DEVELOPMENT APPLICATION

PDPLANPMTD-2025/057784

PROPOSAL: Two Multiple Dwellings

LOCATION: 18 Howrah Road, Howrah

RELEVANT PLANNING SCHEME: Tasmanian Planning Scheme - Clarence

ADVERTISING EXPIRY DATE: 29/04/2026

The relevant plans and documents can be inspected at the Council offices, 38 Bligh Street, Rosny Park, during normal office hours until 29/04/2026. In addition to legislative requirements, plans and documents can also be viewed at www.ccc.tas.gov.au during these times.

Any person may make representations about the application to the Chief Executive Officer, by writing to PO Box 96, Rosny Park, 7018 or by electronic mail to clarence@ccc.tas.gov.au. Representations must be received by Council on or before 29/04/2026.

To enable Council to contact you if necessary, would you please also include a day time contact number in any correspondence you may forward.

Any personal information submitted is covered by Council's privacy policy, available at www.ccc.tas.gov.au or at the Council offices.

Clarence City Council

Clarence... a brighter place

APPLICATION FOR DEVELOPMENT / USE OR SUBDIVISION

*The personal information on this form is required by Council for the development of land under the Land Use Planning and Approvals Act 1993. We will only use your personal information for this and other related purposes. If this information is not provided, we may not be able to deal with this matter. You may access and/or amend your personal information at any time. How we use this information is explained in our **Privacy Policy**, which is available at www.ccc.tas.gov.au or at Council offices.*

Proposal: Unit Development

Location:
Address: 18 Howrah Rd
Suburb/Town: Howrah Postcode: 7018

Current Owners/s:

Applicant:

Personal Information Removed

Tax Invoice for application fees t be in the name o (if different from applicant)

Is the property on the Tasmanian Heritage Register? Yes [ ] No [X]

(if yes, we recommend you discuss your proposal with Heritage Tasmania prior to lodgement as exemptions may apply which may save you time on your proposal)

If you had pre-application discussions with a Council Officer, please give their name

Current Use of Site: ~~Vacant~~ Exisiting dwelling to be demolished

Does the proposal involve land administered or owned by the Crown or Council? Yes ☐ No ☒

Declaration:

- *I have read the Certificate of Title and Schedule of Easements for the land and am satisfied that this application is not prevented by any restrictions, easements or covenants.*
- *I authorise the provision of a copy of any documents relating to this application to any person for the purposes of assessment or public consultation. I agree to arrange for the permission of the copyright owner of any part of this application to be obtained. I have arranged permission for Council's representatives to enter the land to assess this application*
- *I declare that, in accordance with Section 52 of the Land Use Planning and Approvals Act 1993, that I have notified the owner of the intention to make this application. Where the subject property is owned or controlled by Council or the Crown, their signed consent is attached. Where the application is submitted under Section 43A, the owner's consent is attached.*
- *I declare that the information in this declaration is true and correct.*

Acknowledgement:

- *I acknowledge that the documentation submitted in support of my application will become a public record held by Council and may be reproduced by Council in both electronic and hard copy format in order to facilitate the assessment process; for display purposes during public consultation; and to fulfil its statutory obligations. I further acknowledge that following determination of my application, Council will store documentation relating to my application in electronic format only.*

Applicant's Signature:

PLEASE REFER TO THE DEVELOPMENT/USE AND SUBDIVISION CHECKLIST ON THE FOLLOWING PAGES TO DETERMINE WHAT DOCUMENTATION MUST BE SUBMITTED WITH YOUR APPLICATION.

Clarence City Council

DEVELOPMENT/USE OR SUBDIVISION CHECKLIST

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Documentation required:

1. **MANDATORY DOCUMENTATION**

This information is required for the application to be valid. An application lodged without these items is unable to proceed.

- ❑ Details of the location of the proposed use or development.
- ❑ A copy of the current Certificate of Title, Sealed Plan, Plan or Diagram and Schedule of Easements and other restrictions for each parcel of land on which the use or development is proposed.
- ❑ Full description of the proposed use or development.
- ❑ Description of the proposed operation.
  May include where appropriate: staff/student/customer numbers; operating hours; truck movements; and loading/unloading requirements; waste generation and disposal; equipment used; pollution, including noise, fumes, smoke or vibration and mitigation/management measures.
- ❑ Declaration the owner has been notified if the applicant is not the owner.
- ❑ Crown or Council consent (if publically-owned land).
- ❑ Any reports, plans or other information required by the relevant zone or code.
- ❑ Fees prescribed by the Council.

  Application fees (please phone 03 6217 9550 to determine what fees apply). An invoice will be emailed upon lodgement.

2. **ADDITIONAL DOCUMENTATION**

In addition to the mandatory information required above, Council may, to enable it to consider an application, request further information it considers necessary to ensure that the proposed use or development will comply with any relevant standards and purpose statements in the zone, codes or specific area plan, applicable to the use or development.

- ❑ **Site analysis plan and site plan**, including where relevant:
  - *Existing and proposed use(s) on site.*
  - *Boundaries and dimensions of the site.*
  - *Topography, including contours showing AHD levels and major site features.*
  - *Natural drainage lines, watercourses and wetlands on or adjacent to the site.*
  - *Soil type.*
  - *Vegetation types and distribution, and trees and vegetation to be removed.*
  - *Location and capacity of any existing services or easements on/to the site.*
  - *Existing pedestrian and vehicle access to the site.*
  - *Location of existing and proposed buildings on the site.*
  - *Location of existing adjoining properties, adjacent buildings and their uses.*
  - *Any natural hazards that may affect use or development on the site.*
  - *Proposed roads, driveways, car parking areas and footpaths within the site.*
  - *Any proposed open space, communal space, or facilities on the site.*
  - *Main utility service connection points and easements.*
  - *Proposed subdivision lot boundaries.*

- ☐ Where it is proposed to erect buildings, **detailed plans** with dimensions at a scale of 1:100 or 1:200 showing:
  - *Internal layout of each building on the site.*
  - *Private open space for each dwelling.*
  - *External storage spaces.*
  - *Car parking space location and layout.*
  - *Major elevations of every building to be erected.*
  - *Shadow diagrams of the proposed buildings and adjacent structures demonstrating the extent of shading of adjacent private open spaces and external windows of buildings on adjacent sites.*
  - *Relationship of the elevations to natural ground level, showing any proposed cut or fill.*
  - *Materials and colours to be used on rooves and external walls.*
- ☐ Where it is proposed to erect buildings, a plan of the proposed **landscaping** showing:
  - *Planting concepts.*
  - *Paving materials and drainage treatments and lighting for vehicle areas and footpaths.*
  - *Plantings proposed for screening from adjacent sites or public places.*
- ☐ Any additional reports, plans or other information required by the relevant zone or code.

This list is not comprehensive for all possible situations. If you require further information about what may be required as part of your application documentation, please contact Council's Planning Officers on (03) 6217 9550 who will be pleased to assist.

RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

Tasmanian Government

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
60115	17
EDITION	DATE OF ISSUE
4	07-Oct-2025

SEARCH DATE : 12-Dec-2025
SEARCH TIME : 12.04 pm

DESCRIPTION OF LAND

City of CLARENCE
Lot 17 on Plan 60115 (formerly being P1130)
Derivation : The Allotment Gtd. to W.S.Sharland & ors.
Prior CT 3081/78

SCHEDULE 1

N276061 TRANSFER to TEW ENTERPRISES PTY LTD Registered 07-Oct-2025 at 12.01 pm

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
A3169 BOUNDARY FENCES AND OTHER CONDITIONS in Transfer
E432484 MORTGAGE to Bank of Queensland Limited Registered 07-Oct-2025 at 12.02 pm

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

Tasmanian Government

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
60115	17
EDITION	DATE OF ISSUE
3	04-Jan-2017

SEARCH DATE : 28-Aug-2025
SEARCH TIME : 01.24 PM

DESCRIPTION OF LAND

City of CLARENCE
Lot 17 on Plan 60115 (formerly being P1130)
Derivation : The Allotment Gtd. to W.S.Sharland & ors.
Prior CT 3081/78

SCHEDULE 1

C721562 ASSENT to ANDREA LESLEY PAGE Registered 26-May-2006 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
A3169 BOUNDARY FENCES AND OTHER CONDITIONS in Transfer
E75670 MORTGAGE to Australia and New Zealand Banking Group Limited Registered 04-Jan-2017 at noon

UNREGISTERED DEALINGS AND NOTATIONS

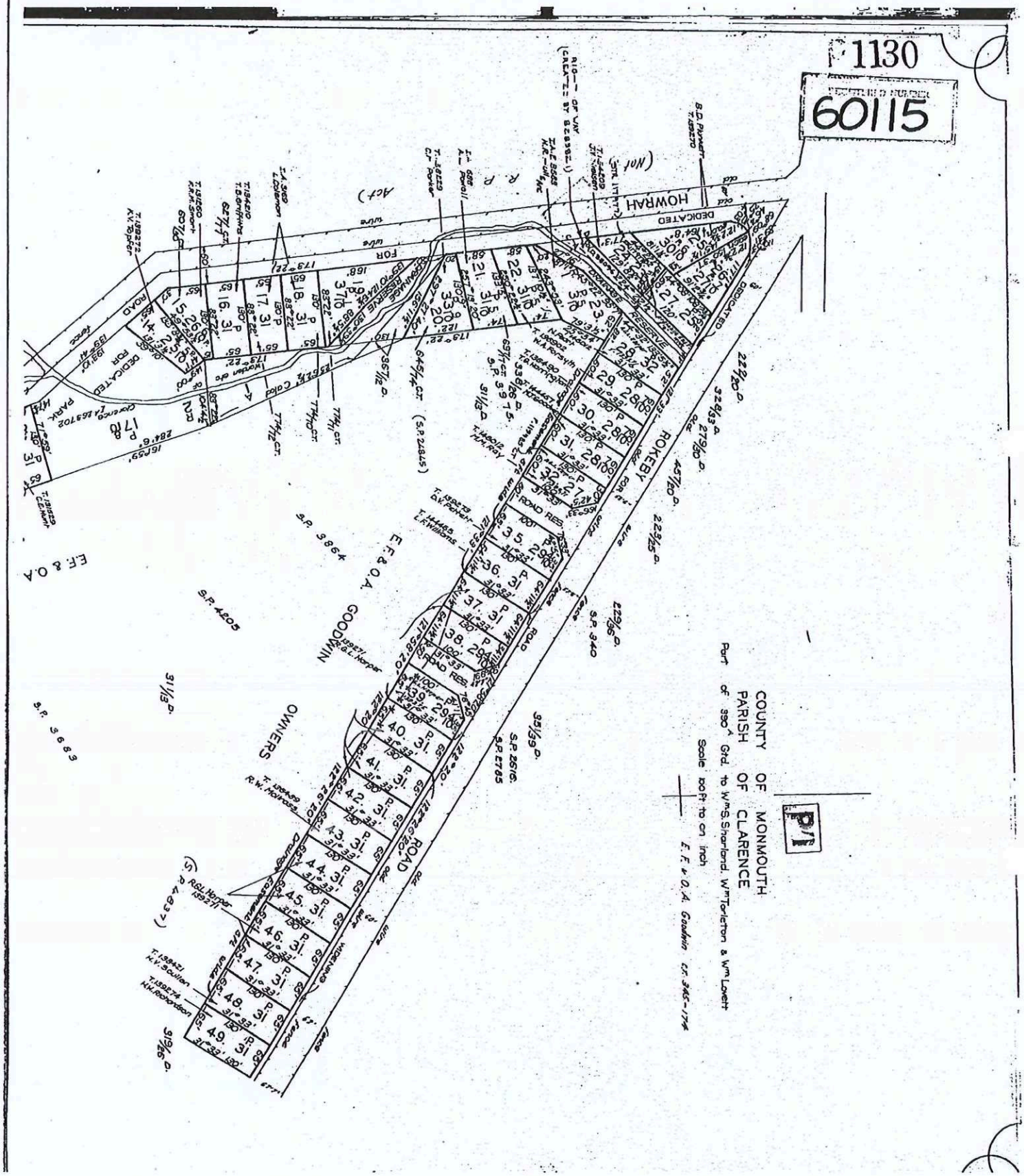
N276444 PRIORITY NOTICE reserving priority for 90 days
D/MORTGAGE AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED to ANDREA LESLEY PAGE
TRANSFER ANDREA LESLEY PAGE to TEW ENTERPRISES PTY LTD
MORTGAGE TEW ENTERPRISES PTY LTD to BANK OF QUEENSLAND LIMITED Lodged by PAGE SEAGER on 16-Jul-2025 BP: N276444

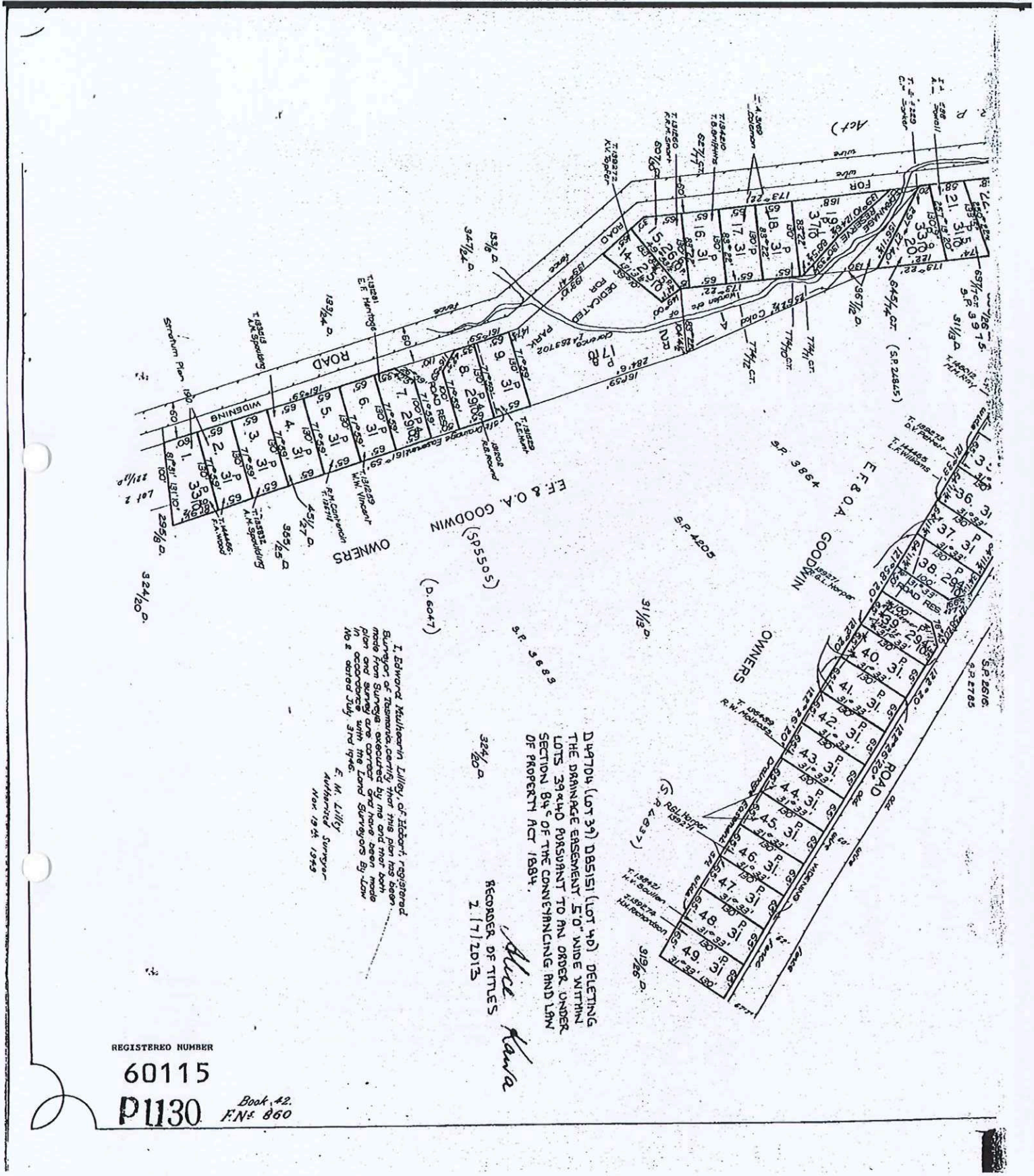
FOLIO PLAN

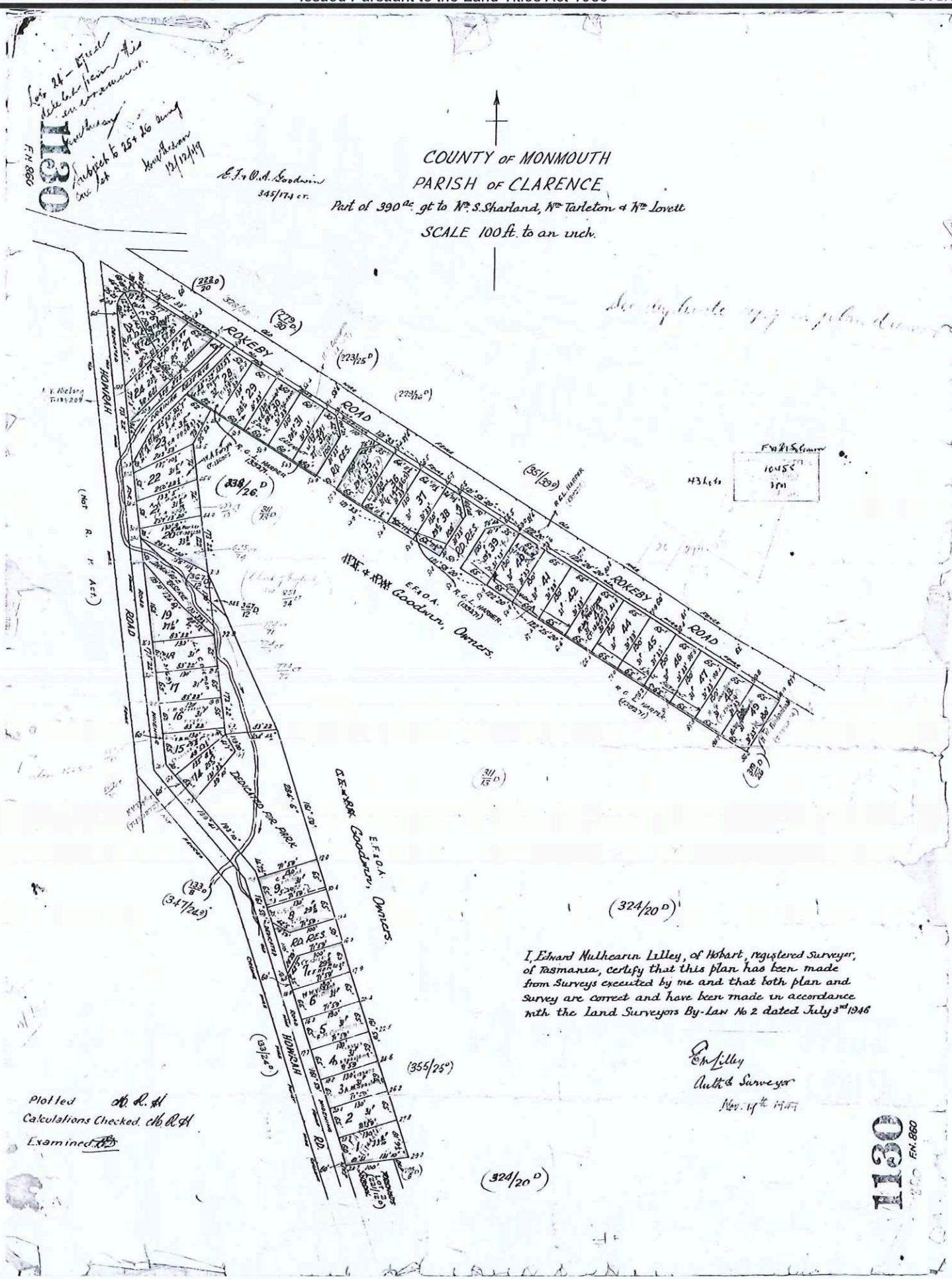
RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

Tasmanian Government







I, Edward Mulhearin Lilley, of Hobart, registered Surveyor, of Tasmania, certify that this plan has been made from Surveys executed by me and that both plan and Survey are correct and have been made in accordance with the Land Surveyors By-Law No 2 dated July 3rd 1946

E.M. Lilley
Auth'd Surveyor
Nov. 14th 1947

Plotted
Calculations Checked
Examined

F.N. 860

Traffic Impact Statement

Access Relocation and Pedestrian Refuge Modification at 18 Howrah Road, Howrah

Hubble Traffic

January 2026

Disclaimer: This report has been prepared based on and in reliance upon the information provided to Hubble Traffic Pty Ltd by the client and gathered by Hubble Traffic Pty Ltd during the preparation of the report. Whilst all reasonable skill, care and diligence has been used in preparation of the report, Hubble Traffic Pty Ltd take no responsibility for errors or omissions arising from misstatements by third parties.

