funding is required	Sec 8

2.0 SERVICE AUTHORITIES:

The service authorities who provide infrastructure services to this area are:

- (a) Sydney Water: Potable Water & Waste Water Infrastructure
- (b) Ausgrid: Electrical Infrastructure
- (c) NBN Co: Telecommunications Infrastructure

3.0 POTABLE WATER AND WASTE WATER

3.1 POTABLE WATER

- a) Immediately adjacent to the site within Burrows Road is a 500mm trunk water main.
- b) Existing offtakes with valving systems have been provided along this 500mm trunk water main to allow connections to properties along Burrows Road. The subject site is serviced by an existing offtake.
- c) Appendix A outlines expected Average Day Demand for potable water at 13kl/day. This level of demand is adequately catered by Sydney Waters existing system.
- d) A feasibility application has been lodged with Sydney Water under Case No. 202470.
- e) Sydney Water responded to the Dept of Planning and Environment on 6th September 2022 (copy of the response is attached in Appendix A) noting the advice that a feasibility application or Out of Scope Building application be lodged with Sydney Water.

3.2 WASTE WATER

- a) No Sydney Water reticulation serves the subject site.
- b) A private sewer system serves this development. The site is serviced by a private pressure sewer main which transports waste water (through easements) to a wet well holding tank at the north-west corner of Lot 13 DP32332. This lot is owned by Roads & Maritime Services where the extension of Campbell Road has been constructed. The wet well then discharges by a pumped rising main to Sydney Waters' existing waste water reticulation system in Campbell Road.
- c) Average Dry Weather Flow from the site is calculated as 12kl/day based on a maximum population of 160EP utilising the proposed flight training centre.

3.3 ALEXANDRA CANAL

- a) The site abuts Alexandra Canal which is a Sydney Water asset.
- b) Any works adjacent to the Canal will need to assess the impact of that work on the wall of the Canal. An Out of Scope Building Plan approval will be required to be lodged with Sydney Water for assessment of any impact the proposed works might have on the Canal wall. The application will be accompanied by an Asset Protection Report and Specialist Engineering Assessments (SEA) as outlined by Sydney Water requirements for this type of application.

4.0 ELECTRICITY

- a) Substantial overhead and underground electrical assets exist in Burrows Road adjacent to the subject site.
- b) The clients electrical consultant, Barnwell Cambridge Pty Ltd, have assessed the electrical demand as 3MVa (refer to Appendix B for assessment).
- c) Ausgrid have determined the site can be supplied from the existing electrical network adjacent to the subject site. The development will require the provision of 3 chamber substations to supply the development – see attached Ausgrid Service Offer in Appendix B.

5.0 TELCOMMUNICATIONS

- a) Substantial fibre-optic cable systems existing in Burrows Road.
- b) These fibre-optic systems are provided by a number of network operators such as NBN Co, Verizon and Luminet.
- c) The subject site is well serviced by the existing fibre-optic telco systems in Burrows Road.

6.0 EXPECTED IMPACTS ON EXISTING INFRASTRUCTURE

- a) No amplifications of utility service infrastructure is required to service this development.
- b) As outlined in Sec 3.3 above Out of Scope Building application will be required to be lodged with Sydney Water to address any impacts on the wall of Alexandra Canal.
- c) Sydney City Council have advised that a 10m restriction zone will be required within the site adjacent to the boundary of the Canal which limits any work to be undertaken in that area. The 10m restriction zone will eventually be acquired by Sydney City Council as part of a pedestrian/bicycle network running along and adjacent to the Canal.
- d) Apart from the comments above there is expected to be no other impacts on existing infrastructure adjacent to the site.

7.0 INFRASTRUCTURE STAGING & DELIVERY PLAN

7.1 SYDNEY WATER INFRASTRUCTURE

Sydney Water has a standard asset creation path through their Sec 73 process.

The development does not have any impact on the delivery of potable water systems, is serviced by a private waste water discharge system and no amplifications of existing Sydney Water systems are required.

Out of Scope Building Plan approval process will detail the mitigation of any impacts by the development on Alexandra Canal and as noted a 10m restriction zone is proposed within the site adjacent to Alexandra Canal boundary.

7.2 ELECTRICITY

Ausgrid have indicated that supply is available to service the subject development and no amplification or upsizing of the network capacity is required to service the property.

7.3 TELCO

Existing assets have sufficient capacity to service the proposed development.

7.4 COST

All assets will be delivered through the service utility providers asset creation path and this instance those assets will be developer funded.

