ACTIVITY DETERMINATION

Project No. BGXUP

Conflict of Interest ¹	
In this matter:	
 I have declared any possible conflict of interests (real, poexecutive, Land & Housing Corporation. I do not consider I have any personal interests that would I will inform the Chief Executive, Land & Housing Corpor possible conflict of interest. 	d affect my professional judgement.
Signed	Dated

Having regard to the Determination Recommendation Report, the Statement of Compliance and the Review of Environmental Factors for this project addressing matters under Part 5 of the *Environmental Planning and Assessment Act 1979,* I determine that the activity proceed as described below and subject to the identified requirements set out in **Schedule 1**.

SITE IDENTIFICATION		
STREET ADDRESS		
Unit/Street No	Street or property name	
1 & 50	Waratah Avenue & Frost Street	
Suburb, town or locality	Postcode	
Orange	2800	
Lacal Causement Assacla	Dool group out a decembration (Let and DD)	
Local Government Area(s)	Real property description (Lot and DP)	
Orange	Lots 5 & 6 in DP 36132	
ACTIVITY DESCRIPTION		
Provide a description of the activity	1	
	d removal of 4 trees to construct a 6 dwelling (4 x 1 bedrooms & 2 x velopment with 4 on grade car parking spaces, associated	,

Conflict of interest includes actual and potential. A conflict of interest includes pecuniary i.e. financial interests to you or a related party or non-pecuniary i.e. benefits to relatives, friends, business associates and personal causes, etc. This includes "related persons" as defined in the Property, Stock and Business Agency Act 2002.

DETERMINED by the New South Wales Land & Housing Corporation on:

Activity Determination:
Proposed General Housing Development at No's 1 Waratah Avenue and 50 Frost Street, Orange

Emma Nicholson
A/Head of Policy and Innovation
Land and Housing Corporation

SCHEDULE 1 RECOMMENDED IDENTIFIED REQUIREMENTS

PART A - Standard identified requirements

THE DEVELOPMENT

The following identified requirements have been imposed to ensure that the development activity is carried out in accordance with the plans / documents and any amendments approved under Part 5 of the Environmental Planning & Assessment Act 1979.

1. The development must be carried out substantially in accordance with the following plans / documents as modified below and by any of the undermentioned identified requirements:

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd.mm.yyyy]:	Prepared by:					
<u>Architectural</u>	Architectural								
0	011-04	D D	1 04 00 0000	DTA A . L. C					
Cover Sheet	Sheet 01	Rev B	24.02.2022	DTA Architects					
Block Analysis Plan	Sheet 02	Rev B	24.02.2022	DTA Architects					
Site Analysis Plan	Sheet 03	Rev B	24.02.2022	DTA Architects					
Demolition Plan	Sheet 04	Rev B	24.02.2022	DTA Architects					
Development Data	Sheet 05	Rev B	24.02.2022	DTA Architects					
Site Plan	Sheet 06	Rev B	24.02.2022	DTA Architects					
Ground Floor Plan	Sheet 07	Rev B	24.02.2022	DTA Architects					
First Floor Plan	Sheet 08	Rev B	24.02.2022	DTA Architects					
Roof Plan	Sheet 09	Rev B	24.02.2022	DTA Architects					
Elevations	Sheet 10	Rev B	24.02.2022	DTA Architects					
Elevations	Sheet 11	Rev B	24.02.2022	DTA Architects					
Elevations – Street view	Sheet 12	Rev B	24.02.2022	DTA Architects					
Sections	Sheet 13	Rev B	24.02.2022	DTA Architects					
Solar Access – View from Sun	Sheet 14	Rev B	24.02.2022	DTA Architects					
Solar Access – View from Sun	Sheet 15	Rev B	24.02.2022	DTA Architects					
Shadow Diagrams	Sheet 16	Rev B	24.02.2022	DTA Architects					
Perspectives	Sheet 17	Rev B	24.02.2022	DTA Architects					
Landscape			_						
Landscape Plan	Sheet 1	Rev P7	07.02.2022	RFA Landscape Architects					
Civil Design									
Specifications and Site Drainage Plan	Sheet 1 of 3	Rev B	20.10.2021	MSL Consulting Engineers					
Stormwater Details and Sections	Sheet 2 of 3	Rev C	17.02.2022	MSL Consulting Engineers					
Sediment and Erosion Control Plan	Sheet 3 of 3	Rev B	20.10.2021	MSL Consulting Engineers					
Cut and Fill Plan	Sheet 1 of 1	Rev C	14.03.2022	MSL Consulting					

Title / Name:	Name: Drawing No / Document Ref		Date [dd.mm.yyyy]:	Prepared by:	
				Engineers	
<u>Hydraulic Plan</u>					
Hydraulic Services Plan Legend & Notes	Sheet 1 of 4	Rev F	02.2022	DeAngelis Taylor and Associated Pty	
Hydraulic Services Plan Site/Ground Floor Plan	Sheet 2 of 4	Rev F	02.2022	DeAngelis Taylor and Associated Pty	
Hydraulic Services Plan First Floor/Roof Plan	Sheet 3 of 4	Rev F	02.2022	DeAngelis Taylor and Associated Pty	
Hydraulic Services Plan Roof Plan	Sheet 4 of 4	Rev F	02.2022	DeAngelis Taylor and Associated Pty	
BASIX/NatHers					
BASIX Certificate	No. 1218683M_02	02	03.03.2022	LC Consulting Engineers	
Specialist Reports					
Arboricultural Impact Assessment Report	Ref 6791		29.10.2021	Redgum Horticultural	
Residential Site Investigation Report	Ref. 36151A_GR01	Α	07.04.2021	Barnson Pty Ltd	
Report relating to Class 1A single storey dwelling	Ref 020-014009		01.11.2021	Philip Chin Building Compliance	
Report relating to Class 2 two storey building	Ref 020-014009		01.11.2021	Philip Chin Building Compliance	
Access Report	Ref. 21228-R2.1		18.11.2021	Access-i	
Traffic Impact Assessment Report			26.10.2021	Park Transit	
Waste Management Plan			29.10.2021	DTA Architects	
Heritage Impact Statement			11.2021	Ian Rufus	