This report has been prepared specifically for the exclusive use of the client named in the report and to the extent necessary, Hubble Traffic Pty Ltd disclaim responsibility for any loss or damage occasioned by use of or reliance upon this report, or the date produced herein, by any third party.

Version	Date	Reason for Issue
Draft	January 2026	Draft issued for client feedback

Contents

1. Introduction

Pinnacle Design and Drafting (Jason Nickerson) has engaged Hubble Traffic Pty Ltd to provide traffic engineering services for the proposed redevelopment of 18 Howrah Road, Howrah.

The project involves demolishing the existing single dwelling, which is currently serviced by a single width crossover near the southern boundary, and replacing it with two two-storey residential townhouses.

Each townhouse will include a double enclosed garage at ground level. Due to the constrained frontage width, the garages are centrally positioned within the site layout, and a single shared driveway located near the midpoint of the Howrah Road frontage represents the most practical and functional access arrangement. This configuration minimises crossover width, supports safe and efficient vehicle movements, and will involve replacing the current crossover with standard kerbing.

The section of Howrah Road adjoining the site is configured with a marked central two-way right-turn lane, supported by solid traffic islands that separate vehicle flows and provide pedestrian protection. A pedestrian refuge islands is positioned directly outside the subject property, and its current location conflicts with the proposed relocation of the access crossover to the midpoint of the site's frontage.

The land use along Howrah Road is predominantly general residential, supported by several recreational facilities including tennis courts, lawn bowling greens, a community meeting space and a men's shed located opposite the development site. These facilities collectively generate a moderate level of pedestrian activity in the area, and retention of appropriate pedestrian facilities is therefore important to maintain safe and convenient crossing opportunities.

2. Purpose of this traffic impact statement

This Traffic Impact Statement examines the implications of relocating the pedestrian refuge island and modifying the access crossover to facilitate the proposed two-dwelling development. The assessment addresses road safety, pedestrian function, sight distance, swept-path performance and compliance with the relevant provisions of the Tasmanian Planning Scheme.

3. Traffic configuration along Howrah Road

The section of Howrah Road adjoining the site includes a central two-way right-turn lane, with a pedestrian refuge island positioned outside the property to provide a safe mid-block crossing point for pedestrians generated by the recreational facilities on the opposite side of the road. The roadway comprises a single traffic lane in each direction and is constructed to an urban standard, incorporating kerb and channel, concrete footpaths on both sides, and established street lighting. This road environment supports moderate traffic volumes and provides an appropriate level of pedestrian and vehicle amenity for the surrounding land uses.

Photograph 3.0 – Howrah Road layout adjacent to the site

4. Relocation of the pedestrian refuge island

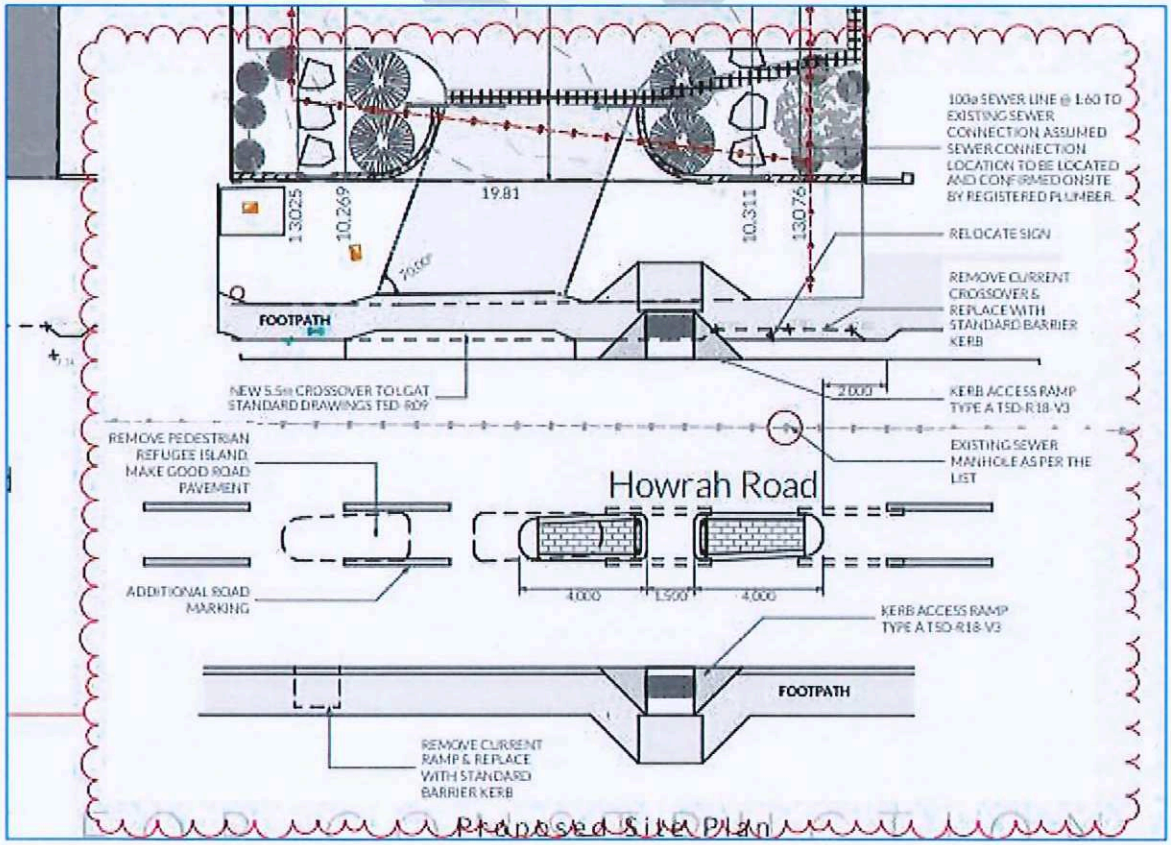
Relocating the existing pedestrian refuge island slightly to the south will enable the proposed access crossover to be positioned centrally along the site frontage. The revised island location avoids conflict with the neighbouring property's access while maintaining an appropriate level of pedestrian protection and crossing opportunity.

Relocating the island further away from the development site is not feasible due to the position of existing crossovers and the need to retain safe access to the recreational car parking serving the tennis centre and bowls club.

Full removal of the pedestrian refuge would not be acceptable from a community or road-user perspective, as it provides an important mid-block crossing point. Shifting the island approximately six metres south preserves its pedestrian function, maintains suitable sight lines, and continues to support safe crossing movements consistent with Austroads guidance.

The six-metre shift represents the minimum relocation necessary to clear the proposed crossover while avoiding conflict with the neighbouring access.

Diagram 4.0 – Relocate pedestrian refuge to the south



4.1. Retaining current property crossover

Retaining the existing southern crossover would prevent the two townhouses from sharing the driveway equitably. The constrained frontage means that a southern-biased access point would disproportionately favour one dwelling, creating an unbalanced internal layout and reducing the functional on-site turning area.

A centrally positioned crossover provides both dwellings with the preferred entry and exit angle for vehicles accessing the double enclosed garages, whereas a significant offset would distort vehicle paths and compromise manoeuvrability.

The central access supports a symmetrical and efficient internal circulation pattern and ensures both garages have comparable turning space and access convenience. This represents a more practical and orderly design outcome for a two-dwelling development and aligns with contemporary residential design principles.

5. Design considerations for relocating the pedestrian refuge

5.1. Removal of the pedestrian refuge

The existing pedestrian refuge island is constructed from precast concrete blocks set above the road surface, with plain concrete infill and pedestrian handrails, as shown in the photograph below. This construction method allows for relatively straightforward removal, with minimal disturbance to the underlying pavement. Any localised pavement damage resulting from the removal works will be reinstated to ensure a smooth and uniform surface, as the area will need to accommodate vehicle movements associated with the proposed development.

These works can be delivered under a Council-issued works permit, with removal of the existing island and construction of the new refuge able to be completed over a short, programmed period. Staging the works will minimise disruption to pedestrian activity, and safe crossing opportunities are expected to be maintained throughout the construction process.

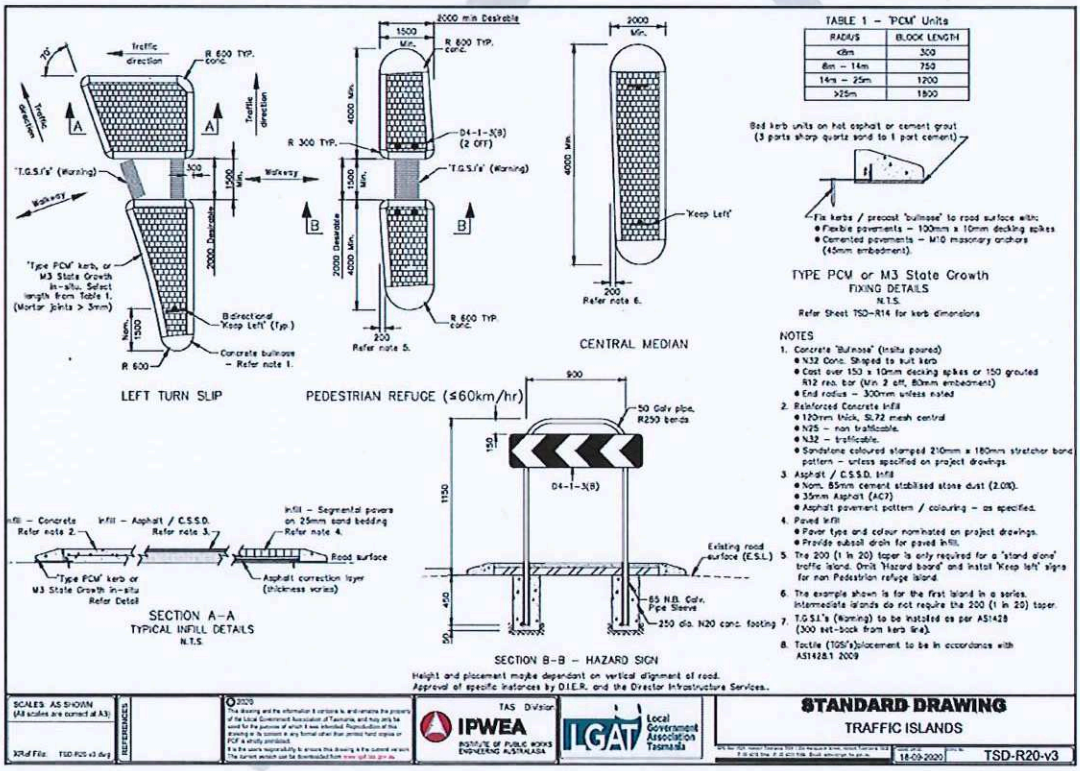
Photograph 5.1 – Existing pedestrian refugee island

5.2. Design standard for new pedestrian refuge

The new pedestrian refuge island will be designed and constructed in accordance with LGAT Standard Drawing TSD-R20-V3. The solid terminal sections will each be 4 metres in length and may be formed using precast concrete blocks pinned to the pavement or by an in-situ concrete pour. The island infill will comprise sandstone-coloured concrete, with the leading nose finished in plain concrete and tapered to provide appropriate offset and deflection for approaching vehicles.

Due to constraints, the minimum 1.5-metre-wide pedestrian walkway will be incorporated at road level, fitted with pedestrian handrails and directional hazard boards. The overall island width will match that of the existing installation, and supplementary pavement markings will be applied to maintain the continuity of the central two-way right-turn lane.

LGAT Extract 5.2 - TSD-R20-V3



5.3. Impact to neighbour property

The neighbouring property to the south, 20 Howrah Road, contains a domestic dwelling that may also operate as a casual massage service. The site is serviced by a single-width crossover located near its northern boundary, with the frontage comprising a concrete hardstand area used for additional parking or as a turning space.

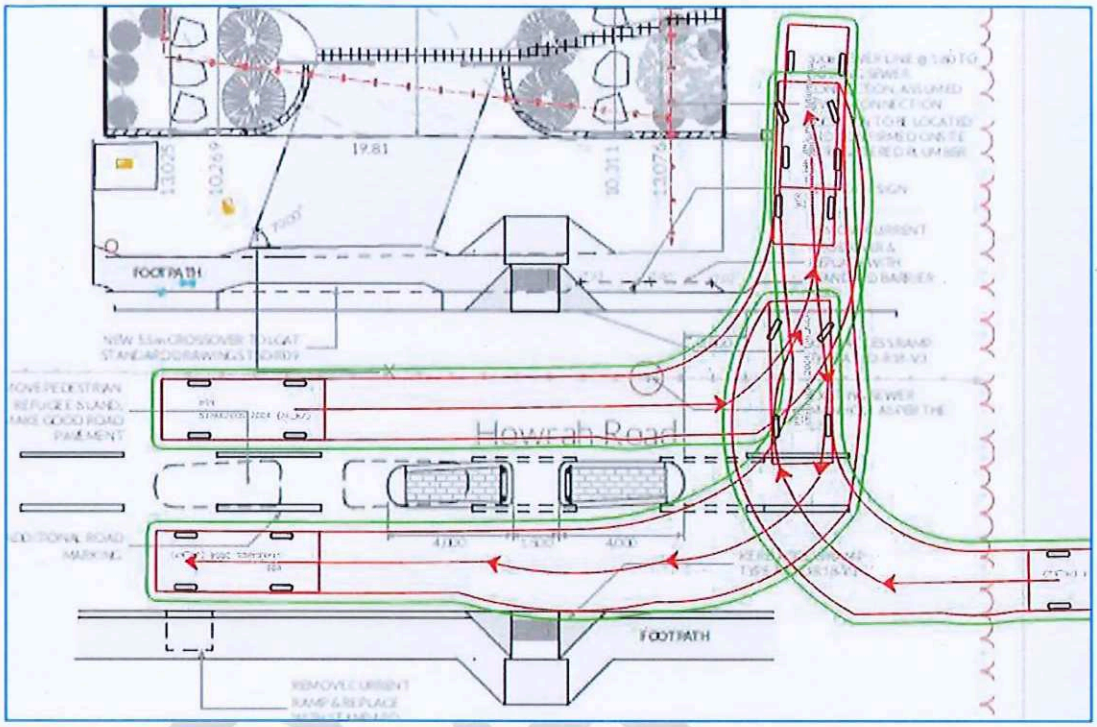
Diagram 5.3 – Neighbouring property at 20 Howrah Road

With the proposed pedestrian refuge island being shifted southward, its new position will be closer to this crossover. Swept-path analysis using B99 design vehicles has been undertaken to confirm that adequate manoeuvring space remains available for vehicles turning at this access. The swept path modelling demonstrates that the relocated island does not impede vehicle movement, and that safe and efficient egress can be maintained.

Photograph 5.3 – Access crossover to 20 Howrah Road

The swept path diagram demonstrates that B99 vehicle can enter and leave the existing access crossover without being impacted by the shifted pedestrian refuge island.

Diagram 5.3 – B99 vehicle swept paths



Shifting the pedestrian refuge island closer to the neighbouring property access may prompt objections from adjoining owners, primarily relating to perceived constraints on vehicle manoeuvring, reduced convenience, or concerns about increased difficulty entering or exiting the site.

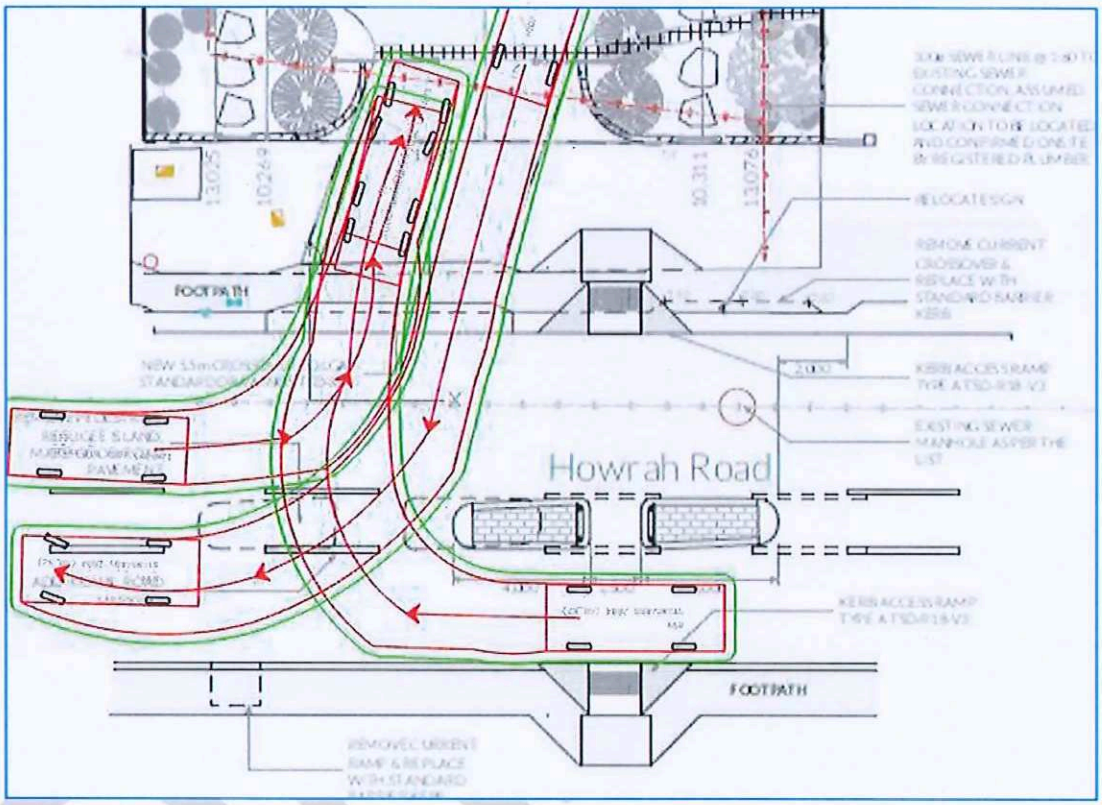
While these concerns are understandable, they are not considered legitimate planning or engineering grounds for objection where swept-path modelling demonstrates that vehicles can continue to enter and leave the access safely and without conflict.

The nose of the solid islands incorporates a PCM kerb, a mountable profile raised approximately 50 millimetres above the road surface, allowing slow-moving vehicles, such as those turning from nearby property accesses, to mount the kerb if required without creating safety issues. There are no signs or fixed objects at the end of the island that would obstruct turning movements, ensuring that vehicles can continue to manoeuvre safely and efficiently.