APPENDIX A

POTABLE WATER & WASTE

WATER DEMAND

1. Logos have provided architectural plans for the Sydney Flight Training Centre, reference Project No. 220507, dated 20/09/2022.
2. The architectural plan outlines the following development area:
 - (a) Combined Ground Level, Level 1 & Level 2 6,510m²

Potable water and waste water use is based on the number of personnel present during maximum flight training days at the centre.

The client advises that the maximum population on site would be 160.

Therefore, the following calculations are based on a potable water demand of 80litres/day/person. Waste water discharge is estimated at 95% of the potable water demand.

Potable Water Demand:

Population	litres/day	Demand per day
160	80	Say 13kl/day

Waste Water Demand:

95% of P.W Demand = 12kl/day

8 September 2022

Catriona Shirley

Department of Planning and Environment
Catriona.shirley@dpie.nsw.gov.au

RE: Sydney Water input to SEARs for SSD-47601708 Sydney Flight Training Centre at 28-30 Burrows Road, St Peters

Thank you for seeking Sydney Water's input on the Secretary's Environmental Assessment Requirements for SSD-47601708 Sydney Flight Training Centre at 28-30 Burrows Road, St Peters. We have reviewed the proposal and provide the following comments for your consideration.

The proposed development presents potential impacts to Sydney Water's assets including but not limited to:

- 60960 x 5640 Stormwater Channel located within the Alexandria Canal

Sydney Water requests that the Department of Planning, Industry and Environment include the following Secretary's Environmental Assessment Requirements relating to the provision of water-related services for the subject site:

Water-related Infrastructure Requirements

1. The proponent of development should determine service demands following servicing investigations and demonstrate that satisfactory arrangements for drinking water, wastewater, and recycled water (if required) services have been made.
2. **The proponent must obtain endorsement and/or approval from Sydney Water to ensure that the proposed development does not adversely impact on any existing water, wastewater or stormwater main, or other Sydney Water asset, including any easement or property. When determining landscaping options, the proponent should take into account that certain tree species can cause cracking or blockage of Sydney Water pipes and therefore should be avoided. In order to ensure that the above noted asset is protected we request that the proponent lodges a feasibility or out of scope building application, as soon as possible and directly with Sydney Water, to ensure that the proposal meets our requirements and to prevent delays or objections at later stages of the planning application process.** Applications should be sent via an approved Water Servicing Coordinator, a list of which can be found on our [website](#).
3. Strict requirements for Sydney Water's stormwater assets (for certain types of development) may apply to this site. The proponent should ensure that satisfactory steps/measures been taken to protect existing stormwater assets, such as avoiding building over and/or adjacent to stormwater assets and building bridges over stormwater assets. The proponent should consider taking measures to minimise or eliminate potential flooding, degradation of water quality, and avoid adverse impacts on any heritage items, and create pipeline easements where required.

Integrated Water Cycle Management

4. The proponent should outline any sustainability initiatives that will minimise/reduce the demand for drinking water, including any alternative water supply and end uses of drinking and non-drinking water that may be proposed, and demonstrate water sensitive urban design (principles are used), and any water conservation measures that are likely to be proposed. This will allow Sydney Water to determine the impact of the proposed development on our existing services and required system capacity to service the development.

If you require any further information, please do not hesitate to contact the Growth Planning Team at urbangrowth@sydneywater.com.au.

Yours sincerely,



Kristine Leitch

Commercial Growth Manager

City Growth and Development, Business Development Group

Sydney Water, 1 Smith Street, Parramatta NSW 2150

APPENDIX B

ELECTRICAL DEMAND

 New Connection

LOCATION

[Land Title Type](#)

Torrens

[Street Number/RMB](#)

22-24

[Location Address](#)

Burrows Road, St Peters, 2044

[Land Zoning](#)

Urban

[Location Diagram](#)

File name	Ausgrid filename reference	Size
Screenshot 2022-03-28 092945.png	LocationAttachmentFilePath_1	0.114 MB

APPLICANT

[Applicant Type](#)

Asp On Behalf Of A Retail Customer Or Real Estate Developer

[Full Name](#)

Mr Charles Rheinberger

[Email Address](#)

charles@depcons.com

[ABN/ACN](#)

50887230861

[Company Name](#)

Dep Consulting

[Floor Number](#)

1

[Unit/Shop Number](#)

4

[Street Number/RMB](#)

12

[Po Box/Locked Bag](#)

685

[Nearest Cross Street](#)

Gerrale Street

[Applicant Address](#)

Laycock Ave Cronulla 2230

[Phone Number](#)