- 2. All building work is to be undertaken in accordance with the National Construction Code and referenced Australian Standards.
- 3. All commitments listed in the BASIX certificate and stamped plans shall be complied with.
- **4.** All construction documentation and building work is to be certified in accordance with Section 6.28 of the *Environmental Planning and Assessment Act 1979*.
- **5.** The land the subject of this approval must be consolidated into a single lot. The plan of consolidation must be lodged at the NSW Land Registry Services and be registered prior to occupation of the development. A copy of the registered plan is to be provided to the Land & Housing Corporation.

OPERATIONAL MATTERS

These identified requirements pertain to the use of the site and have been imposed to ensure that the development and its operation do not interfere with the amenity of the surrounding area.

Stormwater Run-off

- **6.** Stormwater is to be collected within the site, and conveyed in a pipeline to the appropriate gutter or drain under the control of the council for the area, substantially in accordance with the approved concept stormwater drainage plans.
- **7.** Alterations to the natural surface contours or surface absorption characteristics must not impede, increase or divert natural surface water runoff, so as to cause a nuisance to adjoining property owners.

- **8.** All driveways are to be graded in such a manner as to provide continuous surface drainage flow paths to appropriate points of discharge.
- **9.** To prevent water from entering buildings surface waters shall be collected and diverted clear of the buildings by a sub-surface / surface drainage system.

Vehicular Access & Parking

- 10. A concrete vehicular crossing(s) and layback(s) must be provided at the entrance(s) / exit(s) to the property. The crossing(s) and layback(s) must be constructed in accordance with the council for the area's standard requirements for residential crossings. Council shall be provided with plans for the crossing(s) and layback(s) together with the payment of any council inspection fees.
- 11. Particular care should be taken in the location of vehicular crossings and/or laybacks to avoid poles, pits etc. The cost of any necessary adjustments to utility mains and services associated with the construction of the layback / driveway is to be borne by the Land & Housing Corporation. Obsolete gutter laybacks are to be constructed as kerb in accordance with the respective council's standards.

Note: It is recommended that discussion be held with the relevant authorities before construction works commence.

12. Car parking spaces and driveways must be constructed of concrete or other approved hard surfaced materials. The spaces must be clear of obstructions and columns, permanently line marked and provided with adequate maneuvering facilities. The design of these spaces must comply with AS 2890.1.

Site Works

- **13.** All soil erosion and sediment control measures required to be put in place prior to the commencement of demolition / construction works are to be maintained during the entire period of the works until disturbed areas are restored by turfing, paving or revegetation. Soil erosion and sediment control measures shall be designed in accordance with the guidelines set-out in the Blue Book *Managing Urban Stormwater: Soils and Construction* (4th edition, Landcom, 2004).
- **14.** An appropriately qualified person shall design retaining walls or other methods necessary to prevent the movement of excavated or filled ground, including associated stormwater drainage measures.

Building Siting

15. All buildings are to be sited well clear of any easements affecting the site. The builder shall ascertain if any easements do exist and if so obtain full details of such prior to construction commencing.

Smoke Detection System(s)

- **16.** Smoke detection systems shall be installed throughout the building(s) in accordance with requirements of Clause E1.7 of the Building Code of Australia. Detectors shall comply with AS 3786 and must:
 - i. be connected to a permanent 240V power supply; and
 - ii. be provided with a battery backup to activate the alarm unit in the event of failure of the permanent power supply.

Site Soil Contamination

17. If the site is identified as being potentially affected by soil contamination, it is to be inspected by a suitably qualified person to identify any contaminated or hazardous material present. A proposal for remediation is to be prepared, which may include the preparation of a Remedial Action Plan, and remediation is to be carried out in accordance with the plan. A Validation Report, prepared in accordance with Environment Protection Authority requirements, is to be obtained from a qualified expert on completion of the remediation work to verify that the site is suitable for the intended residential use. A copy of the Validation Report is to be provided to the Land & Housing Corporation on completion of the remediation works.

Landscaping

- **18.** Landscaping is to be carried out substantially in accordance with the approved landscape plan(s) and maintained for a period of 12 months by the building contractor. The council for the area is to be consulted in relation to the planting of any street trees along the site frontage(s).
- 19. All scheduled plant stock shall be pre-ordered, prior to commencement of construction or 3 months prior to the commencement of landscape construction works, whichever occurs sooner, for the supply to the site on time for installation. The builder shall provide written confirmation of the order to Council and provide a copy to the Land & Housing Corporation.

Tree Removal

20. Removal of trees within the boundaries of the site is to be carried out in accordance with the trees shown for removal on the approved landscape plan and Arborist report and no other trees are to be removed without further approval. Trees identified for retention on the approved landscape plan and Arborist report are to be retained.

Fencing

21. All front fencing and gates are to be constructed wholly within the boundaries of the site. All gates associated with the fencing are to swing inwards towards the site.

Provision of Letterbox Facilities

22. Suitable letterbox facilities shall be provided in accordance with Australia Post specifications.

Public Liability Insurance

23. A valid public liability insurance policy of at least \$10M shall be maintained throughout the demolition / construction works by the contractor.

PRIOR TO ANY WORK COMMENCING ON THE SITE

The following identified requirements are to be complied with prior to any work commencing on the site.