5.4. Swept path for development site

Vehicle swept path software has also been used to demonstrate B99 vehicles can enter and leave the new access crossover, having consideration the position of the new refuge island.

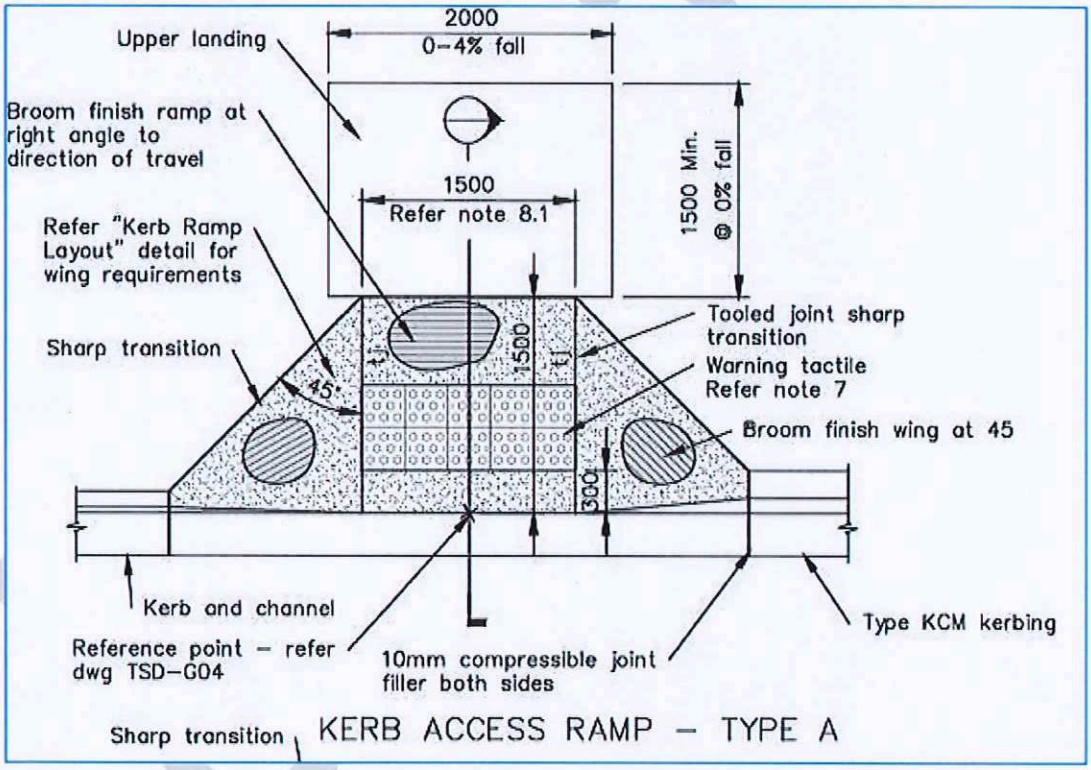
Diagram 5.4 – B99 vehicle swept paths from development site



5.5. Pedestrian kerb ramps

Along both sides of Howrah Road, narrow footpaths are existing, and the new pedestrian refuge will be supported by compliant access ramps on each side of the crossing. These ramps will be designed in accordance with LGAT Standard Drawing TSD-R18-V3, with Type A kerb access ramps incorporated into the layout. Localised widening of the footpath behind each ramp will be undertaken to maintain an adequate flat landing area and ensure safe pedestrian manoeuvring space. The ramp on the development side will be positioned clear of the proposed access crossover, preserving safe pedestrian movement and maintaining an appropriate level of service for all users. These kerb works will not affect existing stormwater drainage paths.

LGAT extract 5.5 – Kerb access ramp type A



5.6. Impact to motorists

The existing and proposed pedestrian refuge islands are located within a marked central two-way right-turn lane, and the adjoining section of Howrah Road is on a straight horizontal alignment. As a result, relocating the island will not adversely affect through-traffic movements in either direction. The straight alignment maintains clear sight lines for approaching drivers, and the continuity of the central turning lane ensures that traffic flow and operational performance along Howrah Road remain unchanged.

5.7. Impact to sight distance from the development site

Relocation of the access crossover for the development site will not present any issues from a driver sight-distance perspective, as this section of Howrah Road is on a straight horizontal alignment with no permanent physical obstructions that would restrict visibility. Sight distance available to drivers in both directions comfortably exceeds the requirements of the Australian Standards for domestic property access. This ensures that vehicles entering and exiting the site can do so safely and efficiently, with adequate time for drivers to observe approaching traffic and complete manoeuvres without undue risk

Available sight distance from the new crossover location is shown below.

Photograph 5.7A – Sight distance to the right

Photograph 5.7B – Sight distance to the left

6. Compliance with the Tasmanian Planning Scheme

The proposed access arrangement and associated pedestrian infrastructure modifications comply with the relevant provisions of the Tasmanian Planning Scheme, specifically the C2.0 Parking and Sustainable Transport Code and the C3.0 Road and Railway Assets Code.

Under the C2.0 Parking and Sustainable Transport Code, the development provides compliant on-site parking through double garages for each dwelling, meeting the acceptable solutions for residential use.

The single crossover arrangement supports safe and efficient vehicle entry and exit, and the internal layout enables on-site turning so that vehicles can enter and leave in a forward direction.

The footpath is set back from the front property boundary, ensuring that drivers exiting the site have clear sight lines to pedestrians travelling along the footpath.

Network pedestrian functionality will be maintained through the provision of compliant kerb ramps and a relocated refuge island designed in accordance with LGAT standards, ensuring safe and convenient pedestrian movement consistent with the intent of the Code.

The proposal also satisfies the C3.0 Road and Railway Assets Code, as the relocated access crossover provides adequate sight distance in both directions, exceeding the requirements of the Australian Standards for domestic property access.

The works do not alter the function or traffic capacity of Howrah Road, nor do they diminish the ability of the road to accommodate cyclists. The straight road alignment ensures that the modified refuge island does not adversely affect through-traffic movements, and the overall operation and safety of the transport network will be maintained.

7. Conclusion

The proposed redevelopment of 18 Howrah Road requires relocation of the existing access crossover to support two new residential dwellings. The current pedestrian refuge island positioned directly outside the property conflicts with the preferred centralised access location.

A detailed review of the road environment, adjoining property access, pedestrian activity and operational requirements of Howrah Road confirms that shifting the refuge island approximately six metres to the south provides the most practical and safe solution.

The relocated island maintains an appropriate pedestrian crossing point for users generated by the nearby recreational facilities, preserves the function of the central two-way right-turn lane, and does not adversely affect through-traffic movements due to the straight road alignment and clear sight lines.

Swept-path analysis demonstrates that both the development site and the neighbouring property at 20 Howrah Road retain safe and efficient vehicle manoeuvring capability with the revised island position. The new refuge island and associated kerb ramps will be designed in accordance with LGAT standards, ensuring compliant pedestrian access and continuity of the existing level of service.

Driver sight distance from the proposed crossover exceeds the requirements of the Australian Standards, confirming that vehicles can enter and exit the site safely.

Overall, the proposed access arrangement and associated pedestrian infrastructure modifications will operate safely, efficiently and in a manner consistent with Austroads guidance and the Tasmanian Planning Scheme.

PINNACLE

PINNACLE

Note: The images provided are artistic representations only and should not be used as references for final colours, finishes, or external/internal features.

18 Howrah Rd, Howrah, 7018

Owner(s) or Clients	Tew Enterprises Pty Ltd
Building Classification	1a
Designer	Jason Nickerson CC6073Y
Total Floor Area (Combined)	493.9m^2 Deck 67.1m^2
Alpine Area	N/A
Other Hazards (e.g.. High wind, earthquake, flooding, landslip, dispersive soils, sand dunes, mine subsidence, landfill, snow & ice, or other relevant factors)	Floor Prone Hazard Area Code, Safe Guarding of Airports Code

Title Reference	60115/17
Zoning	General Residential
Land Size	785m^2
Design Wind Speed	N2
Soil Classification	P
Climate Zone	7
Corrosion Environment	Low
Bushfire Attack Level (BAL)	Low

Changes List			
Issue	Description of change	Date	Designer
Ch - 01	TIA changes for RFI	22.01.26	JRN
Ch - 02	Council RFI changes (shadows diagrams, site elevation, window changes)	04.03.26	CJ
Ch - 03	Council RFI	22.03.26	JRN

ID	Sheet Name	Issue
A.01	Site Plan	DA - 02
A.02	Floor Plan - Lower	DA - 02
A.03	Floor Plan - Upper	DA - 02
A.04	Elevations	DA - 02
A.05	Elevations	DA - 02
A.06	Site Elevation	DA - 02
A.07	Roof Plan	DA - 02
A.08	Electrical Plan - Lower	DA - 02
A.09	Electrical Plan - Upper	DA - 02
A.10	Door & Window Schedule	DA - 02
A.11	Door & Window Schedule	DA - 02
A.12	Shadow Diagrams 21st June 0900	DA - 02
A.13	Shadow Diagrams 21st June 1200	DA - 02
A.14	Shadow Diagrams 21st June 1500	DA - 02
A.15	Proposed Shadow Diagrams 21st June	DA - 02
C.01	Civil Plan	DA - 02
C.02	Parking	DA - 02
P.01	Sewer & Water Plan	DA - 02

Legend

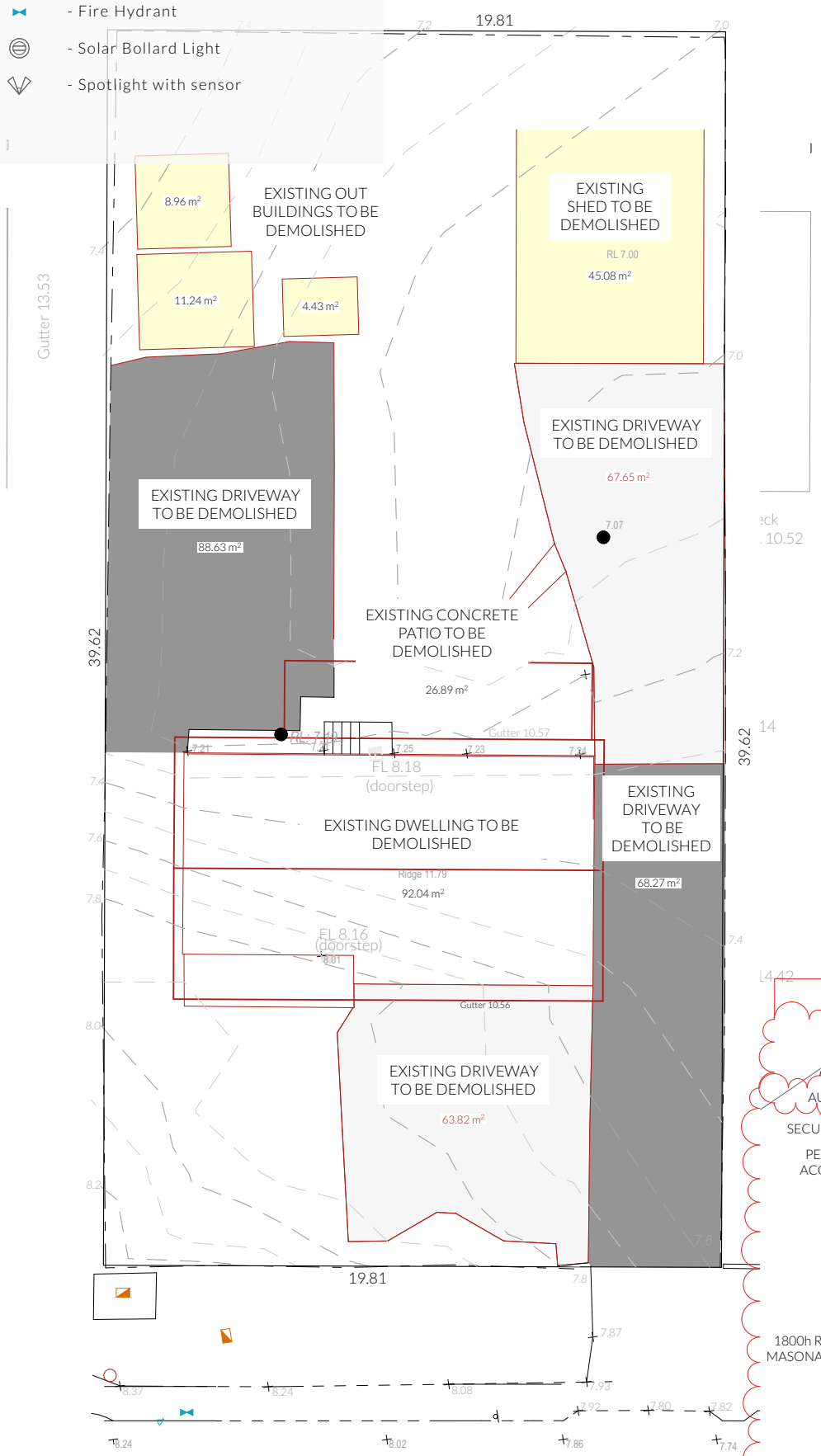
- Electrical Connection
- Electrical Turret
- Sewer Connection
- Stormwater Connection
- Telstra Connection
- Telstra Pit
- Water Meter
- Water Stop Valve
- Fire Hydrant
- Solar Bollard Light
- Spotlight with sensor

Site Areas

Site Area	785 m²
Building Footprint	255.54 m²
Total Site Coverage	32.55%

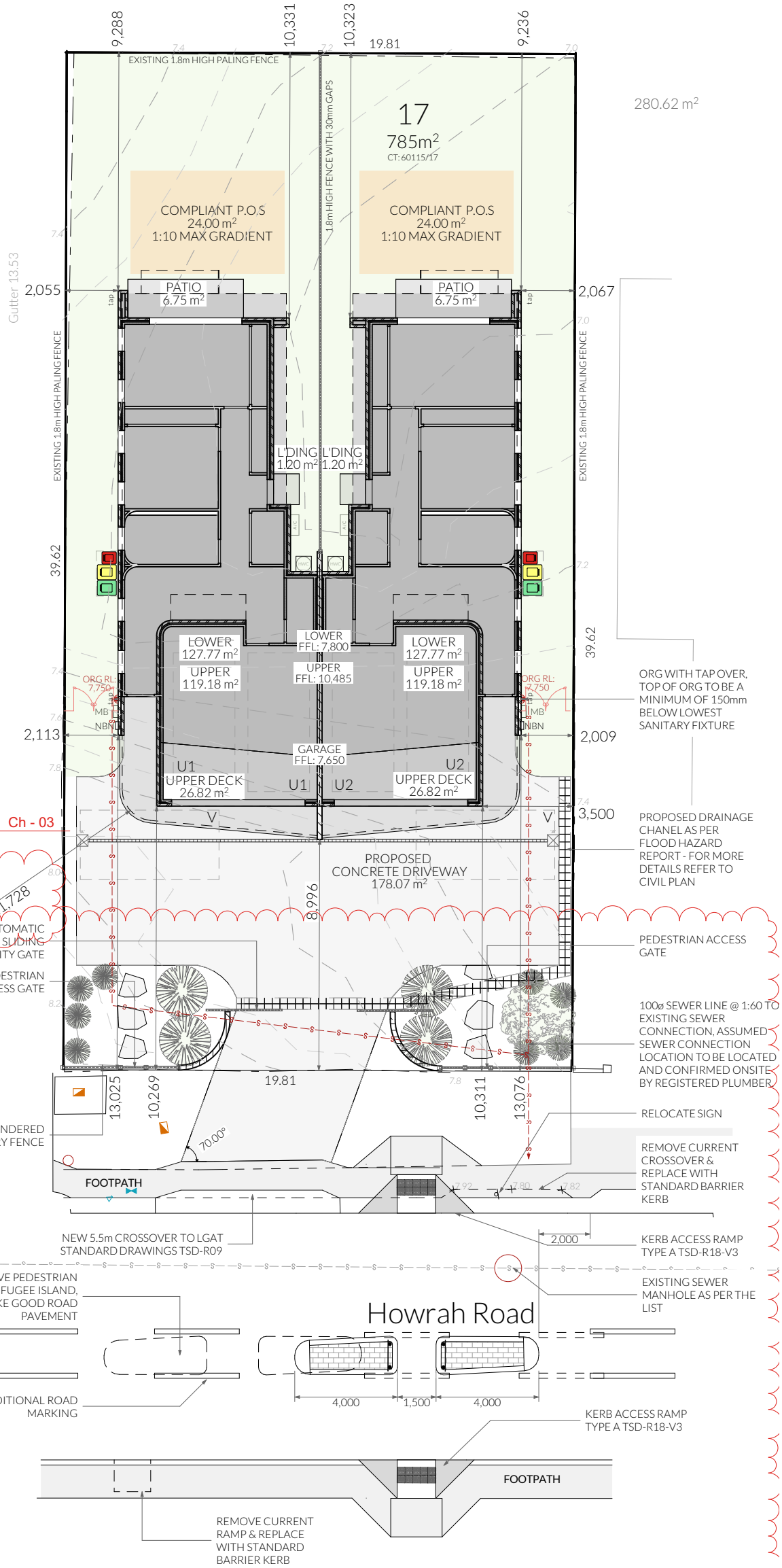
Important Note

Refer to Flood Hazard report completed by Flussig dated November 2025 for details on Flood Hazard Design.



Existing Site Plan

Ch - 01



Proposed Site Plan

PINNACLE

PINNACLE DRAFTING & DESIGN
7/3 Abernant Way, Cambridge 7170
03 6248 4218
admin@pinnacledrafting.com.au
www.pinnacledrafting.com.au
Licence Number: CC6073Y

Issue	Date	Designer
Ch - 01	22.01.26	JRN
Ch - 03	22.03.26	JRN

NOTE: Refer to cover page for further details on changes.

Site Plan

Scale: 1:200 @ A3

Pg. No: A.01

Revision: DA - 02

Approved by: JRN

Proposal: Unit Development

Client: Tew Enterprises Pty Ltd

Address: 18 Howrah Rd, Howrah, 7018

Date: 04/11/25

Drawn by: JRN

Job No: 074-2025

Engineer: Aldanmark

Building Surveyor: Freestone

BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

Construction of sanitary compartments 10.4.2 of NCC 2022

The door to a fully enclosed sanitary compartment must -

- open outwards; or
- slide; or
- be readily removable from the outside of the compartment.

unless there is a clear space of at least 1.2 m, measured in accordance with Figure 10.4.2 of NCC 2022 Vol II, between the closet pan within the *sanitary compartment* and the doorway.

Note: Safe Movement & Egress

Openable windows greater than 4m above the surface below are to be fitted with a device to limit opening or a suitable screen so a 125mm sphere cannot pass through. Except for Bedrooms, where the requirement is for heights above 2m. Refer to clauses 11.3.7 and 11.3.8 of NCC 2022 for further information on suitable protective devices.

Note: Paved Areas

All paths and patios to fall away from dwelling.

Note: Stair Construction

All stairs to be constructed in accordance with NCC Vol II 2022 Part 11.2.2:
Riser: Min 115mm - Max 190mm
Going: Min 240mm - Max 355mm
Slope (2R+G): Max 550 - Min 700
For stairways serving non-habitable room used infrequently, refer to table 11.2.2(b).

Landings to comply with Clause 11.2.5 and be a minimum of 750mm deep measured 500mm from the inside edge of the landing.