0419 019 874

[Asp Number](#)

4615

[Asp Level](#)

Level 3

CUSTOMER

Customer Type

Real Estate Developer

Full Name

Mr James Chappelow

Email Address

james@wilken.com.au

Phone Number

0285773000

LOAD DETAILS

Proposed Point Of Common Coupling

Substation

Proposed Asset Identifier

Unknown

Proposed Connection Point

Main Switchboard

Proposed Service Length

20

Proposed Service Type

Underground

Service Voltage

Low Voltage 230/400v

Service Size

Other (1500kva Substations)

Proposed Maximum Demand	Number Of Phases:	Phase A:	4330	Phase B:	4330	Phase C:	4330
	3						

Proposed Maximum Demand Calculation

File name	Ausgrid filename reference	Size
Memo Style - Max Demand.pdf	WFAMaxDemandCalc_1	0.243 MB

Are You Intending To Connect Controlled Load At This Premises?

No

ADDITIONAL DEVELOPMENT DETAILS

HOUSE SERVICES

Number Of House Service Premises:	1
Proposed Maximum Demand Number Of Phases:	3
Phase A:	400
Phase B:	400
Phase C:	400
Total Number Of Premises:	1

I Will Be Installing Equipment At The Premises That May Result In Non Linear / Fluctuating Loads

No

Construction Of The Premises Connection Assets Will Commence

31-Jul-2022

When Do You Wish To Electrify The Premises?

30-Oct-2022

Ausgrid Has Provided A Certified Design Number(Cdn) For A Network Augmentation Project Associated With The Premises

No

Asp 1 Has Been Appointed

No

[Do You Have Development Consent \(Da\) For Your Proposal?](#)

No

[Do You Wish To Underground / Relocate Electricity Assets In Conjunction With This Connection Application?](#)

No

[Comments](#)

New Supply For A Proposed Aviation Training Facility

EXPEDITED CONNECTION

Do you want to [expedite](#) your connection offer for all premises?

Yes No

Ausgrid will send you an [offer](#) that meets your supply requirements.

DECLARATION

[Applicant Name](#)

Mr Charles Rheinberger

[Application Date](#)

28-Mar-2022

[Price Description](#)

Above 100 Amps Connection Offer - Technical Assessment required 1 x 473.25

[Price Including GST](#)

AUD \$473.25

[Total Price](#)

AUD \$473.25

[Terms and Conditions:](#)

In submitting this application you are engaging Ausgrid to provide you with a connection offer. Once submitted the fee charged is consumed. Ausgrid will aim to provide you with a written response within 10 business days. If additional work and/or fees are required, we will contact you to advise prior to providing the response.

Where this application requests an expedited connection, I declare that I have read and understood the terms and conditions of the connection offer and agree that if the connection is expedited that a contract based on that offer will be formed with Ausgrid on the date that Ausgrid receives the application. Where this application is being made on behalf of a retail customer or real estate developer, I declare that I have obtained the authority of that person to make this application of their behalf, including where applicable, making a request for expedition of the connection application.

*I acknowledge the terms & conditions.



OFFER to provide DESIGN RELATED SERVICES



DESIGN RELATED SERVICES OFFER

Premises address: 22-24 BURROWS ROAD, ST PETERS 2044

NMI - Number: Webform Ref 325526

MC Reference: 1900113133 AP Reference: 800475273

This offer is made on 30/03/2022

By Ausgrid of 24 Campbell St, Haymarket NSW 2000.

To the **connection applicant** named in the *connection application* received on 28/03/2022 in respect of the *premises* referred to above.

Ausgrid has determined that network alterations are required to connect your development and we cannot proceed to a connection or relocation offer at this stage. To enable Ausgrid to further consider and process your application you will require a certified design and associated certification number. Your application remains technically incomplete until you have been issued a certification number.

This Design Related Services Offer provides guidance on how to obtain a certified design and associated certification number.

Scope of Network Alterations

Ausgrid has determined that the following works are likely to be required:

- Establish 3 x Chamber Substation in Accordance with Current Network Standards

These works are classified as contestable, which means that you are required to fund the design and some or all of the construction works. If you have not already done so, you will need to engage and manage suitably qualified contractors, known as Accredited Service Providers (ASPs) to undertake the design and construction.

Initially, your ASP Level 3 (ASP/3) will undertake the design, and then your ASP Level 1 (ASP/1) will undertake construction in accordance with the design and Ausgrid's policies and standards. The timeframe for the works will vary depending on factors such as the complexity and the way in which you manage your ASP's.