Long Service Levy

24. The long service levy shall be paid by the Land & Housing Corporation to the Long Service Payments
Corporation in accordance with the Building & Construction Industry Long Service Payments Act 1986
prior to the commencement of any building and construction works.

Note:

Where approval has been granted for development by a Crown body other than a council, the amount payable is 0.35% of the contract inclusive of GST.

(Deleted)

Service Authority Clearances

25. An application for a compliance certificate is to be made to the relevant water utility (e.g. the local council for the area or Hunter Water or Sydney Water) or other evidence of the utility's non-objection to the commencement of work on the basis of service availability is to be obtained prior to work commencing.

Note:

Payment of water and/or sewer service charges and/or a notice of requirements for works to be carried out during construction / prior to occupation may be applicable prior to issue of the compliance certificate.

- **26.** A written clearance from an electricity supply authority stating that electrical services have been made available to the development or that arrangements have been entered into for the provision of services to the development is to be obtained prior to work commencing.
- **27.** A certificate from an approved telecommunications carrier to certify that satisfactory arrangements have been made to ensure the provision of underground telephone services to the site and to each dwelling in the development is to be obtained prior to work commencing.
- **28.** Where the site is to be connected to reticulated gas, a certificate from an approved gas carrier to certify that satisfactory arrangements have been made to ensure the provision of underground gas services to the site and to each dwelling in the development is to be obtained prior to work commencing.

Utilities Service Provider Notification

29. The demolition / construction plans must be submitted to the appropriate water utility's office (eg Sydney Water office) to determine whether the development will affect the utility's sewer and water mains, stormwater drains and/or easements. If the development complies with water utility's requirements, the plans will be stamped indicating that no further requirements are necessary.

Disconnection of Services

- **30.** All previously connected services that are required to be disconnected are to be appropriately disconnected and made safe prior to commencement of the demolition / construction works. The various service authorities shall be consulted regarding their requirements for the disconnection of services.
- 31. All existing services within the boundary to remain live must be identified, pegged and made safe.

Demolition / Site Clearance

- **32.** The builder is to notify the occupants of premises on either side, opposite and at the rear of the development site a minimum of two days prior to demolition/site clearance. Such notification is to be clearly written on A4 size paper giving the date demolition/site clearance will commence and be placed in the letterbox of every premise (including every unit of a multi-unit residential building or mixed use building if applicable). The demolition/site clearance must not commence prior to the date which has been stated in the notice letter.
- 33. Prior to the demolition/site clearance, a Work Plan shall be prepared by a competent person(s) and shall be submitted to the Land & Housing Corporation. The Work Plan shall outline the identification of any hazardous materials, including surfaces coated with lead paint, method of demolition/site clearance, the precautions to be employed to minimise any dust nuisance and the disposal methods for hazardous materials.

Stormwater Disposal

- **34.** A detailed stormwater drainage plan(s), substantially in accordance with the approved concept stormwater drainage plan(s), is to be prepared and submitted to the Land & Housing Corporation. Any on-site detention system shall be designed in accordance with any catchment authority requirements (eg the Upper Parramatta River Catchment Trust On-site Detention Handbook) and/or the council for the area's drainage code.
- **35.** Proof of lodgement of any plan of a required drainage easement at the NSW Land Registry Services must be submitted to the Land & Housing Corporation prior to commencement of works. Registration of the plan of easement must be completed prior to occupation of the development and a copy of the registered plan is to be provided to the Land & Housing Corporation.

Council Notification

36. The council for the area shall be advised in writing, of the date it is intended to commence work, including demolition/site clearance. A minimum period of 5 working days notification shall be given.

Landfill

- **37.** Where site filling is necessary, a minimum of 95% standard compacting must be achieved and certified by a NATA registered Soils Laboratory.
- 38. Land fill materials must satisfy the following requirements:
 - i. be Virgin Excavated Natural Matter (VENM);
 - ii. be free of slag, hazardous, contaminated, putrescible, toxic or radio-active matter; and
 - iii. be free of industrial waste and building debris.

Site Facilities

- **39.** The following facilities shall be installed on the site:
 - (a) Toilet facilities shall be provided at the rate of 1 toilet for every 20 persons, or part thereof, employed at the site. Each toilet provided shall be a standard flushing toilet and shall be connected to a public sewer or if connection to a public sewer is not practicable, to an accredited sewerage management facility provided by the council for the area or if this is not practicable to some other council approved management facility.
 - (b) Adequate refuse disposal methods and builders storage facilities. Builders' wastes, materials or sheds are not to be placed on any property other than that which this approval relates to.
- **40.** Access to the site is to be provided only via an all-weather driveway on the property and is not to be provided from any other site.

Site Safety

- **41.** A sign must be erected in a prominent position on any site on which demolition or building work is being carried out:
 - (a) showing the name, address and telephone number of the responsible Land & Housing Corporation officer for the work, and
 - (b) showing the name of the principal contractor (if any) and a telephone number on which that person may be contacted during and outside working hours, and
 - (c) stating that unauthorised entry to the work site is prohibited.

Any such sign is to be maintained while the work is being carried out, but must be removed when the work has been completed.

Note:

This requirement does not apply in relation to building work that is carried out inside an existing building that does not affect the external walls of the building.

42. A minimum 1.8m high security fence or a Class A (minimum 1.8m high security fence) or Class B (overhead) hoarding must be erected between the work site and any public place prior to demolition / construction. Access to the site shall be restricted to authorised persons only and the site shall be secured against unauthorised entry when demolition / construction work is not in progress or the site is otherwise unoccupied.

Note:

Approval from the relevant roads authority will be required under Section 138 of the Roads Act 1993 where a Class A or B hoarding encroaches onto the footpath of / or a public thoroughfare within a classified road.