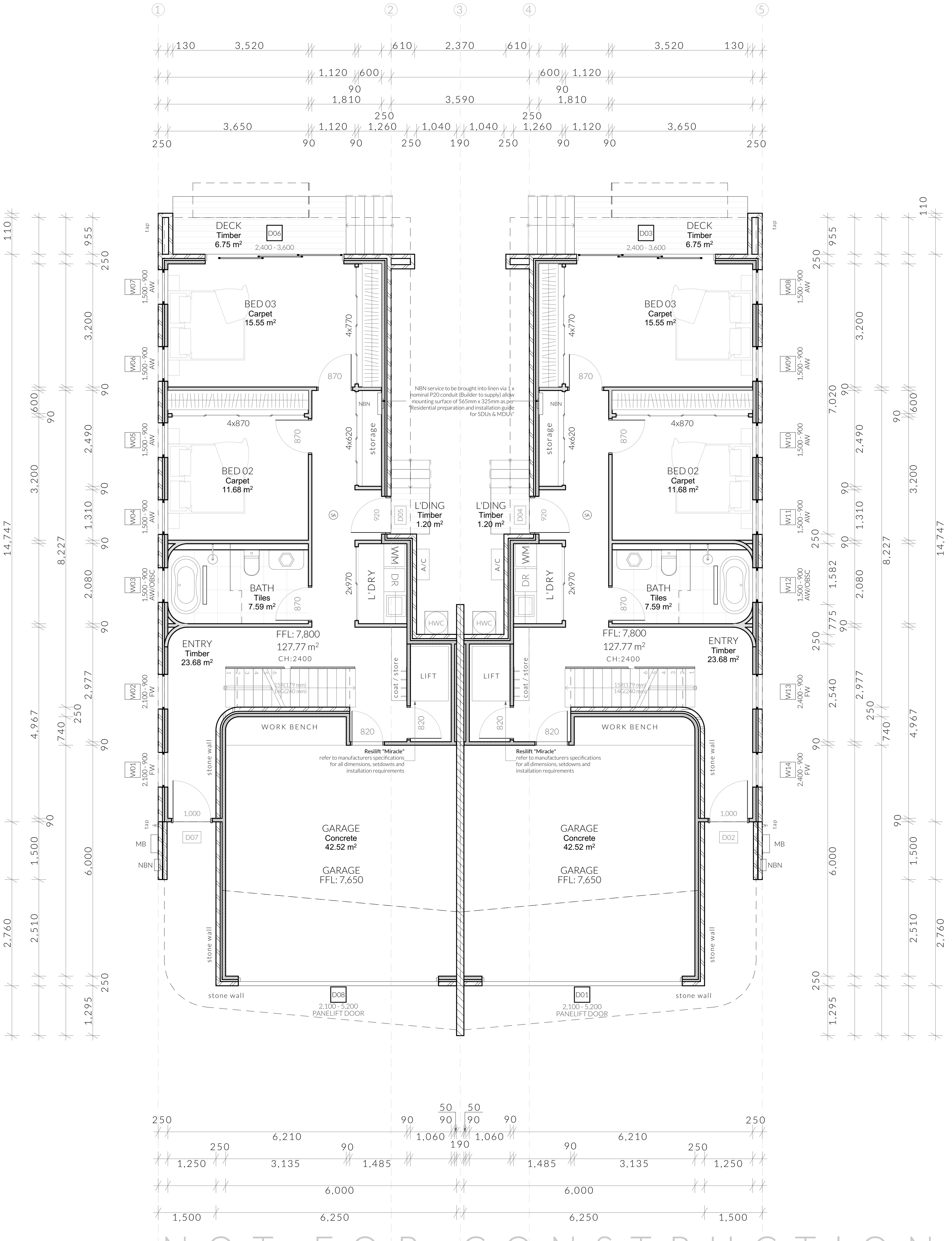
Slip resistance of treads, nosings and ramps to comply with Clause 11.2.4.

Heights of rooms & other spaces 10.3.1 of NCC 2022

Heights of rooms and other spaces must not be less than;
(a)in a *habitable room* excluding a kitchen - 2.4 m; and
(b)in a kitchen - 2.1 m; and
(c)in a corridor, passageway or the like - 2.1 m; and
(d)in a bathroom, shower room, laundry, *sanitary compartment*, airlock, pantry, storeroom, garage, car parking area or the like - 2.1 m; and
(e)in a room or space with a sloping ceiling or projections below the ceiling line within- See NCC directly for these items
(f)in a stairway, ramp, *landing*, or the like - 2.0 m measured vertically above the nosing line of stairway treads or the floor surface of a ramp, *landing* or the like.

If required onsite, the builder may work within the tolerances of the above as specified within the NCC 2022 Vol II. Builder to contact *Pinnacle* before undertaking works.

A/P Access Panel
AJ Articulation Joint
SA Smoke Alarm



Floor Areas - Unit 1

Lower Floor	127.77m²
Upper Floor	119.18m²
Total Floor Area	246.95m²
Total Deck Area	33.55m²

Floor Areas - Unit 2

Lower Floor	127.77m²
Upper Floor	119.18m²
Total Floor Area	246.95m²
Total Deck Area	33.55m²

Floor Areas - Total

Lower Floor	255.54m²
Upper Floor	238.36m²
Total Floor Area	493.9m²
Total Deck Area	67.1m²

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Licence Number: CC6073Y

Issue	Date	Designer

NOTE: Refer to cover page for further details on changes.

Floor Plan - Lower

Scale: 1:100 @ A3
Pg. No: A.02
Revision: DA - 02
Approved by: JRN

Proposal: Unit Development
Client: Tew Enterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

N

BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

Construction of sanitary compartments 10.4.2 of NCC 2022

The door to a fully enclosed sanitary compartment must -

- open outwards; or
- slide; or
- be readily removable from the outside of the compartment.

unless there is a clear space of at least 1.2 m, measured in accordance with Figure 10.4.2 of NCC 2022 Vol II, between the closet pan within the *sanitary compartment* and the doorway.

Note: Safe Movement & Egress

Openable windows greater than 4m above the surface below are to be fitted with a device to limit opening or a suitable screen so a 125mm sphere cannot pass through. Except for Bedrooms, where the requirement is for heights above 2m. Refer to clauses 11.3.7 and 11.3.8 of NCC 2022 for further information on suitable protective devices.

Note: Paved Areas

All paths and patios to fall away from dwelling.

Note: Stair Construction

All stairs to be constructed in accordance with NCC Vol II 2022 Part 11.2.2:
Riser: Min 115mm - Max 190mm
Going: Min 240mm - Max 355mm
Slope (2R+G): Max 550 - Min 700
For stairways serving non-habitable room used infrequently, refer to table 11.2.2(b).

Landings to comply with Clause 11.2.5 and be a minimum of 750mm deep measured 500mm from the inside edge of the landing.

Slip resistance of treads, nosings and ramps to comply with Clause 11.2.4.

Heights of rooms & other spaces 10.3.1 of NCC 2022

Heights of rooms and other spaces must not be less than;
(a)in a *habitable room* excluding a kitchen - 2.4 m; and
(b)in a kitchen - 2.1 m; and
(c)in a corridor, passageway or the like - 2.1 m; and
(d)in a bathroom, shower room, laundry, *sanitary compartment*, airlock, pantry, storeroom, garage, car parking area or the like - 2.1 m; and
(e)in a room or space with a sloping ceiling or projections below the ceiling line within- See NCC directly for these items
(f)in a stairway, ramp, *landing*, or the like - 2.0 m measured vertically above the nosing line of stairway treads or the floor surface of a ramp, *landing* or the like.

If required onsite, the builder may work within the tolerances of the above as specified within the NCC 2022 Vol II. Builder to contact *Pinnacle* before undertaking works.

A/P Access Panel

AJ Articulation Joint

SA Smoke Alarm

Floor Areas - Unit 1

Lower Floor	127.77m²
Upper Floor	119.18m²
Total Floor Area	246.95m²
Total Deck Area	33.55m²

Floor Areas - Unit 2

Lower Floor	127.77m²
Upper Floor	119.18m²
Total Floor Area	246.95m²
Total Deck Area	33.55m²

Floor Areas - Total

Lower Floor	255.54m²
Upper Floor	238.36m²
Total Floor Area	493.9m²
Total Deck Area	67.1m²

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Issue	Date	Designer
Ch - 02	04.03.26	CJ

NOTE: Refer to cover page for further details on changes.

Floor Plan - Upper

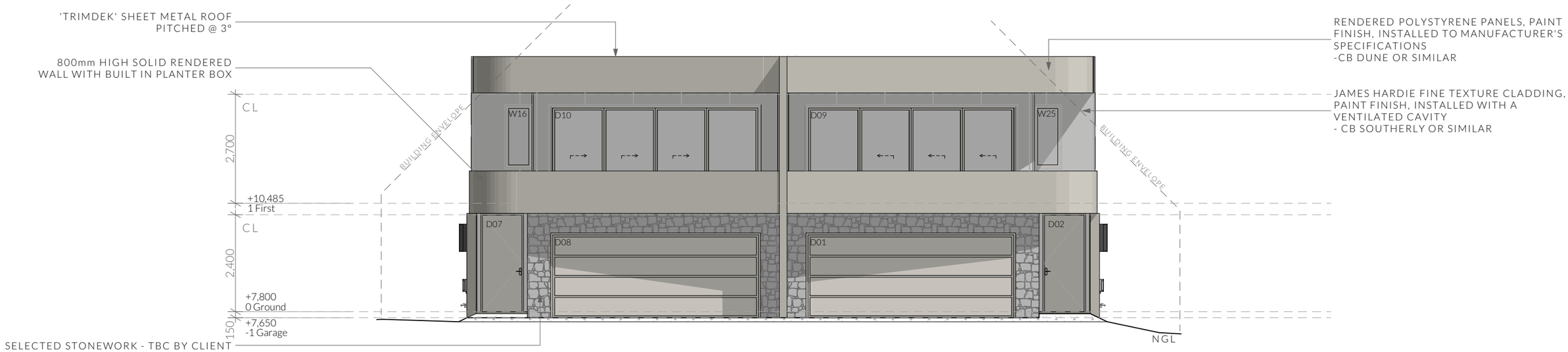
Scale: 1:100 @ A3
Pg. No: A.03
Revision: DA - 02
Approved by: JRN

Proposal: Unit Development
Client: Tew Enterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

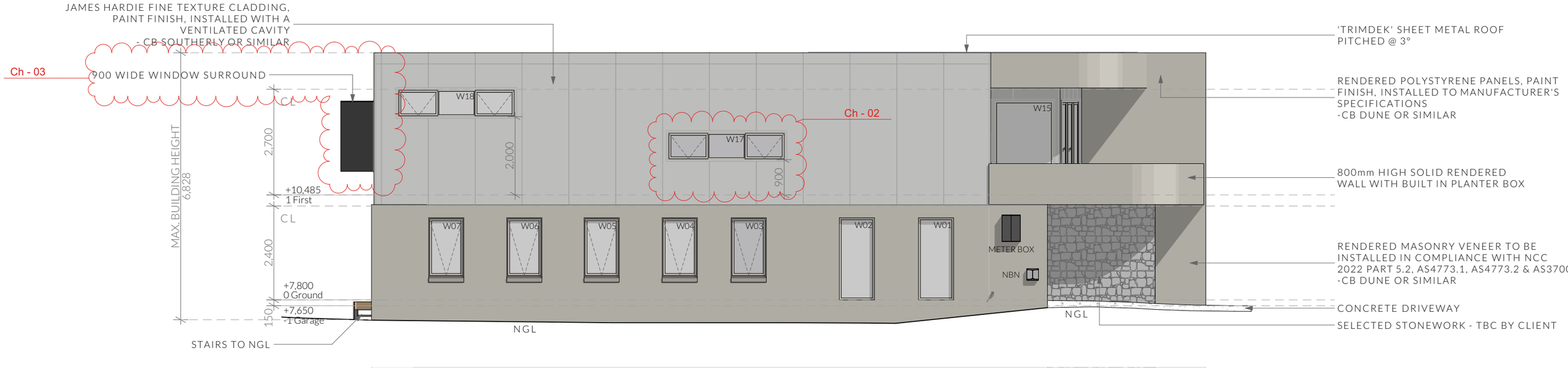
Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

N

BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA



West Elevation 1:100



North Elevation 1:100

NOTE
Clearances between cladding and ground shall comply with Clause 7.5.7 of the NCC 2022 and shall be a minimum clearance of:
100mm in low rainfall intensity areas or sandy, well-drained areas; or 50mm above impermeable areas that slope away from the building; or 150mm in any other case.

Wall cladding must extend a minimum of 50 mm below the bearer or lowest horizontal part of the suspended floor framing.

U.N.O in builders specifications or located in saline environments or if using a glazed finish brick, brickwork is to be installed in stretcher bond pattern with raked joints.

As per NCC parts 11.3.7 and 11.3.8,
Openable windows greater than 4m above ground level are to be fitted with a device to limit the opening or a suitable screen so a 125mm sphere cannot pass through, and withstand a force of 250N. Except for bedrooms, where the requirement is for heights above 2m.

All stairs to be constructed in accordance with NCC 2022 Vol II Part 11.2.2
Riser: Min 115mm - Max 190mm Going: Min 240mm - Max 355mm Slope (2R+G): Max 550 - Min 700

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Elevations
Revision: DA - 02
Approved by: JRN
Scale: 1:100 @A3
Pg. No: A.04

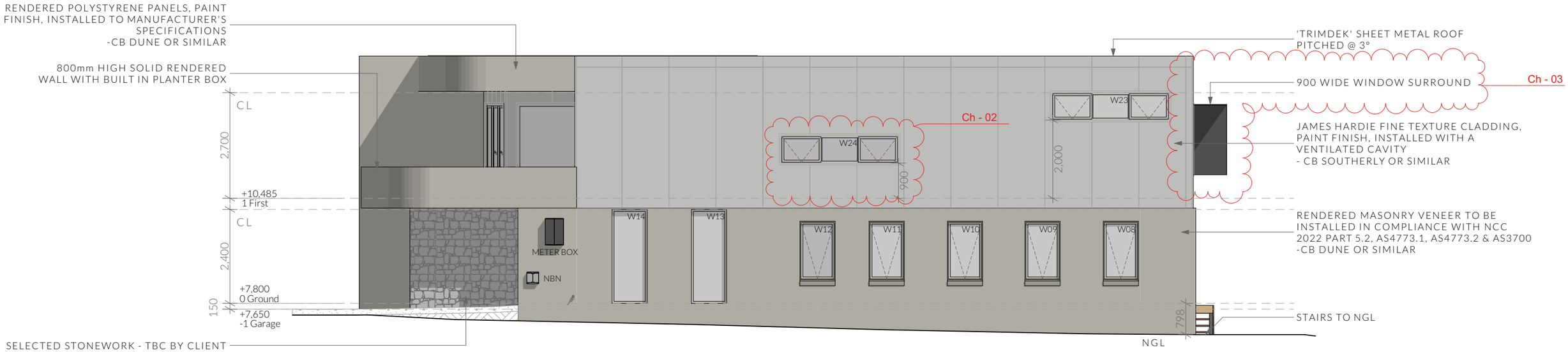
Proposal: Unit Development
Client: TewEnterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

Issue	Date	Designer
Ch - 02	04.03.26	CJ
Ch - 03	22.03.26	JRN

NOTE: Refer to cover page for further details on changes.

BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA



South Elevation 1:100

East Elevation 1:100

NOTE
Clearances between cladding and ground shall comply with Clause 7.5.7 of the NCC 2022 and shall be a minimum clearance of:
100mm in low rainfall intensity areas or sandy, well-drained areas; or 50mm above impermeable areas that slope away from the building; or 150mm in any other case.

Wall cladding must extend a minimum of 50 mm below the bearer or lowest horizontal part of the suspended floor framing.

U.N.O in builders specifications or located in saline environments or if using a glazed finish brick, brickwork is to be installed in stretcher bond pattern with raked joints.

As per NCC parts 11.3.7 and 11.3.8,
Openable windows greater than 4m above ground level are to be fitted with a device to limit the opening or a suitable screen so a 125mm sphere cannot pass through, and withstand a force of 250N. Except for bedrooms, where the requirement is for heights above 2m.

All stairs to be constructed in accordance with NCC 2022 Vol II Part 11.2.2
Riser: Min 115mm - Max 190mm Going: Min 240mm - Max 355mm Slope (2R+G): Max 550 - Min 700

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Elevations

Revision: DA - 02
Approved by: JRN

Scale: 1:100 @ A3
Pg. No: A.05

Proposal: Unit Development
Client: TewEnterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

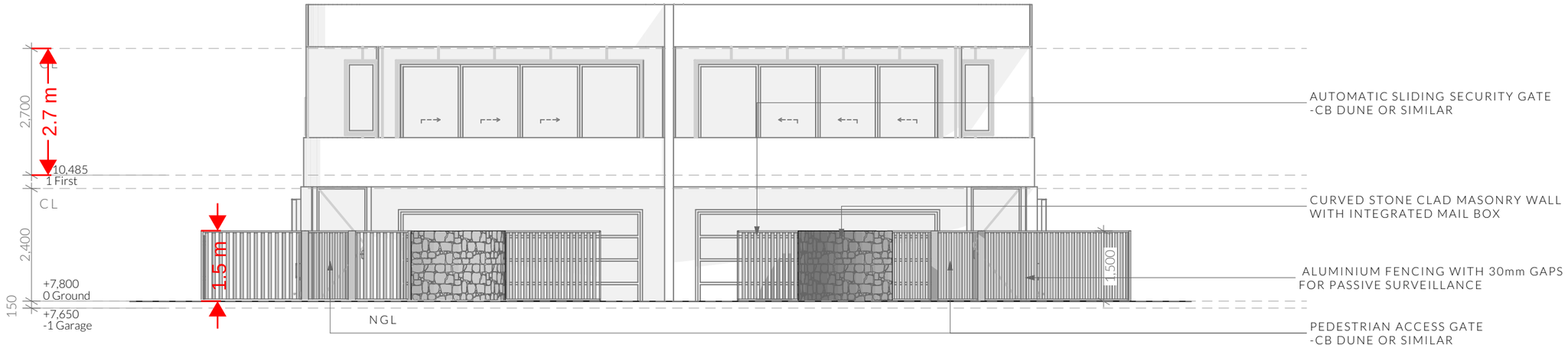
Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

Issue	Date	Designer
Ch - 02	04.03.26	CJ
Ch - 03	22.03.26	JRN

NOTE: Refer to cover page for further details on changes.

BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

Ch - 02



West Site Elevation 1:100

NOTE
Clearances between cladding and ground shall comply with Clause 7.5.7 of the NCC 2022 and shall be a minimum clearance of:
100mm in low rainfall intensity areas or sandy, well-drained areas; or 50mm above impermeable areas that slope away from the building; or 150mm in any other case.

Wall cladding must extend a minimum of 50 mm below the bearer or lowest horizontal part of the suspended floor framing.

U.N.O in builders specifications or located in saline environments or if using a glazed finish brick, brickwork is to be installed in stretcher bond pattern with raked joints.

As per NCC parts 11.3.7 and 11.3.8,
Openable windows greater than 4m above ground level are to be fitted with a device to limit the opening or a suitable screen so a 125mm sphere cannot pass through, and withstand a force of 250N. Except for bedrooms, where the requirement is for heights above 2m.

All stairs to be constructed in accordance with NCC 2022 Vol II Part 11.2.2
Riser: Min 115mm - Max 190mm Going: Min 240mm - Max 355mm Slope (2R+G): Max 550 - Min 700

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Site Elevation

Revision: DA - 02
Approved by: JRN

Scale: 1:100 @A3
Pg. No: A.06

Proposal: Unit Development
Client: Tew Enterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

Issue	Date	Designer
Ch - 02	04.03.26	CJ

NOTE: Refer to cover page for further details on changes.

BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

Ventilation of roof spaces NCC 2022 Part 10.8.3

A roof must have a roof space that-
- (a) is located-
  - (i) immediately above the primary insulation layer; or
  - (ii) immediately above sarking with a vapour permeance of not less than 1.14 µg/N.s, which is immediately above the primary insulation layer; or
  - (iii) immediately above ceiling insulation; and
- (b) has a height of not less than 20 mm; and
- (c) is either-
  - (i) ventilated to outdoor air through evenly distributed openings in accordance with Table 10.8.3; or
  - (ii) located immediately underneath the roof tiles of an unsarked tiled roof.