Once the works have been satisfactorily completed and electrified, the premises connection assets will be owned and maintained by Ausgrid as part of the electricity distribution network.

Contract for Design Related Services

This letter is an offer for the Customer to enter into a Contract for Design Related Services with Ausgrid. It remains open for acceptance for 45 business days. If the offer is accepted by the Applicant, the Applicant does so as the Customer's agent. No work will be undertaken by Ausgrid until a Design Contract is in place.

You are encouraged to contact ASP/3's and ASP/1's to understand the likely overall costs you will incur for design and construction before you accept and commit to the Contract for Design Related Services.

IMPORTANT: The contractual arrangements provide the framework for a design to be prepared by your ASP/3, and NOT by Ausgrid. Ausgrid's fees as outlined below are for the design related network services we provide during the design phase and are **IN ADDITION** to the fees charged by your ASP/3 in preparing the design.

Acceptance Fees

The acceptance fees relating to the Contract for Design Related Services are outlined in the attached Acceptance Fee Summary and also detailed on the Ausgrid Portal page. Ausgrid will invoice **the Customer** once we receive acceptance via the Ausgrid Portal along with a Customer Details Form (attached). The Contract will commence when you pay the invoiced fee.

The acceptance fees are an estimate for the Ausgrid services required and are payable up front by the **Customer**. Further fees may apply for any additional services required and these will be quoted via the Ausgrid Portal on each occasion.

Ausgrid's published rates for our services are amended from time to time in our Alternative Control Services Fee Schedule Publication, and in accordance with the Contract, Ausgrid reserves the right to charge the rates that are applicable at the time the service is provided.

Fees for Ausgrid's services are in addition to the design and construction costs charged by your ASP's, and some fees may not be refundable if the service has already been provided. Fees and rates are set by the Australian Energy Regulator.

WHAT TO DO NEXT

- To move ahead, please accept the offer (see below) outlined in this document and then have the **Customer** pay the invoice that will be forwarded
- **Complete and forward the [Customer Details Form](#)**
- Engage an ASP Level 3 designer
 - On the Ausgrid Portal, nominate the ASP/3 as the designer for this project
 - Advise the ASP/3 that the Design Information Category for this project is **Complex**

Enquiries: connections.technical.enquiries@ausgrid.com.au

Enclosures: Contract terms – via website at:
<https://ausgrid.com.au/CDRS>.

Customer Details Form – via website at
<https://ausgrid.com.au/customerdetailsform>

Acceptance Fee Summary – attached

PLEASE REVIEW THE OFFER OUTLINED IN THIS LETTER, ALONG WITH THE TERMS LINKED ABOVE, THEN PROCEED TO THE AUSGRID PORTAL

IF YOU WISH TO ACCEPT THIS OFFER

SELECT "ACCEPT" AGAINST THE OFFER ON THE AUSGRID PORTAL WITHIN 45 BUSINESS DAYS

RETURN THE [CUSTOMER DETAILS FORM](#) BY EMAIL
TO contestability@ausgrid.com.au

IF YOU WISH TO DECLINE THE OFFER

SELECT "DECLINE" AGAINST THE OFFER ON THE AUSGRID PORTAL.

Should you wish to proceed in the future, a new connection application will need to be lodged.

DESIGN RELATED SERVICES OFFER

ACCEPTANCE FEE SUMMARY

Service Description	Unit	Quantity	Price per unit	Total Price
Design Service Package 07	Service	1.00000	\$0.00	\$0.00
Administration of Contestable Works - General - Design	Service	1.00000	\$247.40	\$247.40
Design Information - Complex - R5	Hour	20.00000	\$225.78	\$4,515.60
Design Certification - Other - R5	Hour	38.00000	\$225.78	\$8,579.64
SUBTOTAL				\$13,342.64
GST (10%)				\$1,334.26
TOTAL				\$14,676.90

These fees are an **initial estimate** for the services we will require to provide throughout the design contract and are payable up front by the **Customer**, on acceptance of the contract.

IMPORTANT: **Additional** services may be required through the course of the design contract (e.g. asset number requests, specialist services, consultancy services). The fee for such services will be billed to the **Customer** in accordance with the contract, and are payable prior to design certification. Typical examples include, but are not limited to, fees for asset creation, additional certification effort and requests to vary network standards.

TO AVOID DELAYS, DON'T FORGET TO RETURN A COPY OF THE COMPLETED **CUSTOMER DETAILS FORM** TO AUSGRID (contestability@ausgrid.com.au)