43. Building materials are not to be stored on the council for the area's footpath or roadway.

Waste Management

44. A final Waste Management Plan is to be prepared and submitted to the Land & Housing Corporation prior to the commencement of demolition / construction. The plan shall detail the amount of waste material and the destination of all materials, recyclable and non-recyclable, including provision for adequate receptacle(s) to store all waste generated by the development, pending disposal.

DURING DEMOLITION / SITE CLEARANCE / CONSTRUCTION

The following identified requirements are to be complied with whilst works are occurring on the site.

Heritage

- 45. Historic and indigenous archaeological sites and relics are protected under the Heritage Act 1977 and National Parks and Wildlife Act 1974 respectively. Should any relics be uncovered during the course of the approved works, work must cease in the affected area. Subsequently, in cases where historical items have been uncovered, the Department of Planning, Industry and Environment must be contacted or if indigenous items have been uncovered the Department of Environment, Energy and Science must be contacted.
- **46.** All workers / contractors must be informed of their obligations under the *National Parks and Wildlife Act* 1974, namely that it is illegal to disturb, damage or destroy a relic without the prior approval of the Coordinator-General of the Department of Environment, Energy and Science.

Demolition

- **47.** Any existing structures are to be demolished/removed prior to commencement of construction of the approved development.
- 48. Demolition is to be carried out in accordance with the appropriate provisions of AS 2601.
- **49.** Where materials containing asbestos are to be removed, the removal is to be carried out by a licensed contractor(s) who has a current SafeWork NSW accreditation in asbestos removal.
- **50.** Removal of asbestos-based thermal or acoustic insulation, such as sprayed asbestos and asbestos-based lagging, including friable asbestos boards, shall be carried out in accordance with the National Occupational Health and Safety Commission's Code of Practice for the Safe Removal of Asbestos, 2nd Edition [NOHSC:2002 (2005)].
- **51.** Hazardous or intractable wastes, including all asbestos laden waste, arising from the demolition/site clearance process shall be removed and disposed of in accordance with the requirements of SafeWork NSW and the Department of Environment, Energy and Science.
- **52.** Documentary evidence in the form of tip receipts from an approved Waste Management Facility shall be obtained by the demolition/site clearance contractor and submitted to the Land & Housing Corporation demonstrating the appropriate disposal of the asbestos waste.
- **53.** Demolition/site clearance procedures shall maximise the reuse and recycling of materials from the site in order to reduce the environmental impacts of waste disposal.
- **54.** During demolition/site clearance, the public footway and public road shall be kept clear at all times and shall not be obstructed by any demolished material or vehicles. The public road and footway shall be swept (not hosed) clean of any material, including clay, soil and sand.
- **55.** All vehicles leaving the site with demolition/site clearance materials shall have their loads covered and vehicles shall not track soil and other material onto the public roads and footways and the footway shall be suitably protected against damage when plant and vehicles access the site. All loading of vehicles with demolished materials shall occur on site.
- **56.** Care shall be taken during demolition/site clearance to ensure that existing services on the site (ie sewer, electricity, gas, and telecommunications) are not damaged.

Survey Reports

57. Survey reports are to be submitted to the Land & Housing Corporation prior to the placement of the footings / slab and on completion of the dwellings to verify the correct position of the structures in relation to the boundary allotments in accordance with this determination.

Hours of Demolition / Construction / Civil Work

58. Demolition / site clearance / construction / civil work is only permitted on the site between the hours of 7.00am to 6.00pm Monday to Friday and 8.00am to 1.00pm on Saturday with no work permitted on Sundays or public holidays.

Excavation & Backfilling

59. All excavations and backfilling associated with site clearance and the erection of a building must be executed safely and in accordance with appropriate professional standards. All such work is to be guarded and protected to prevent it from being dangerous to life and property.

Pollution Control

- **60.** Any noise generated during the construction of the development shall not exceed the limits specified in the July 2009 Interim Construction Noise Guidelines, published by the Department of Environment and Climate Change (now Department of Environment, Energy and Science).
- **61.** No fires are to be lit or waste materials burnt on the site.
- **62.** No washing of concrete forms or trucks is to occur on the site.
- **63.** Any contamination / spills on the site during construction works must be actively managed and reported immediately to appropriate regulatory authorities to minimise any potential damage to the environment.
- **64.** Dust generation during demolition / site clearance / construction shall be controlled using regular control measures such as on site watering or damp cloth fences.
- **65.** All vehicles transporting loose materials and travelling on public roads must be secured (ie closed tail gate and covered) to minimise dust generation.
- **66.** Spraying of paint and other materials with the potential to become air borne particulates must only be undertaken in light wind conditions.
- **67.** Non-recyclable waste and other waste containers must be regularly collected and disposed of at a licensed landfill or other disposal site in accordance with details set out in the final Waste Management Plan to be prepared and submitted to the Land & Housing Corporation prior to the commencement of demolition / construction.

Impact of Construction Works

- **68.** The Land & Housing Corporation shall bear the cost of any necessary adjustments to utility mains and services.
- **69.** Care shall be taken to prevent any damage to adjoining properties. The building contractor may be liable to pay compensation to any adjoining owner if, due to construction works, damage is caused to such adjoining property.

PRIOR TO OCCUPATION OF THE DEVELOPMENT

The following identified requirements are to be complied with prior to the occupation of the development.

General

70. The occupation of the development shall not commence until all the identified requirements of this determination have been complied with.

Termite Protection

71. To protect buildings from subterranean termite, termite barriers installed in accordance with AS 3660.1 are required on the underside and penetrations of the concrete slab floor.

In addition, a durable notice must be permanently fixed inside the meter box indicating:

- (a) The method of protection.
- (b) The date of installation of the system.
- (c) Where a chemical barrier is used, its life expectancy as listed on the National Registration Authority label.
- (d) The need to maintain and inspect the system on a regular basis.