Stormwater Notes

All gutters, downpipes and rain heads to be designed and installed in compliance with AS3500.3 & NCC 2022 Volume II Part 7.4.

Roofing Cladding

Roof cladding, flashings, cappings, roof sheeting and fixings are to be installed in accordance with NCC 2022 Volume II Part 7.2 for sheet roofing and Part 7.3 for tiled and shingle roofing.

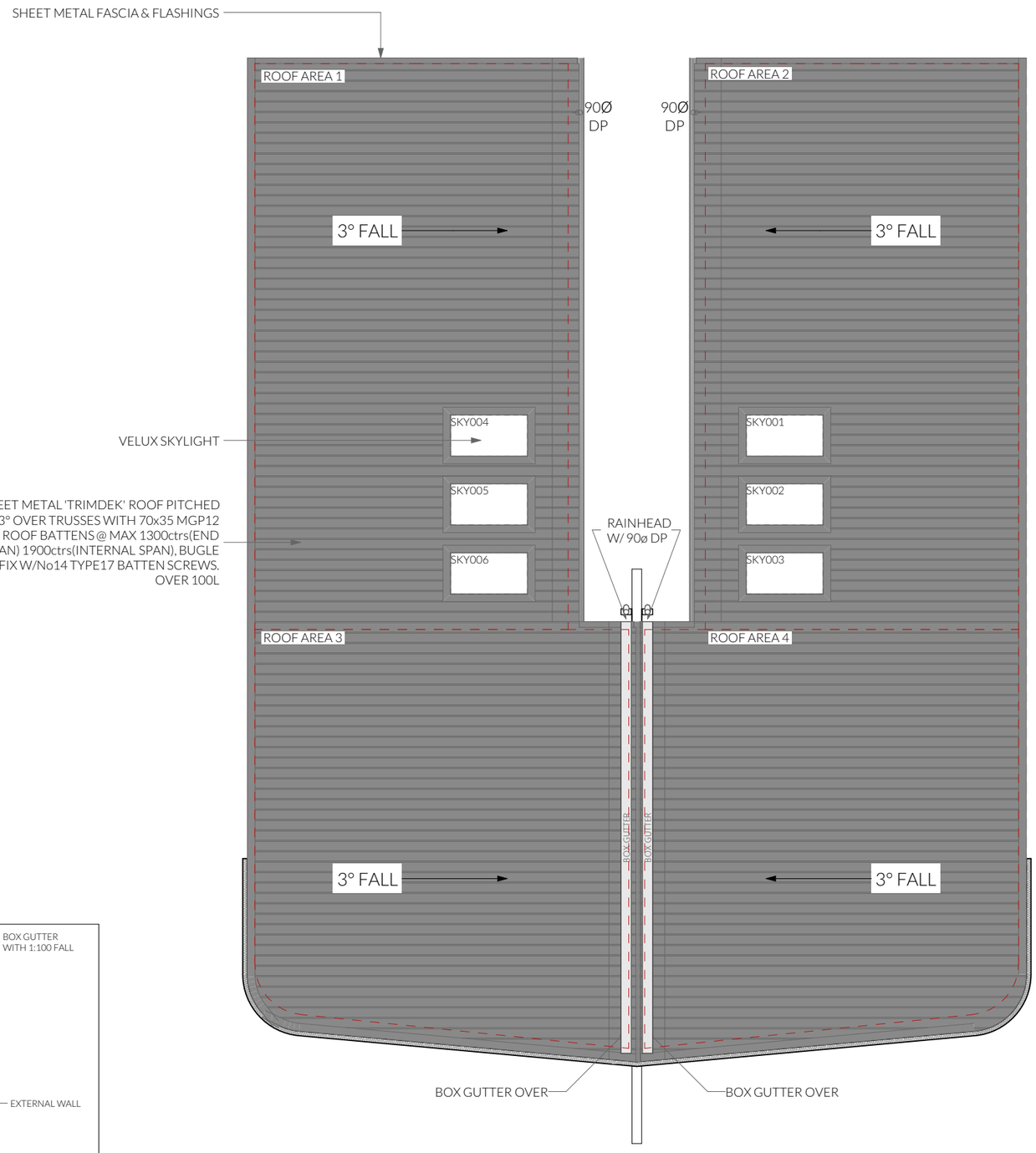
Eaves & Soffit Linings

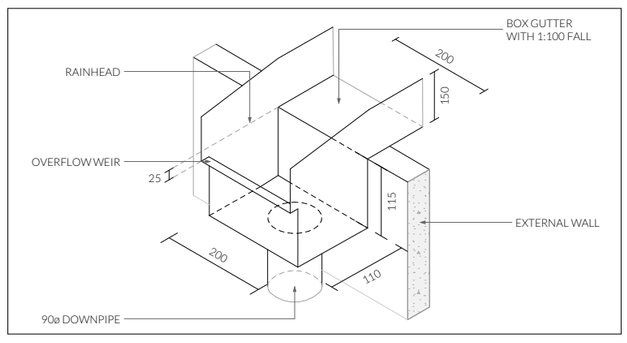
To comply with NCC 2022 Vol II Part 7.5.5 and where provided, external fibre-cement sheets and linings used as eaves and soffit linings must-
- (a) comply with AS/NZS 2908.2 or ISO 8336; and
- (b) be fixed in accordance with Table 7.5.5 and Figure 7.5.5 using-
  - (i) 2.8 × 30 mm fibre-cement nails; or
  - (ii) No. 8 wafer head screws (for 4.5 mm and 6 mm sheets only); or
  - (iii) No. 8 self embedding head screws (for 6 mm sheets only).

Refer to table 7.5.5 for trimmer and fastener spacings.

ROOF PITCH	VENTILATION OF OPENINGS (TABLE 10.8.3)
<10°	25,000 mm2/m provided at each of two opposing ends

(1) Ventilation openings are specified as a minimum free open area per metre length of the longest horizontal dimension of the roof.
(2) For the purposes of this Table, high level openings are openings provided at the ridge or not more than 900 mm below the ridge or highest point of the roof space, measured vertically.





EXTERNAL RAIN HEAD DETAIL (TYP) N.T.S

Parapet cappings

Where a wall cladding is used to form a parapet wall, the cladding must be attached to a supporting frame and have a capping installed that complies with the following:
- (a) Cappings must-
  - (i) be purpose made, machine-folded sheet metal or equivalent sections of a material compatible with all up and downstream metal roof covering materials in accordance with 7.2.2(2); and
  - (ii) extend not less than 50 mm down the sides of the parapet; and
  - (iii) be separated from the supporting framing by a vapour permeable sarking installed in accordance with (f); and
  - (iv) be fixed with either self drilling screws or rivets with rubber washers at intervals of not more than 500 mm that do not penetrate the top of cappings, except at joints and corners.
- (b) The top of the capping must slope a minimum of 5 degrees.
- (c) Joints in cappings must-
  - (i) overlap by not less than 50 mm in the direction of flow; and
  - (ii) be securely fastened at intervals of not more than 40 mm; and
  - (iii) have sealant installed between laps.
- (d) Fixing for cappings must be compatible with the capping material in accordance with 7.2.2.
- (e) Lead cappings must not be used with prepainted steel or zinc/aluminium steel or on any roof if the roof is part of a drinking water catchment area.
- (f) Sarking must comply with AS 4200.1 and be installed behind all wall cladding where parapets are installed, with-
- (i) each adjoining sheet or roll being-
  - (A) overlapped not less than 150 mm; or
  - (B) taped together; and
  - sarking fixed to supporting members at not more than 300 mm centres.

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Roof Plan

Revision: DA - 02
Approved by: JRN

Scale: 1:100 @ A3
Pg. No: A.07

Proposal: Unit Development
Client: Tew Enterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

Issue	Date	Designer

NOTE: Refer to cover page for further details on changes.

BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

ELECTRICAL LEGEND - Lower Floor

Symbol	Description	Allowance	Quantity
D	DATA - CAT 6 (RJ45) - 1 GANG		2
	FAN - 3 IN 1 (4 LAMP)	10W (LIGHT)	2
	FAN - CEILING - EXHAUST		4
2.400H CEILING MOUNTED	GPO - (1) SINGLE (CEILING MOUNTED)		2
2	GPO - (2) DOUBLE		30
W/PROOF 2	GPO - WEATHER PROOF DOUBLE		4
R	LIGHT - CEILING - DOWNLIGHT RECESSED	10W	26
	LIGHT - CEILING - LED BATTEN	20W	4
W1	LIGHT - WALL MOUNTED - TYPE 1	10W	10
	SWITCH - LIGHT 1 GANG		10
2	SWITCH - LIGHT 2 GANG		8

Smoke Alarms Part 9.5 of NCC 2022

Smoke alarms must-
(a)be located in-
(i)a Class 1a building in accordance with 9.5.2 and 9.5.4; and
(ii)a Class 1b building in accordance with 9.5.3 and 9.5.4; and

(b)comply with AS 3786, except that in a Class 10a private garage where the use of the area is likely to result in smoke alarms causing spurious signals, any other alarm deemed suitable in accordance with AS 1670.1 may be installed provided that smoke alarms complying with AS 3786 are installed elsewhere in the Class 1 building; and
(c)be powered from the consumer mains source where a consumer mains source is supplied to the building; and be interconnected where there is more than one alarm.

In a Class 1a building, smoke alarms must be located in-
(a)any storey containing bedrooms, every corridor or hallway associated with a bedroom, or if there is no corridor or hallway, in an area between the bedrooms and the remainder of the building; and
(b) each other storey not containing bedrooms.

Smoke alarms required by 9.5.2 and 9.5.3 must be installed on or near the ceiling, in accordance with the following:
(a)Where a smoke alarm is located on the ceiling it must be-
(i)a minimum of 300 mm away from the corner junction of the wall and ceiling; and
(ii)between 500 mm and 1500 mm away from the high point and apexes of the ceiling, if the room has a sloping ceiling.
(b)Where (a) is not possible, the smoke alarm may be installed on the wall, and located a minimum of 300 mm and a maximum of 500 mm off the ceiling at the junction with the wall.

Note: Exhaust Fans

Exhaust fans to comply with NCC 2022 Vol 2 Part 10.8.2 and have;
-An exhaust system installed in a kitchen, bathroom, sanitary compartment or laundry must have a minimum flow rate of-
(a)25 L/s for a bathroom or sanitary compartment; and
(b)40 L/s for a kitchen or laundry.
-Exhaust from a kitchen, kitchen range hood, bathroom, sanitary compartment or laundry must discharge directly or via a shaft or duct to outdoor air.
-Where a venting clothes dryer is installed, it must discharge directly or via a shaft or duct to outdoor air.
-An exhaust system that is not run continuously and is serving a bathroom or sanitary compartment that is not ventilated in accordance with 10.6.2(a) must-
(a)be interlocked with the room's light switch; and
(b)include a run-on timer so that the exhaust system continues to operate for 10 minutes after the light switch is turned off.

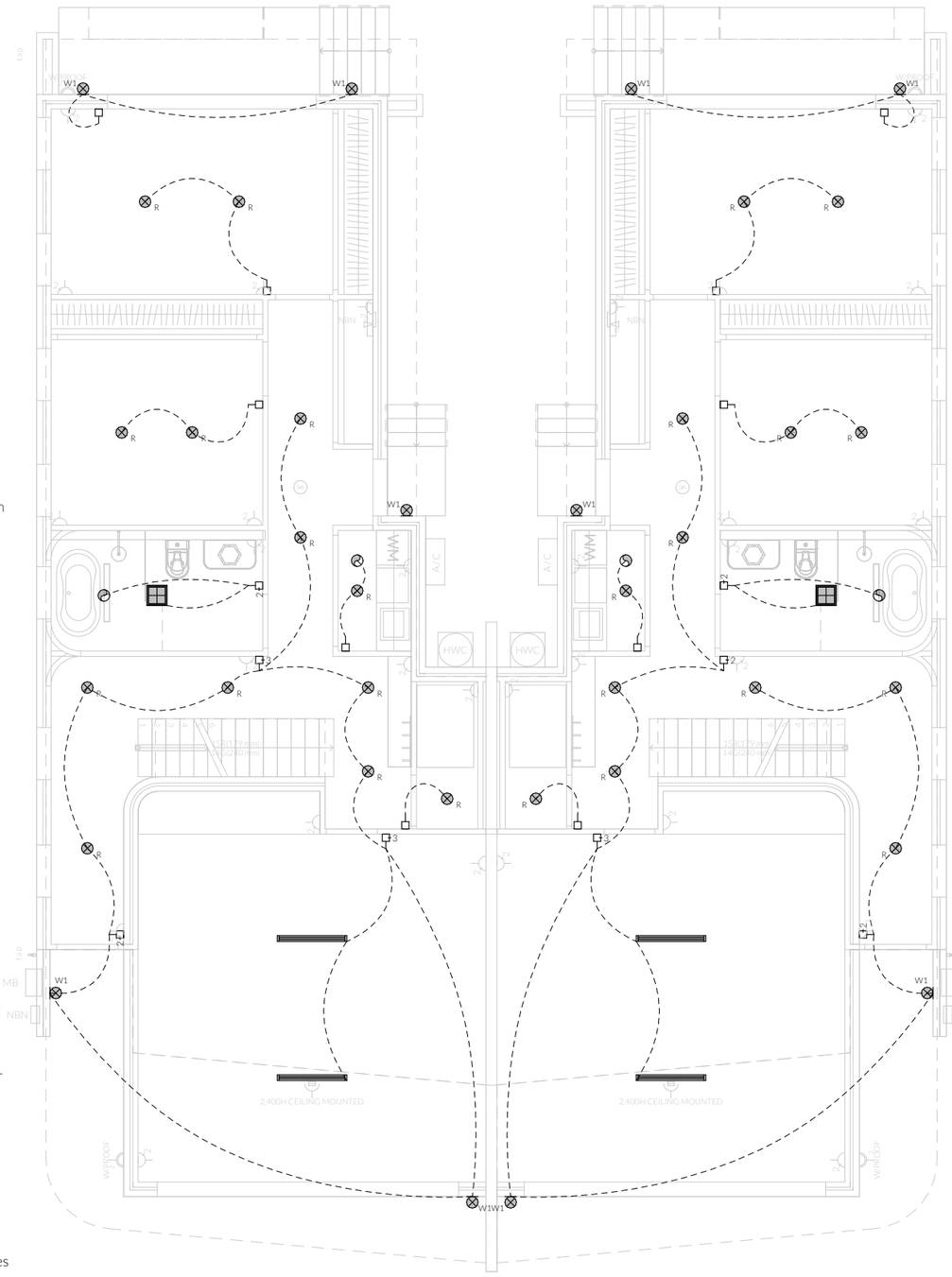
Note: Lighting

Lighting layout may change, owner to confirm with builder prior to purchase/installation of exact quantity and location of electrical services provided that installation is compliant with AS3000 and artificial lighting allowances do not exceed:
5W/m^2 in class 1a dwellings
4W/m^2 to veranda, balcony or the like
3W/m^2 in a class 10a dwelling associated with the class 1a dwelling

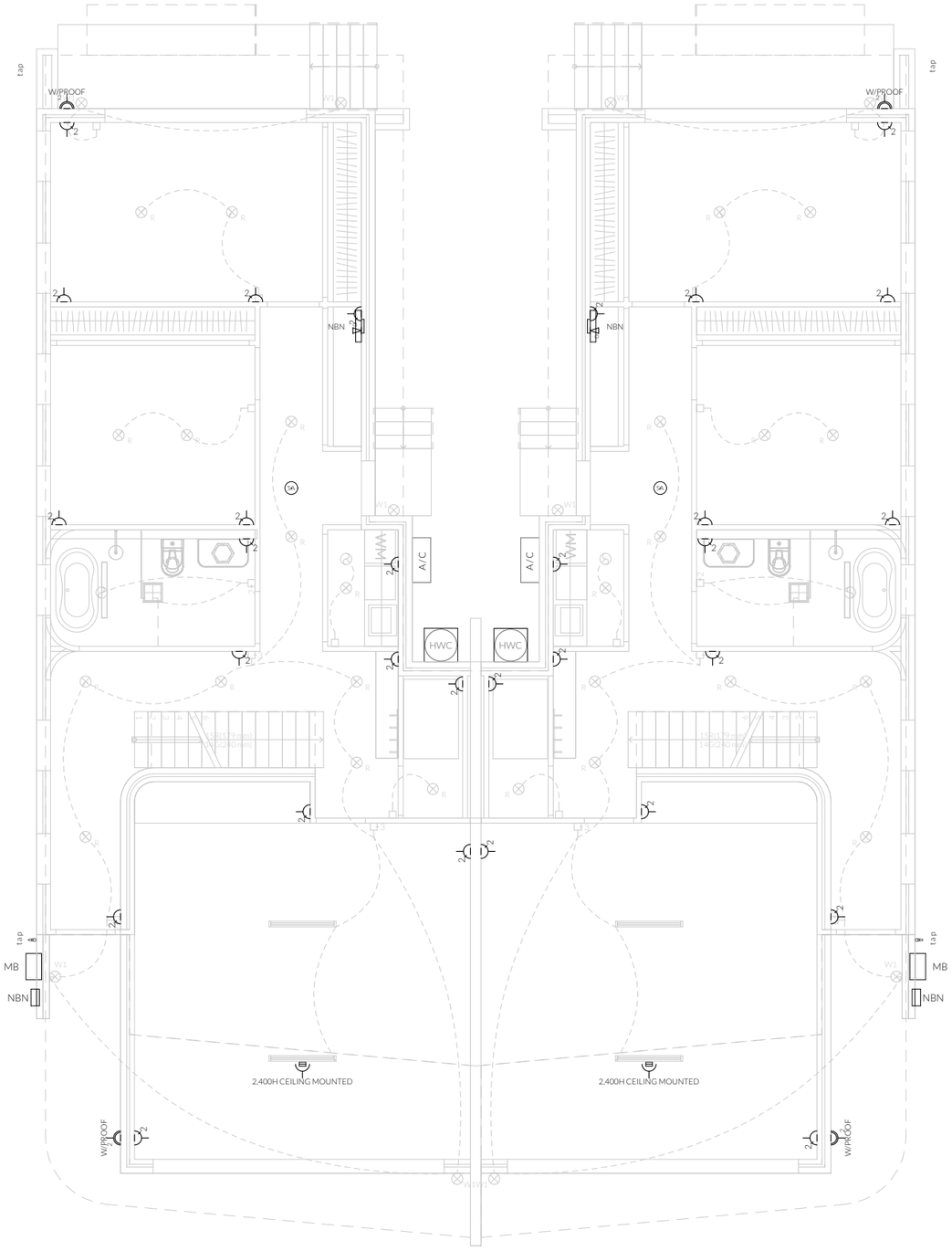
U.N.O - All downlights are to be Insulation Contact (IC) rated.

Preparation for future Solar Installation:

Should the solar design be required for future installation, 2/25mm solarflex (or similar) conduits marked "solar" are to be installed from the meter box to the roof space.



Electrical Plan - Lower - Light/Reflected Ceiling



Electrical Plan - Lower - Power

Notes
U.N.O ceilings are to be plasterboard.
– – D – – - Dimmable Circuit
– – T – – - Timer Circuit(as fan note)
PB - Plasterboard
CS - Cement Sheet Eaves
PW - Plywood Ceiling
TB - Timber Batten Ceiling

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Electrical Plan - Lower
Revision: DA - 02
Approved by: JRN
Scale: 1:100 @A3
Pg. No: A.08

Proposal: Unit Development
Client: TewEnterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

Issue	Date	Designer

NOTE: Refer to cover page for further details on changes.

BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

ELECTRICAL LEGEND - Upper Floor

Symbol	Description	Allowance	Quantity
D	DATA - CAT 6 (RJ45) - 1 GANG		4
TV	DATA - TV CONNECTION		2
	FAN - 3 IN 1 (4 LAMP)	10W (LIGHT)	2
	FAN - CEILING - EXHAUST		4
2	GPO - (2) DOUBLE		24
2 ISO	GPO - (2) DOUBLE (WITH COOKTOP ISOLATOR SWITCH)		2
2 USB	GPO - (2) DOUBLE (WITH USB CHARGER)		6
2 WPROOF	GPO - WEATHER PROOF DOUBLE		2
R	LIGHT - CEILING - DOWNLIGHT RECESSED	10W	32
	LIGHT - CEILING - PENDANT - LED STRIP 2000L	20W (LM)	2
W1	LIGHT - WALL MOUNTED - TYPE 1	10W	4
2	SWITCH - LIGHT 1 GANG		18

Smoke Alarms Part 9.5 of NCC 2022

Smoke alarms must-
(a)be located in-
(i)a Class 1a building in accordance with 9.5.2 and 9.5.4; and
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(b)comply with AS 3786, except that in a Class 10a private garage where the use of the area is likely to result in smoke alarms causing spurious signals, any other alarm deemed suitable in accordance with AS 1670.1 may be installed provided that smoke alarms complying with AS 3786 are installed elsewhere in the Class 1 building; and
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(ii)between 500 mm and 1500 mm away from the high point and apexes of the ceiling, if the room has a sloping ceiling.
(b)Where (a) is not possible, the smoke alarm may be installed on the wall, and located a minimum of 300 mm and a maximum of 500 mm off the ceiling at the junction with the wall.

Note: Exhaust Fans

Exhaust fans to comply with NCC 2022 Vol 2 Part 10.8.2 and have;
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(a)25 L/s for a bathroom or sanitary compartment; and
(b)40 L/s for a kitchen or laundry.
-Exhaust from a kitchen, kitchen range hood, bathroom, sanitary compartment or laundry must discharge directly or via a shaft or duct to outdoor air.
-Where a venting clothes dryer is installed, it must discharge directly or via a shaft or duct to outdoor air.
-An exhaust system that is not run continuously and is serving a bathroom or sanitary compartment that is not ventilated in accordance with 10.6.2(a) must-
(a)be interlocked with the room's light switch; and
(b)include a run-on timer so that the exhaust system continues to operate for 10 minutes after the light switch is turned off.

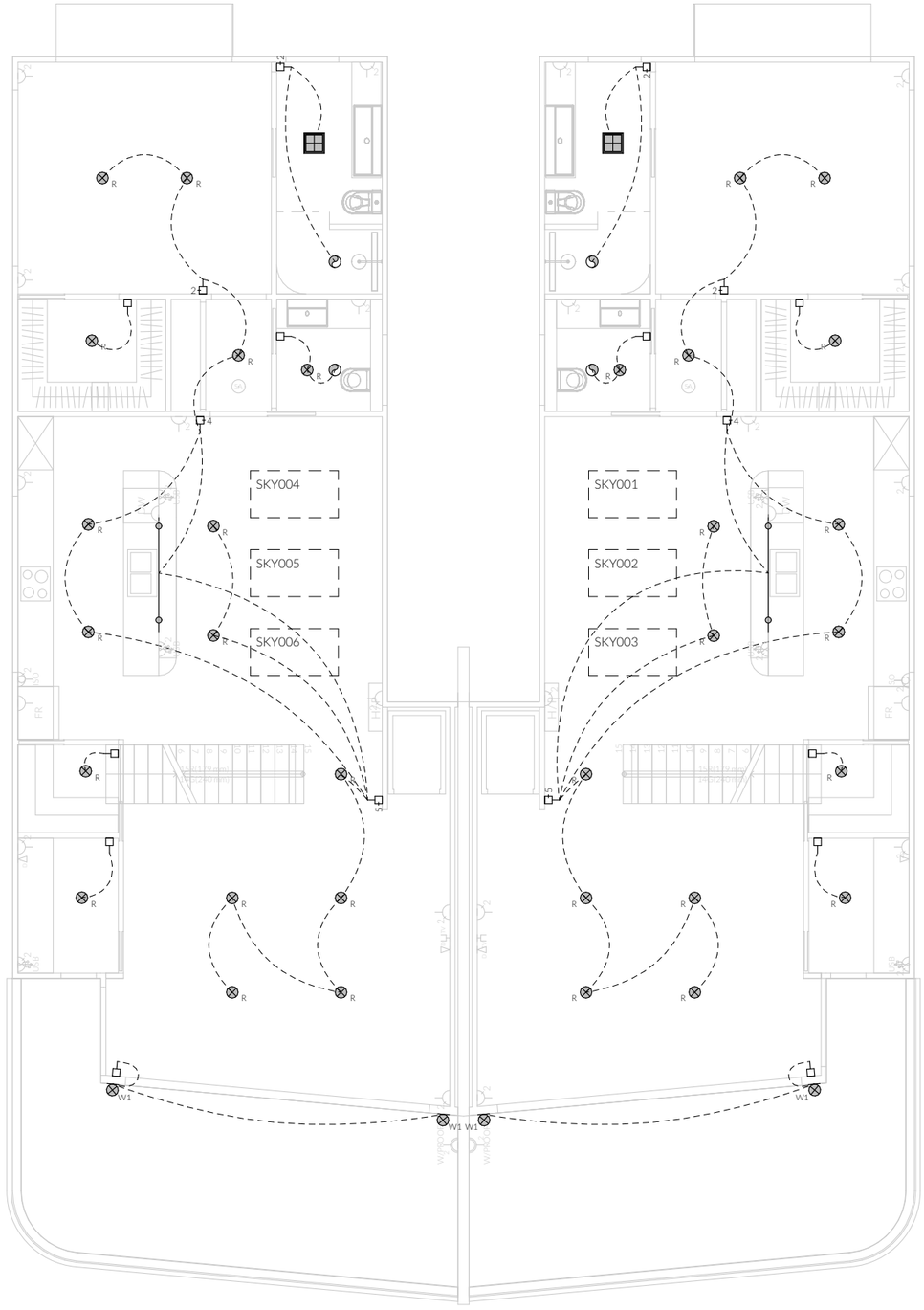
Note: Lighting

Lighting layout may change, owner to confirm with builder prior to purchase/installation of exact quantity and location of electrical services provided that installation is compliant with AS3000 and artificial lighting allowances do not exceed:
5W/m² in class 1a dwellings
4W/m² to veranda, balcony or the like
3W/m² in a class 10a dwelling associated with the class 1a dwelling

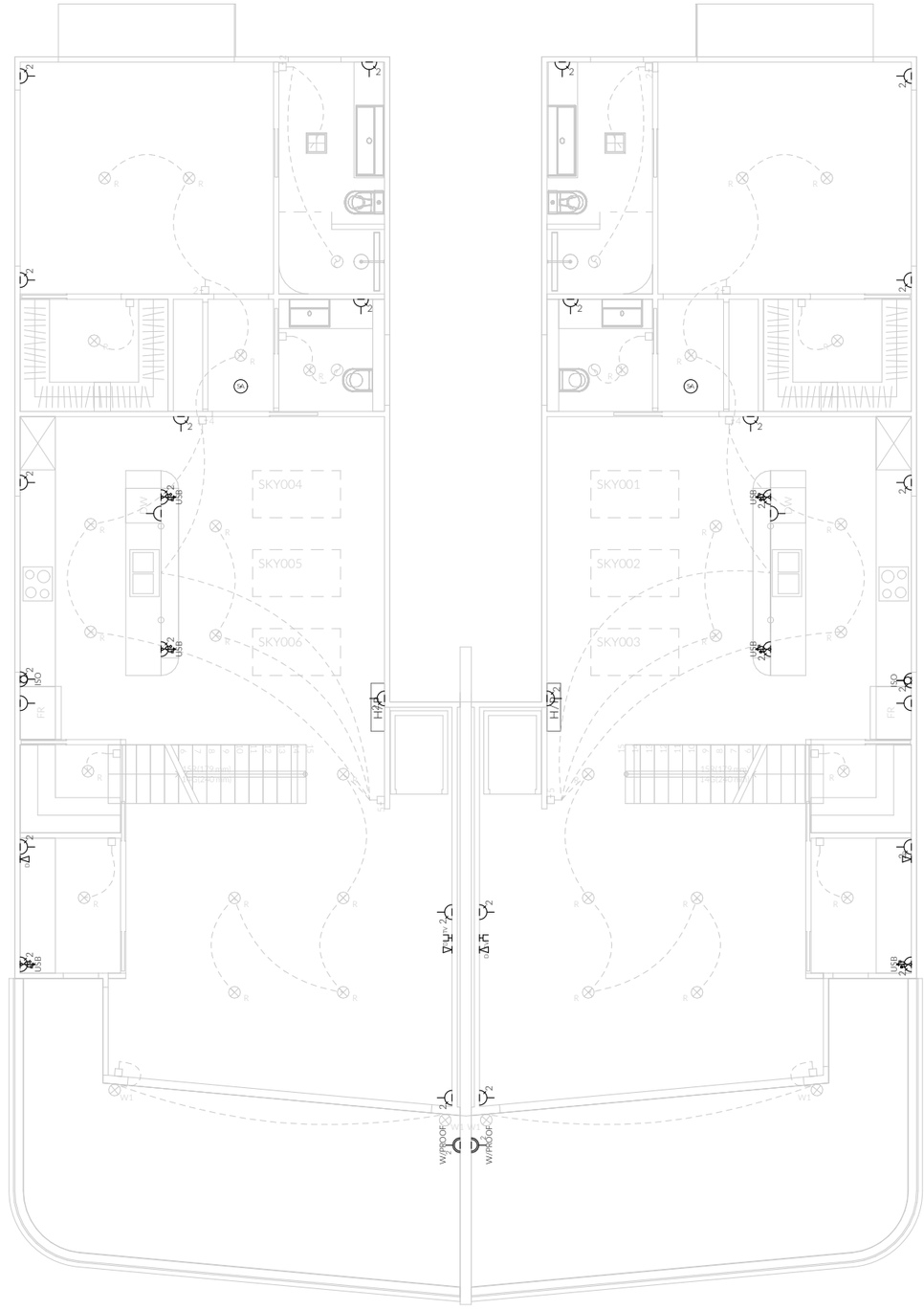
U.N.O - All downlights are to be Insulation Contact (IC) rated.

Preparation for future Solar Installation:

Should the solar design be required for future installation, 2/25mm solarflex (or similar) conduits marked "solar" are to be installed from the meter box to the roof space.



Electrical Plan - Upper - Light/Reflected Ceiling



Electrical Plan - Upper - Power

Notes

U.N.O ceilings are to be plasterboard.
– – D – – - Dimmable Circuit
– – T – – - Timer Circuit(as fan note)
PB - Plasterboard
CS - Cement Sheet Eaves
PW - Plywood Ceiling
TB - Timber Batten Ceiling

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Licence: CC6073Y

Electrical Plan - Upper
Revision: DA - 02
Approved by: JRN
Scale: 1:100 @ A3
Pg. No: A.09

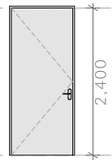
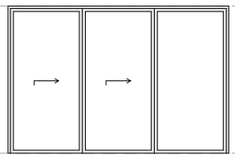
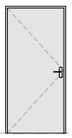
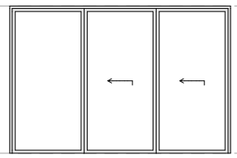
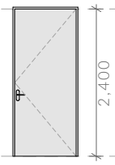
Proposal: Unit Development
Client: TewEnterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

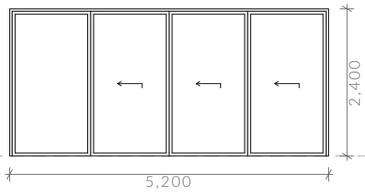
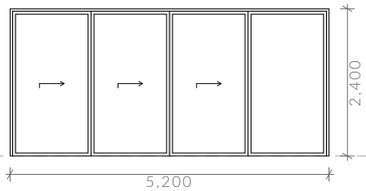
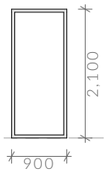
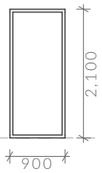
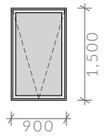
Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

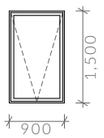
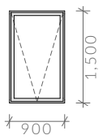
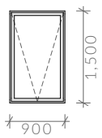
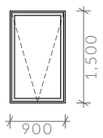
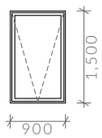
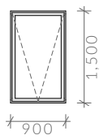
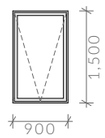
Issue	Date	Designer

NOTE: Refer to cover page for further details on changes.

BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

ID	D01	D02	D03	D04	D05	D06	D07
External View							
Sill Height	-150	0	0	0	0	0	0
Notes							

ID	D08	D09	D10	W01	W02	W03
External View						
Sill Height	-150	0	0	0	0	600
Notes						OBSCURE

ID	W04	W05	W06	W07	W08	W09	W10
External View							
Sill Height	600	600	600	600	600	600	600
Notes							

Glazing

All glazing must comply with Section 8 of NCC Vol II 2022.

Windows must be installed in accordance with the following:

(a)Structural building loads must not be transferred to the window assembly.
(b)A minimum 10 mm gap must be provided between the top of the window assembly and any loadbearing framing or masonry wall element.
(c)The requirements of (b) may be increased where necessary to allow for frame settlement over wide openings.
(d)Packing, if provided between each window assembly and the frame, must be-
(i)located along each side and bottom; and
(ii)fixed to ensure the sides and bottom of the window assembly remain straight; and
(iii) clear of any flashing material.

If a door, side panel or panel is capable of being mistaken for a doorway or opening, the glass must be marked to make it readily visible with an opaque band not less than 20 mm in height located so that-
(a)the upper edge is not less than 700 mm above the floor; and
(b)the lower edge is not more than 1.2 m above the floor.

Refer to Part 8.4.7 for exemptions.

Glazing - 52mm Double Glazed (clear)

All windows & doors to be glazed with the minimum following values:

Window Type	U-Value	SHGC
Awning	4.1	0.57
Fixed	3.2	0.67

Values based on products from Clark Windows. Where Argon Gas is specified the U-Value is reduced by 0.1 across all products.

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Door & Window Schedule

Revision: DA - 02
Approved by: JRN

Scale: @ A3
Pg. No: A.10

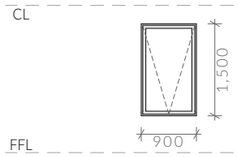
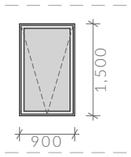
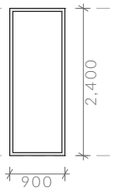
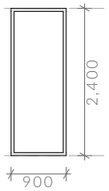
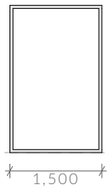
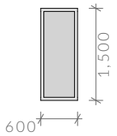
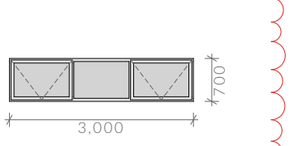
Proposal: Unit Development
Client: TewEnterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

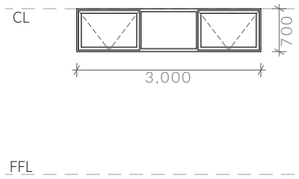
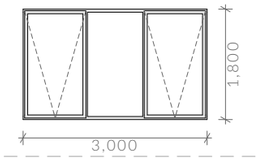
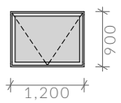
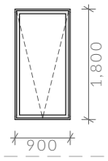
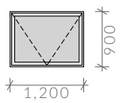
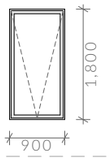
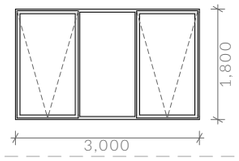
Issue	Date	Designer

NOTE: Refer to cover page for further details on changes.

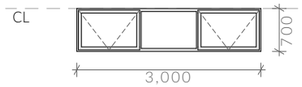
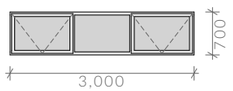
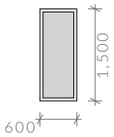
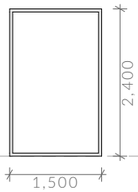
BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

ID	W11	W12	W13	W14	W15	W16	W17
External View							
Sill Height	600	600	0	0	0	900	900
Notes		OBSCURE				OBSCURE	OBSCURE

Ch - 02

ID	W18	W19	W19	W20	W20	W21	W22
External View							
Sill Height	2,000	600	1,200	600	1,200	600	600
Notes			OBSCURE		OBSCURE		

Ch - 02

ID	W23	W24	W25	W26
External View				
Sill Height	2,000	900	900	0
Notes		OBSCURE	OBSCURE	

Glazing

All glazing must comply with Section 8 of NCC Vol II 2022.

Windows must be installed in accordance with the following:
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(b)A minimum 10 mm gap must be provided between the top of the window assembly and any loadbearing framing or masonry wall element.
(c)The requirements of (b) may be increased where necessary to allow for frame settlement over wide openings.
(d)Packing, if provided between each window assembly and the frame, must be-
(i)located along each side and bottom; and
(ii)fixed to ensure the sides and bottom of the window assembly remain straight; and
(iii) clear of any flashing material.

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(a)the upper edge is not less than 700 mm above the floor; and
(b)the lower edge is not more than 1.2 m above the floor.

Refer to Part 8.4.7 for exemptions.

Glazing - 52mm Double Glazed (clear)

All windows & doors to be glazed with the minimum following values:

Window Type	U-Value	SHGC
Awning	4.1	0.57
Fixed	3.2	0.67

Values based on products from Clark Windows. Where Argon Gas is specified the U-Value is reduced by 0.1 across all products.