Road Damage

72. The cost of repairing any damage caused to the council for the area's assets in the vicinity of the subject site as a result of demolition / site clearance / construction works associated with the approved development is to be met in full by the building contractor.

Stormwater Drainage

- 73. Prior to occupation of the development, a Work As Executed Plan must be prepared by the Building Contractor clearly showing all aspects of the constructed stormwater drainage system, including any on-site detention system. The plan must demonstrate general compliance with the approved concept stormwater drainage plan(s) and must include:
 - Sufficient levels and dimensions to verify the constructed storage volume.
 - Location and surface levels of all pits.
 - Invert levels of the internal drainage line, orifice plates fitted and levels within the outlet control pit.
 - Finished floor levels of all structures.
 - Verification that any required trash screens have been installed.
 - Locations and levels of any overland flow paths.
 - Verification that any drainage lines are located wholly within easements.

The Work-As-Executed Plan information should be shown on a copy of the final civil works drawings.

A positive covenant and restriction-as-to-user must be placed over the onsite detention system (if any) in accordance with the council for the area's on-site detention policy to ensure that system will be adequately maintained. The positive covenant and restriction-as-to-user must be registered at NSW Land Registry Services prior to occupation of the development. A copy of the registered restriction-as-to-user is to be provided to the Land & Housing Corporation and the council for the area.

PART B - Additional identified requirements

Site Specific Requirements

74. Site Investigation Report

The recommendations contained in the Site Investigation Report dated 7.04.2021 prepared by Barnson must be implemented, including but not limited to Building Foundation and Construction. In particular, during foundation construction, should the subsurface conditions vary to those inferred in the Site Investigation Report, a suitably experienced geotechnical engineer should review the design and recommendations given in the Report to determine if any alterations are required.

Requirements resulting from consideration of the council for the area's notification response in the REF

Nil requirements

Requirements as requested by public authorities other than councils

Nil requirements

Requirements resulting from consideration of adjoining occupier responses to notification in the REF / consideration of other public submissions received

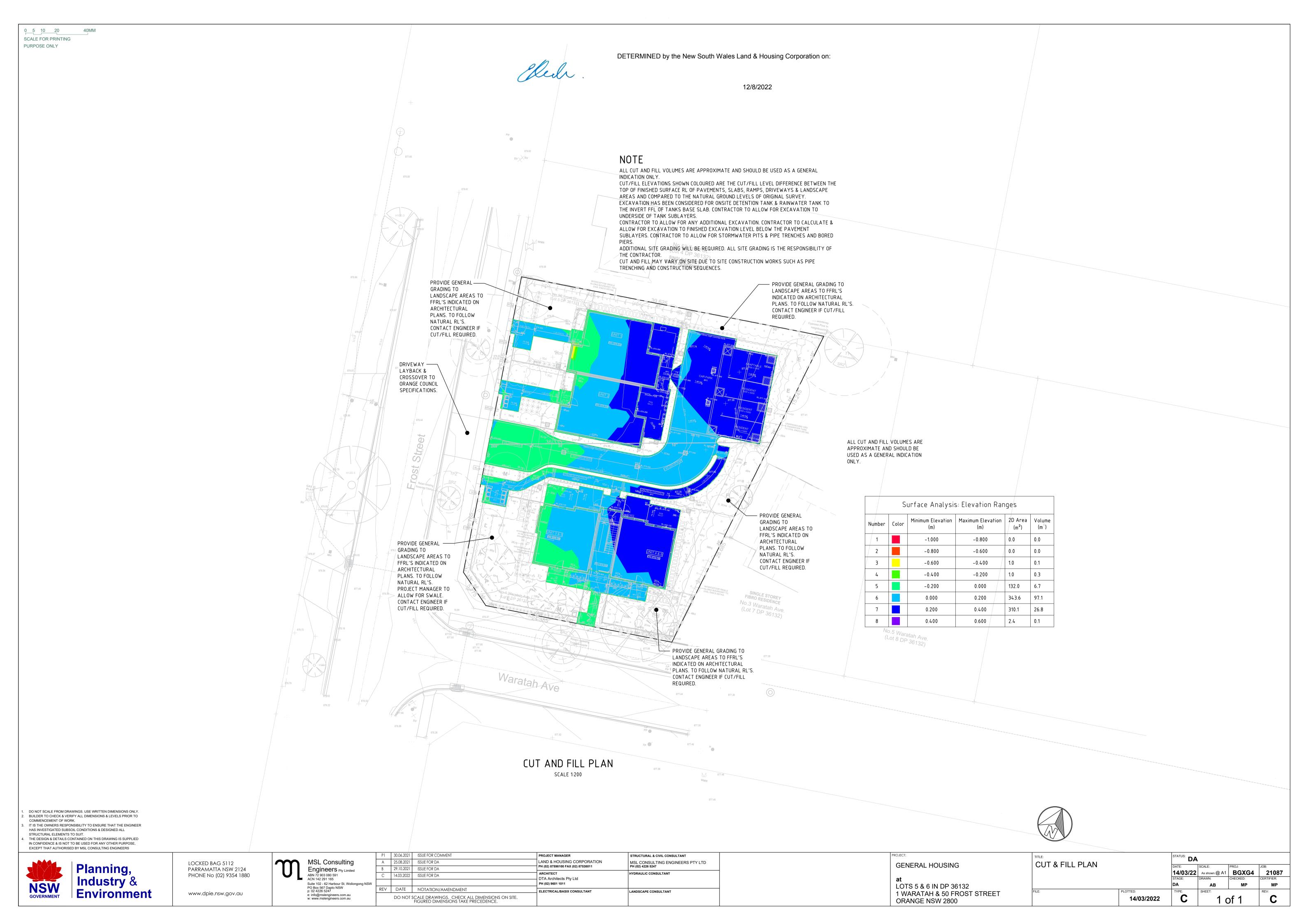
Nil requirements

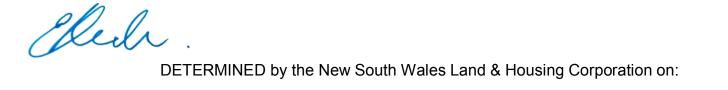
Specific service / utility agency requirements

Nil requirements

ADVISORY NOTES

- Approval of this development activity does not imply or infer compliance with Section 23 of the Disability Discrimination Act 1992. Refer to AS 1428.1 and the Building Code of Australia for detailed guidance.
- ii. Information regarding the location of underground services may be obtained from Dial Before You Dig at www.1100.com.au or by dialling 1100.