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Licence: CC6073Y

Door & Window Schedule

Revision: DA - 02
Approved by: JRN

Scale: @ A3
Pg. No: A.11

Proposal: Unit Development
Client: TewEnterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

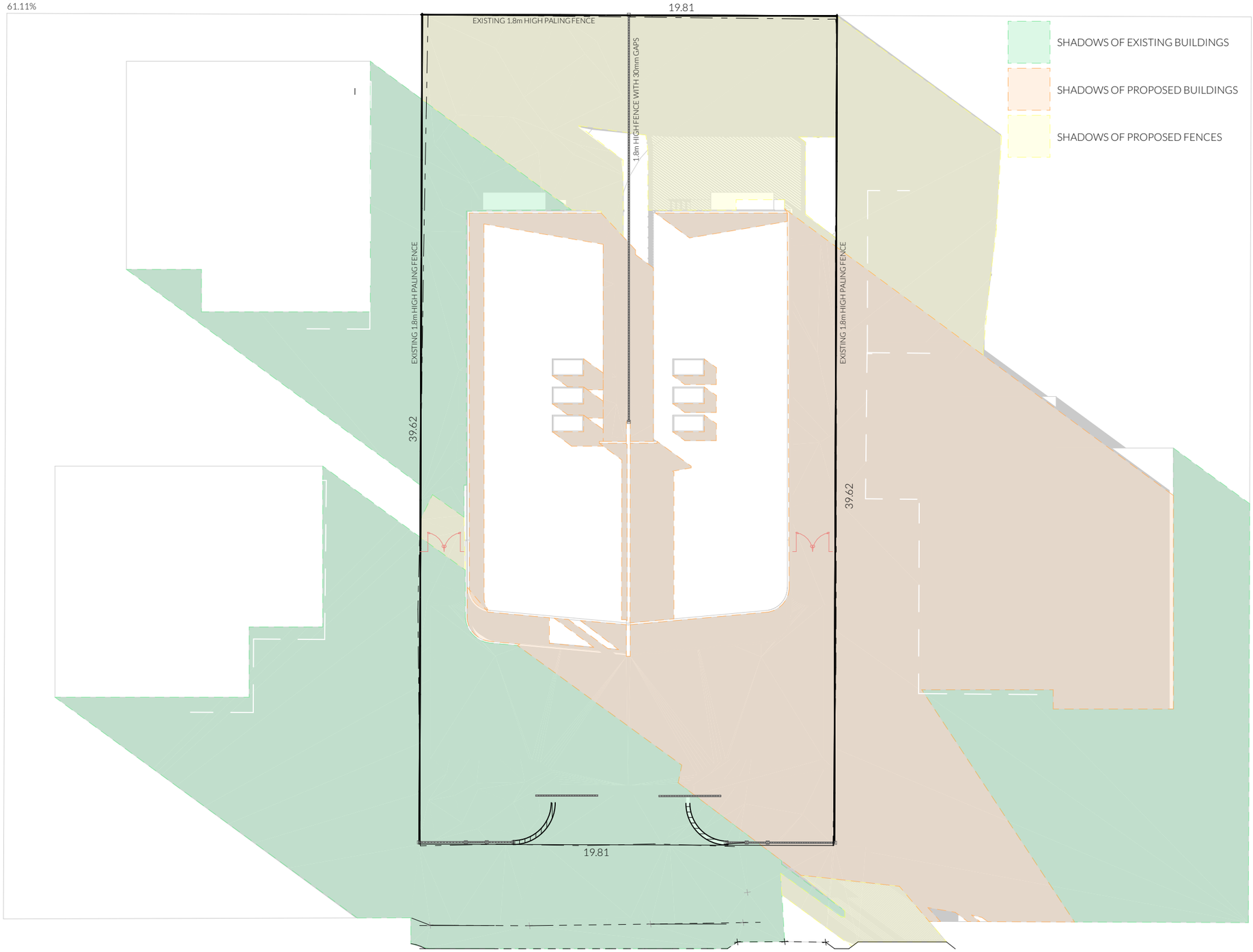
Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

Issue	Date	Designer
Ch - 02	04.03.26	CJ

NOTE: Refer to cover page for further details on changes.

BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

UNIT #	TOTAL POS	%FREE FROM SHADOW
UNIT 1	140.31	
UNIT2	140.31	
16 HOWRAH	386.66	65.47%
20 HOWRAH	485.53	61.11%



Ch - 02

NOT FOR CONSTRUCTION

PINNACLE DRAFTING & DESIGN
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03 6248 4218
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www.pinnacledrafting.com.au
Licence: CC6073Y

Shadow Diagrams 21st June 0900

Revision: DA - 02
Approved by: JRN

Scale: 1:200 @A3
Pg. No: A.12

Proposal: Unit Development
Client: TewEnterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

Issue	Date	Designer
Ch - 02	04.03.26	CJ

NOTE: Refer to cover page for further details on changes.

UNIT #	TOTAL POS	%FREE FROM SHADOW
UNIT 1	140.31	
UNIT2	140.31	
16 HOWRAH	386.66	70.86%
20 HOWRAH	485.53	39.54%

Ch - 02

NOT FOR CONSTRUCTION

PINNACLE

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7/3 Abernant Way, Cambridge 7170
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Licence: CC6073Y

Shadow Diagrams 21st June 1200

Revision: DA - 02
Approved by: JRN

Scale: 1:200 @ A3
Pg. No: A.13

Proposal: Unit Development
Client: TewEnterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

Issue	Date	Designer
Ch - 02	04.03.26	CJ

NOTE: Refer to cover page for further details on changes.

UNIT #	TOTAL POS	%FREE FROM SHADOW
UNIT 1	140.31	
UNIT2	140.31	
16 HOWRAH	386.66	50.46%
20 HOWRAH	485.53	5.5%

SHADOWS OF EXISTING BUILDINGS

SHADOWS OF PROPOSED BUILDINGS

SHADOWS OF PROPOSED FENCES

Ch - 02

NOT FOR CONSTRUCTION

PINNACLE

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Shadow Diagrams 21st June 1500

Revision: DA - 02
Approved by: JRN

Scale: 1:200 @A3
Pg. No: A.14

Proposal: Unit Development
Client: TewEnterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

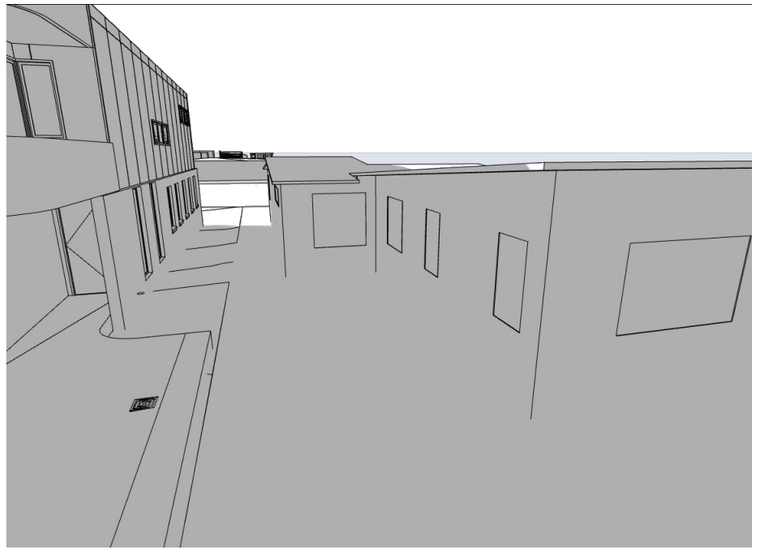
Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

Issue	Date	Designer
Ch - 02	04.03.26	CJ

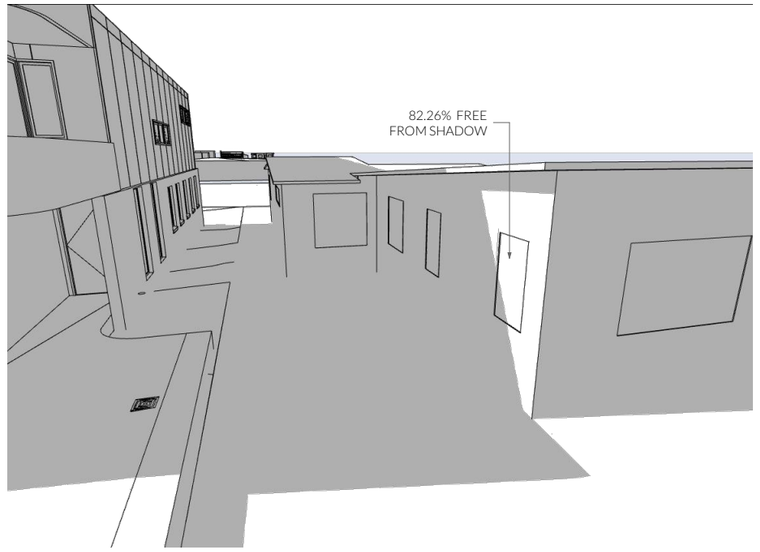
NOTE: Refer to cover page for further details on changes.

N

BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA



1000



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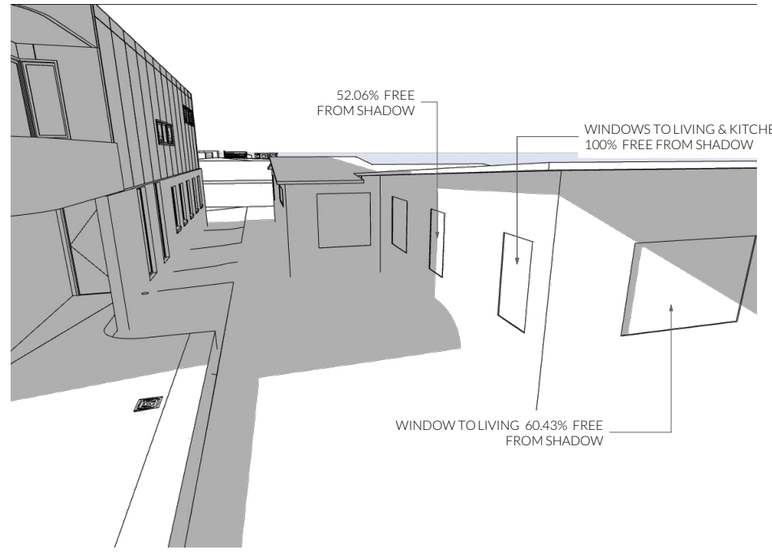

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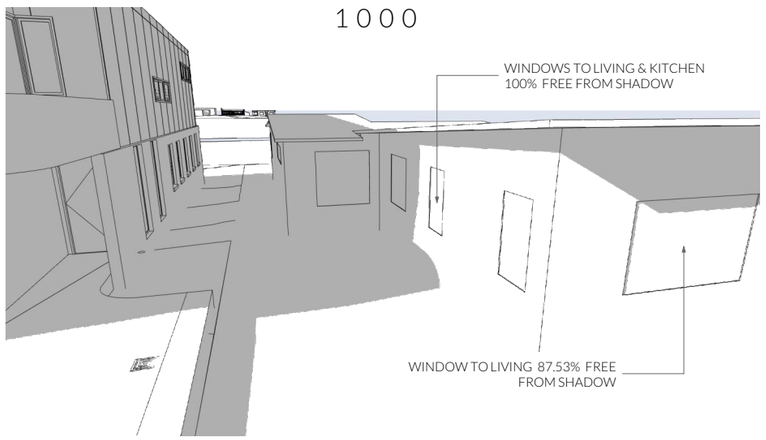

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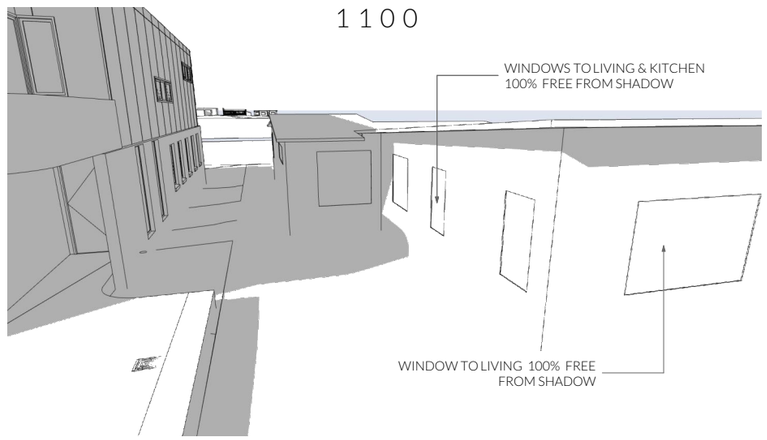

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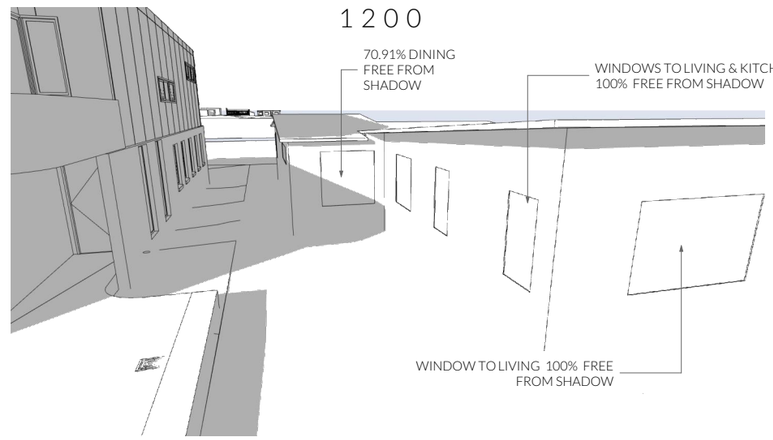

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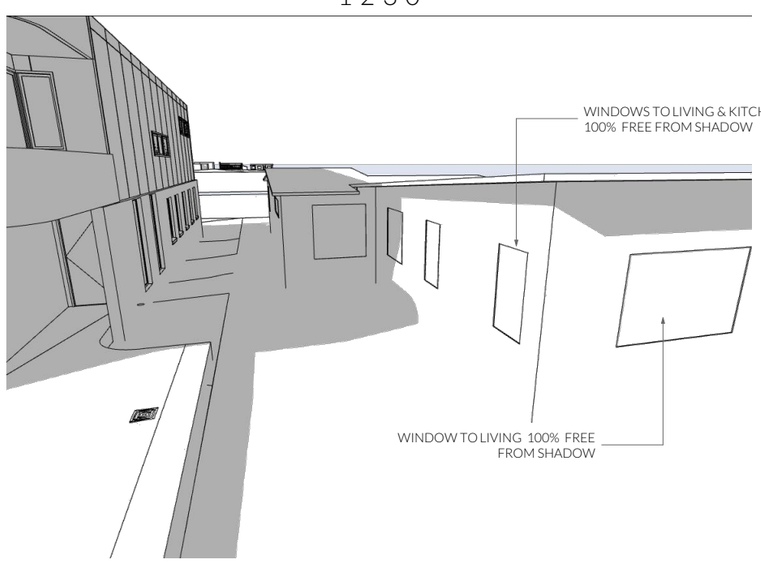

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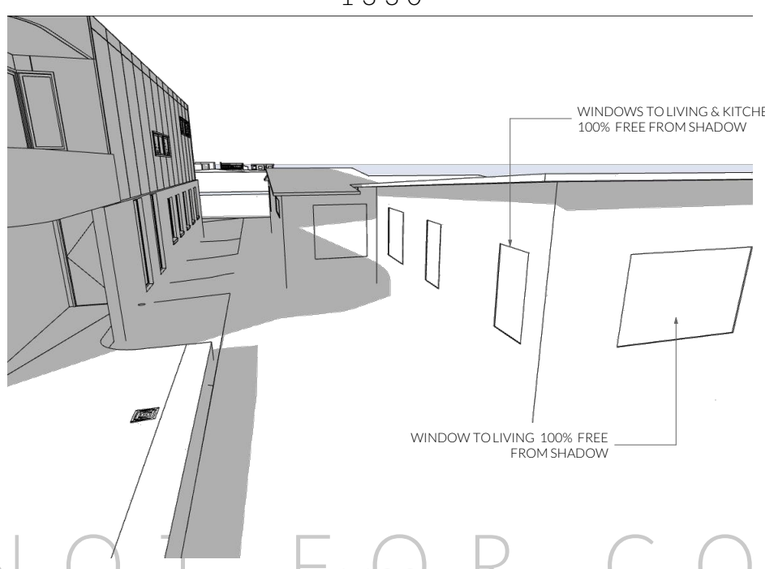

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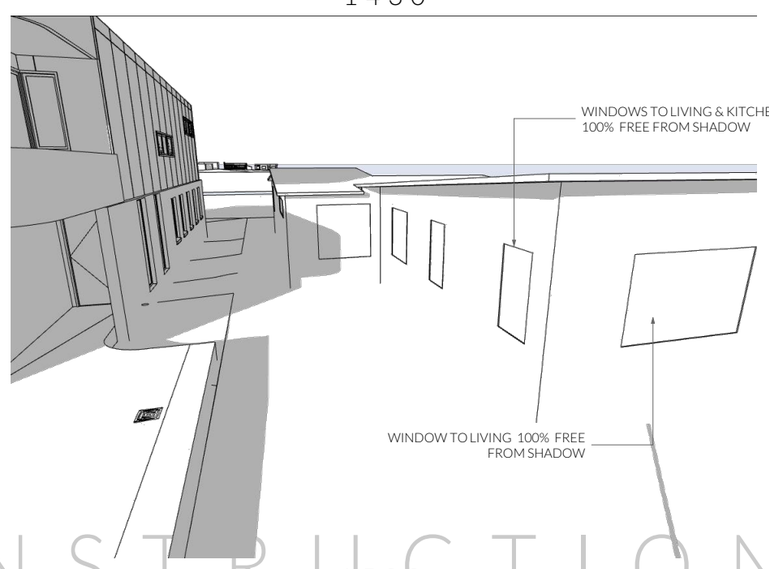

1500

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Proposed Shadow Diagrams 21st June

Revision: DA - 02
Approved by: JRN

Scale: @ A3
Pg. No: A.15

Proposal: Unit Development
Client: Tew Enterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

Issue	Date	Designer

NOTE: Refer to cover page for further details on changes.

BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

Surface Water Drainage

Ground to fall away from building in all directions in compliance with AS2870 & N.C.C 2022 3.3.3.

Surface water must be diverted away from a Class 1 building as follows:

(a) Slab-on-ground - finished ground level adjacent to a building: the external finished surface surrounding the slab must be drained to move surface water away from the building and graded to give a slope of not less than
  (i) 25mm over the first 1m from the building
    (A) in low rainfall intensity areas for surfaces that are reasonably impermeable (such as concrete or claypaving); or
    (B) for any reasonably impermeable surface that forms part of an access path or ramp provided for the purposes of Clauses 1.1 (2) or (4)(c) of the ABCB Standard for Livable Housing Design; or
  (ii) 50 mm over the first 1 m from the building in any other case.

(b) Slab-on-ground - finished slab heights: the height of the slab-on-ground above external finished surfaces mustbe not less than
  (i) 100 mm above the finished ground level in low rainfall intensity areas or sandy, well-drained areas; or
  (ii) 50 mm above impermeable (paved or concrete) areas that slope away from the building in accordance with(a); or
  (iii) 150 mm in any other case.

(c) The ground beneath suspended floors must be graded so that the area beneath the building is above the adjacent external finished ground level and surface water is prevented from ponding under the building.

Subsoil Drainage

is to comply with AS2870, AS3500 & N.C.C 2022 3.3.4.

Where a subsoil drainage system is installed to divert subsurface water away from the area beneath a building, the subsoil drain must-
  (a) be graded with a uniform fall of not less than 1:300; and
  (b) discharge into an external silt pit or sump with-
    (i) the level of discharge from the silt pit or sump into an impervious drainage line not less than 50 mm below the invert level of the inlet; and provision for cleaning and maintenance.

Note

All driveway pits and grate drains to be **Class B**.

Stormwater pits are indicative. Location may vary depending on site conditions.

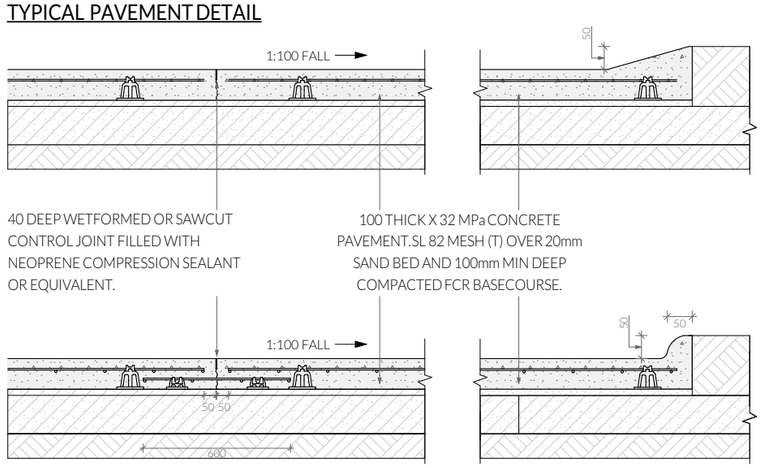
Legend

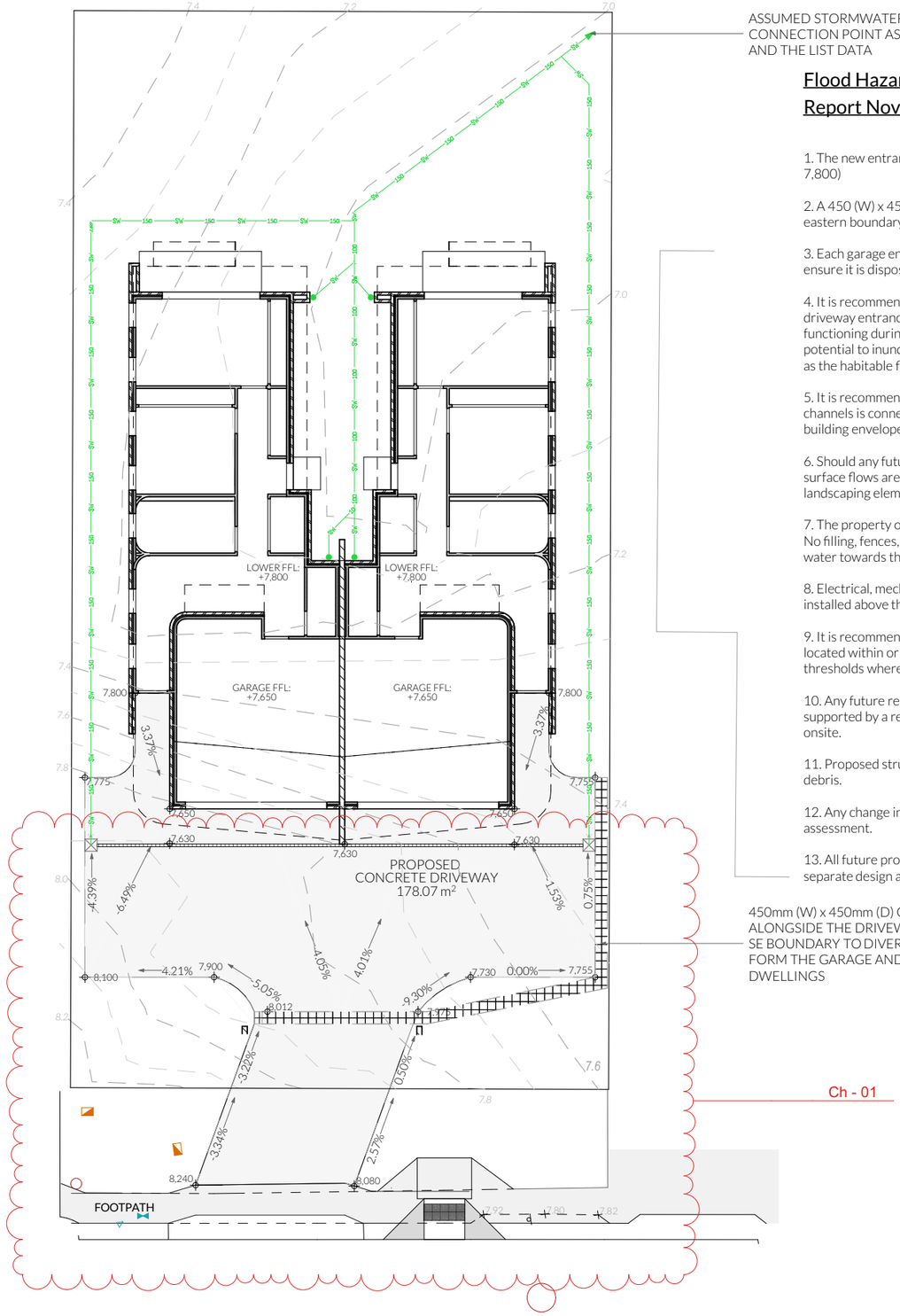
- SW — Stormwater Line
- AG — Ag Drain
- Stormwater Connection
- **Class A** 300mm Stormwater Pit
- **Class B** 450mm Stormwater Pit
- 100mm wide trafficable grate drain

General Notes

1. Remove all topsoil and organic matter from beneath concrete driveway areas and provide 100m deep compacted FCR basecourse layer.
2. Concrete strength shall be 32 mpa min.
3. Provide control joints at 6.0 m centres- refer detail.
4. Compact concrete using mechanical vibrators.
5. Cure all exposed concrete surfaces by keeping moist for 7 days. i.e cover with plastic sheets.
6. Connect new service connections into existing. Liaise with council's plumbing surveyor for location of existing connections.
7. All new and/or altered service connections shall be undertaken by council at the developer's expense.
8. Provide 100ø agricultural drains at base of cut and connect to stormwater at lowest point
9. Driveway to be min 100mm thick 32mpa concrete with sl82 @ 40mm cover over 100mm compacted FCR. Provide deep tooled joints or sawcut joints @ max. 4m crs.
10. Driveway to be sloped to integrated kerb and gutter system on low side of driveway
11. Rainwater pipes to be PVC or Colorbond finish metal.
12. Driveway sawcuts to be installed at approx. 4m centres with expansion joints at 8-12m centres.

TYPICAL PAVEMENT DETAIL





Flood Hazard Management Report Recommendations as per Flussig Report November 2025

1. The new entrance of the proposed development to have a minimum floor level as per Table5. (FFL: 7,800)

2. A 450 (W) x 450 (D) mm grated channel running alongside the driveway entrance towards the south-eastern boundary to divert overland flow away from the garage and entrances to the dwellings.

3. Each garage entry door must be fitted with a 100 mm wide grated trench to capture localised runoff and ensure it is disposed of onsite.

4. It is recommended that regular maintenance and inspections of the proposed grated trench along the driveway entrance and the grated trenches alongside the garage doors are conducted to ensure adequate functioning during a major storm event. If blockage of either or both of these trenches occur, it has the potential to inundate the habitable area as the garage finished floor level is proposed to be at the same level as the habitable floor level internal entrance.

5. It is recommended that all stormwater infrastructure associated with the grated trenches and diversion channels is connected to a lawful point of discharge to ensure water is safely conveyed away from the building envelope.

6. Should any future landscaping or hardstand areas be undertaken, all ground shaping must ensure that surface flows are directed away from building openings. Raised garden beds, retaining walls, or other landscaping elements must not obstruct overland flow paths.

7. The property owner is advised to maintain a clear overland flow path along the south eastern boundary. No filling, fences, storage, or temporary structures should be placed within this path as they may redirect water towards the garage or habitable areas.

8. Electrical, mechanical, and essential building services located near the flood affected areas should be installed above the predicted flood level to reduce the risk of damage during a storm event.

9. It is recommended that the building design includes waterproofing measures at all door thresholds located within or adjacent to the flood extent. This includes adequate sealing, weather strips, and raised thresholds where practical.

10. Any future redevelopment or alteration that increases impervious surfaces within the lot should be supported by a revised stormwater and flood assessment to confirm that runoff can still be safely managed onsite.

11. Proposed structures, located in the inundation area, are to be designed to resist flood forces including debris.

12. Any change in external building layout or addition of other solid structures will require further flood assessment.

13. All future proposed structures within the flood extent not shown within this report will require a separate design and report addressing their impacts.

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Civil Plan

Revision: DA - 02
Approved by: JRN

Scale: 1:200 @ A3
Pg. No: C.01

Proposal: Unit Development
Client: TewEnterprises Pty Ltd
Address: 18 Howrah Rd, Howrah, 7018

Date: 04/11/25
Drawn by: JRN
Job No: 074-2025
Engineer: Aldanmark
Building Surveyor: Freestone

Issue	Date	Designer
Ch - 01	22.01.26	JRN

NOTE: Refer to cover page for further details on changes.

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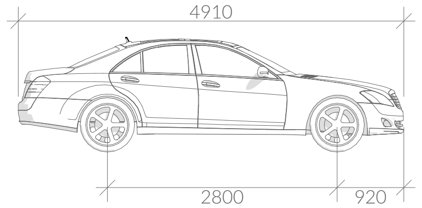
Vehicle Movement Notes

- Movement templates demonstrate the ability of vehicles to enter intersection in a forwards direction and leave in a forwards direction.

- The base dimensions of the vehicle template represent the B85 (85th Percentile) Vehicle

- The swept path of the vehicle represent the outer extents of the vehicle.



B85 Vehicle Dimensions

Width:	1870
Track:	1770
L-L Time:	6.0
Turning Radius:	5800

Parking Space requirements
As defined by the Parking and Sustainable Transport Code - Table C2.3

Parking Dimensions - 90°

Width:	2600	2800	3000	3200
Length:	5400	5400	5400	5400
Aisle Width:	6400	5800	5200	4800

Parking Dimensions - 45°

Width:	2600
Length:	5400
Aisle Width:	3500

Parking Dimensions - Parallel

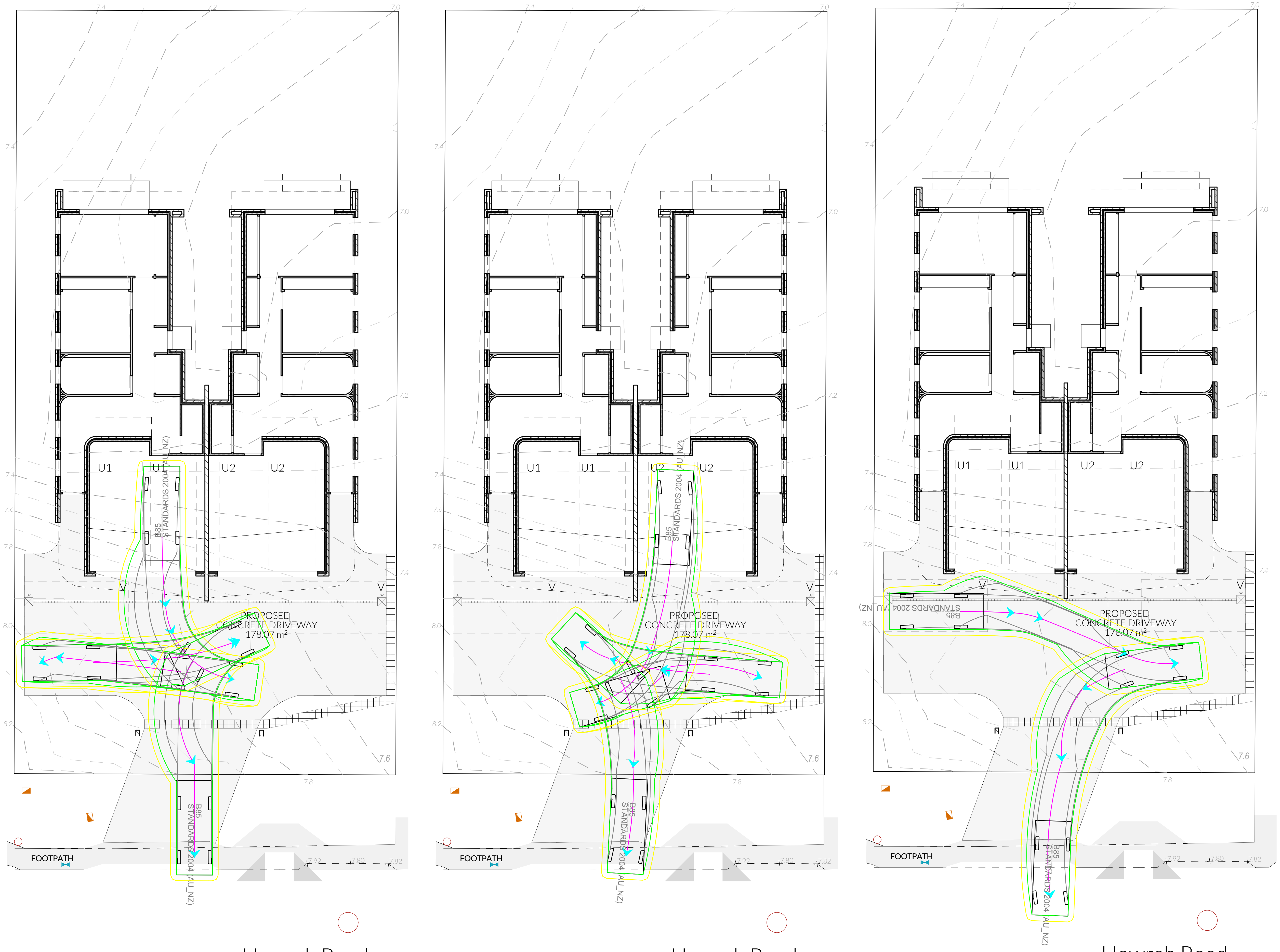
Width:	2300
Length:	6700
Aisle Width:	3600

Legend

- Solar Bollard Lighting
- Spotlight with Sensor

Turning Path Legend

LINE OF BODY
300mm BODY CLEARANCE
DIRECTION OF TRAVEL



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Parking

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Scale: 1:200 @ A3
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Plumbing Notes

All plumbing to be in accordance with AS3500, NCC Vol III, Tas Plumbing Code and local authority regulations.

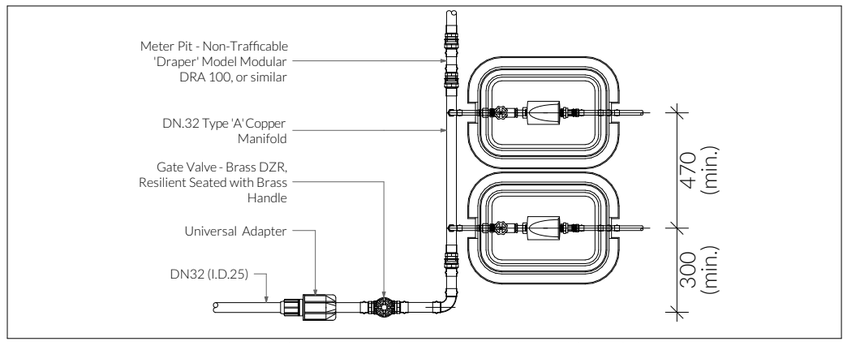
Sewer and stormwater to mains connections, plumber to verify location on site.
(refer to site plan.)

All works are to be in accordance with the water supply code of Australia WSA 03-2011-3.1 version 3.1 MRWA edition v2.0 and Sewerage Code of Australia Melbourne Retail Water Agencies Code WSA 02-2014-3.1 MRWA version 2 and TasWater'ssupplements to these codes.

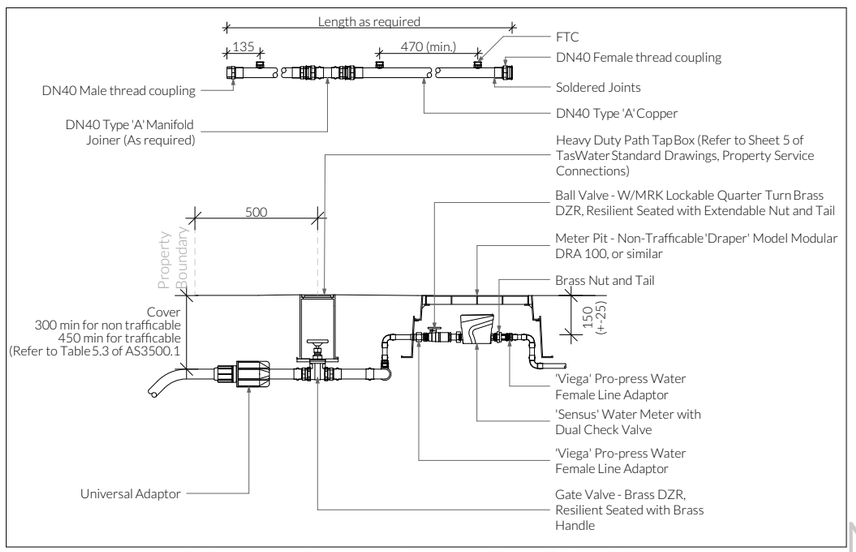
Minimum gradient on sewer pipes as per AS3500.2.2
·65ø = 1:40 (2.5%)
·80ø, 100ø = 1:60 (1.65%)
·125Ø = 1:80 (1.25%)
·150Ø = 1:100 (1.00%)

Note

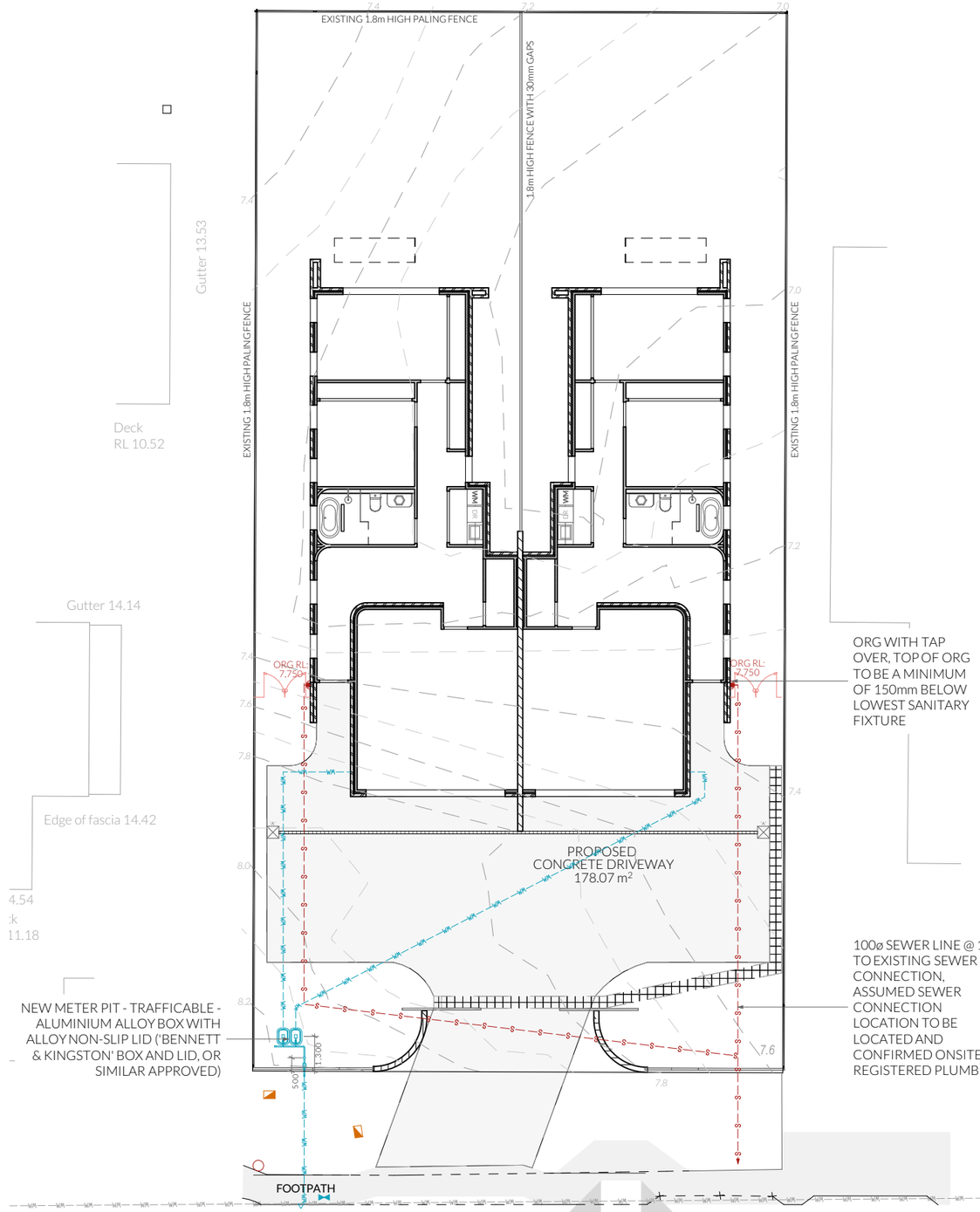
All driveway pits and grate drains to be **Class B**.
Stormwater pits are indicative. Location may vary depending on site conditions.



Meter Assembly - Below Ground Plan View



Meter Assembly - Profile View



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Sewer & Water Plan

Revision: DA - 02
Approved by: JRN

Scale: 1:200 @ A3
Pg. No: P.01

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