12/8/2022

DAISSUE

1 WARATAH AVENUE & 50 FROST STREET, ORANGE NSW

(LOT 5 & 6 in DP 36132)

GENERAL HOUSING

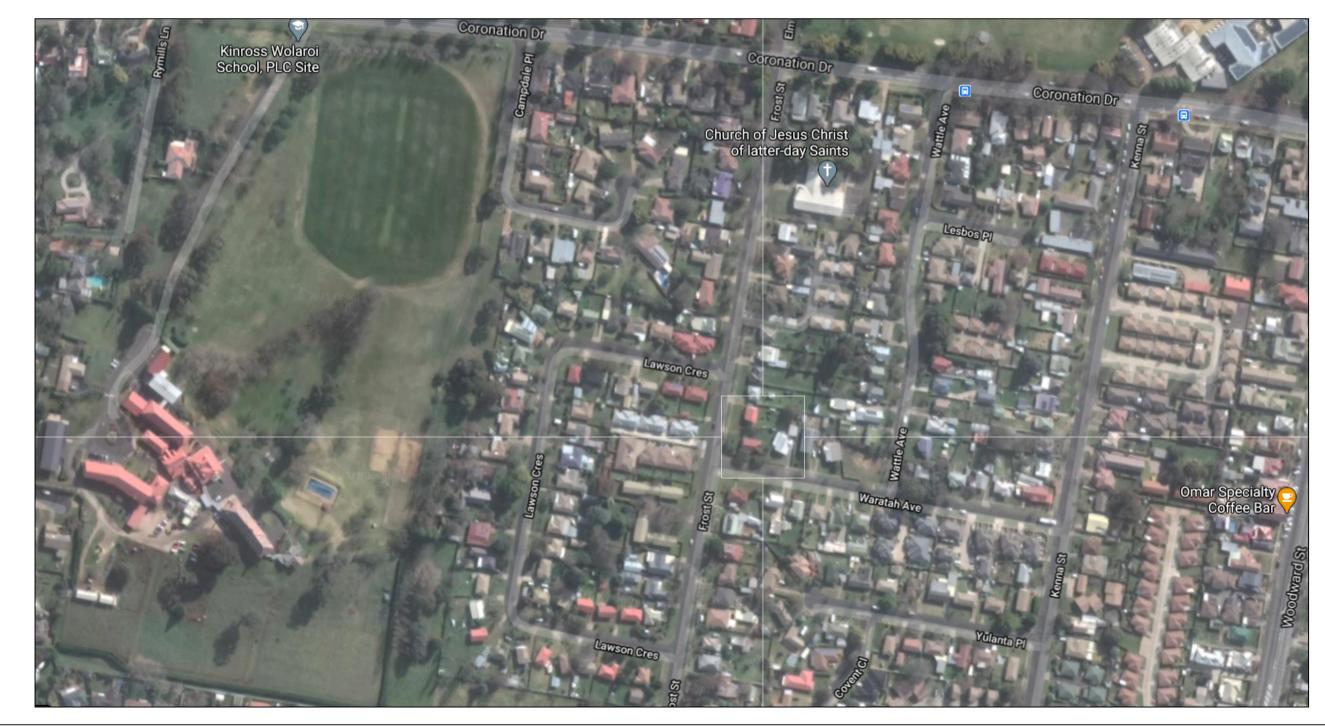




DRAWING SCHEDULE:

ARCHITECTURAL	Type	Sheet No.	Rev
COVER SHEET	Α	01 of 17	В
BLOCK ANALYSIS PLAN	Α	02 of 17	В
SITE ANALYSIS PLAN	Α	03 of 17	В
DEMOLITION PLAN	Α	04 of 17	В
DEVELOPMENT DATA	Α	05 of 17	В
SITE PLAN	Α	06 of 17	В
GROUND FLOOR PLAN	Α	07 of 17	В
FIRST FLOOR PLAN	Α	08 of 17	В
ROOF PLAN	Α	09 of 17	В
ELEVATIONS	Α	10 of 17	В
ELEVATIONS	Α	11 of 17	В
ELEVATIONS- STREET VIEW	Α	12 of 17	В
SECTIONS	Α	13 of 17	В
SOLAR ACCESS - VIEW FROM SUN	Α	14 of 17	В
SOLAR ACCESS - VIEW FROM SUN	Α	15 of 17	В
SHADOW DIAGRAMS	Α	16 of 17	В
PERSPECTIVES	Α	17 of 17	В

LOCATION PLAN:





LOCKED BAG 5112
PARRAMATTA NSW 2124
PHONE No (02) 9354 1880
www.dpie.nsw.gov.au



DTA Architects
PH (02) 9601 1011

PROJECT MANAGER

LAND & HOUSING CORPORATION PH (02) 9354 1880

DATE: 24/02/2022

DESIGN:

NOMINATED ARCHITECTS:

Daniel Donai

NSW ARB No.9068

Member

Australian institute of Architects

PROJECT No:

STRUCTURAL ELEMENTS TO SUIT. THE DESIGN & DETAILS CONTAINED ON THIS DRAWING IS SUPPLIED IN CONFIDENCE & IS NOT TO BE USED FOR ANY OTHER PURPOSE, EXCEPT THAT AUTHORISED BY DTAARCHITECTS

C COPYRIGHT - DTAARCHITECTS







EXISTING 1 STOREY MULTI - UNIT DEVELOPMENT



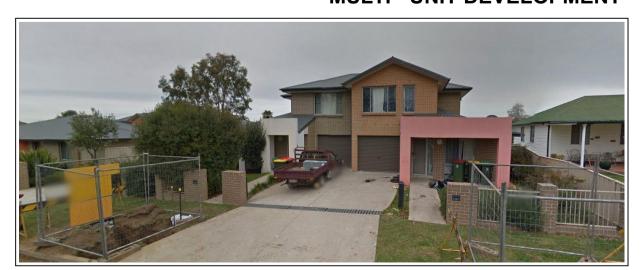
PROPOSED DEVELOPMENT OWNED BY **DEPARTMENT OF HOUSING**



EXISTING 1 STOREY MULTI - UNIT DEVELOPMENT



EXISTING 1 STOREY MULTI - UNIT DEVELOPMENT



EXISTING 1 & 2 STOREY MULTI - UNIT DEVELOPMENT ----



EXISTING 1 STOREY

MULTI - UNIT DEVELOPMENT

PROPOSED DEVELOPMENT OWNED BY DEPARTMENT OF HOUSING BOUNDARY LINE TO LOTS OWNED BY OTHERS

LEGEND: BLOCK PLAN

MOSTLY TYPICAL RECTANGULAR LOTS WITH VARIED LOT SIZES IN THE VICINITY OF THE NEW DEVELOPMENT. LOTS BECOME IRREGULAR **TOWARDS BLOCK ENDS.**



DETERMINED by the New South Wales Land & Housing Corporation on:

- EXISTING 1 STOREY MULTI - UNIT DEVELOPMENT



12/8/2022

- EXISTING 1 STOREY MULTI - UNIT DEVELOPMENT



EXISTING 1 STOREY MULTI - UNIT DEVELOPMENT



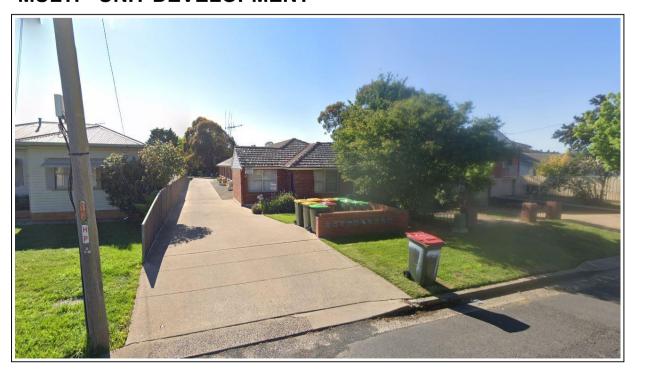
EXISTING 1 STOREY MULTI - UNIT DEVELOPMENT



EXISTING 1 STOREY MULTI - UNIT DEVELOPMENT



EXISTING 1 STOREY MULTI - UNIT DEVELOPMENT



- EXISTING 1 STOREY MULTI - UNIT DEVELOPMENT



EXISTING 1 & 2 STOREY MULTI - UNIT DEVELOPMENT -

TYPICAL LOT DEVELOPMENT -



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GENERAL HOUSING

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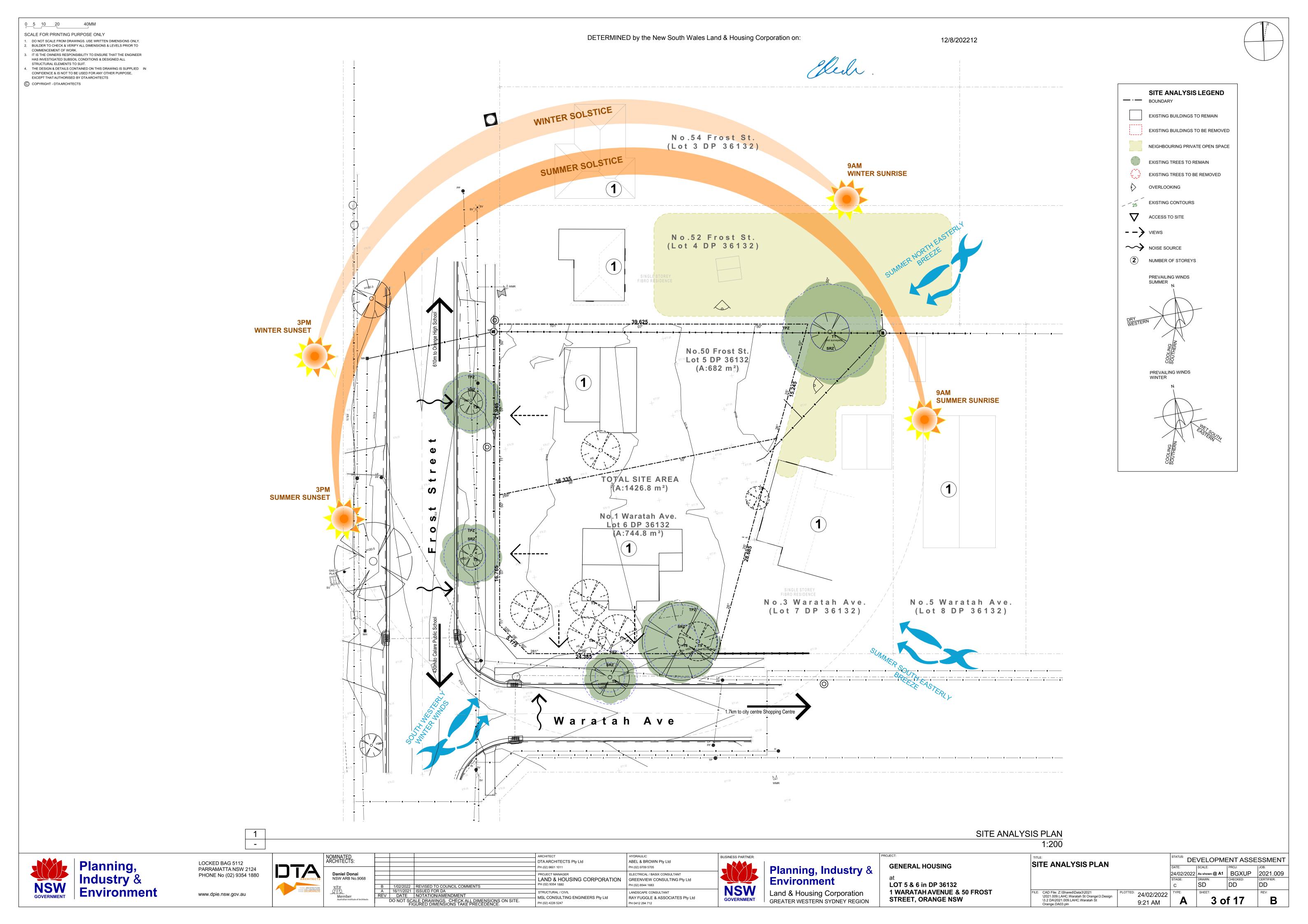
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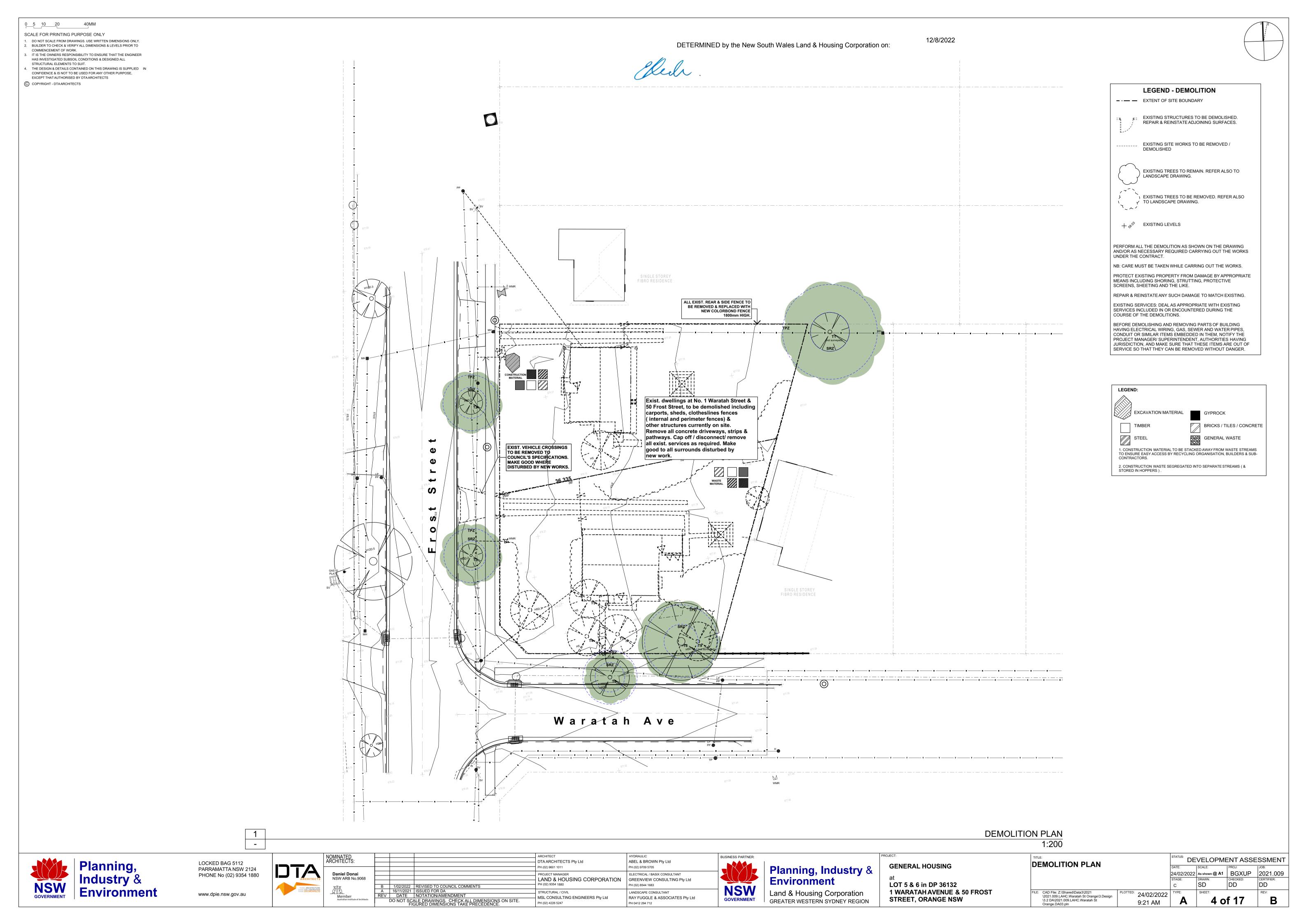
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LOT 5 & 6 in DP 36132 1 WARATAH AVENUE & 50 FROST STREET, ORANGE NSW

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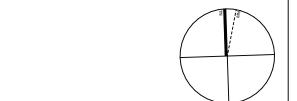
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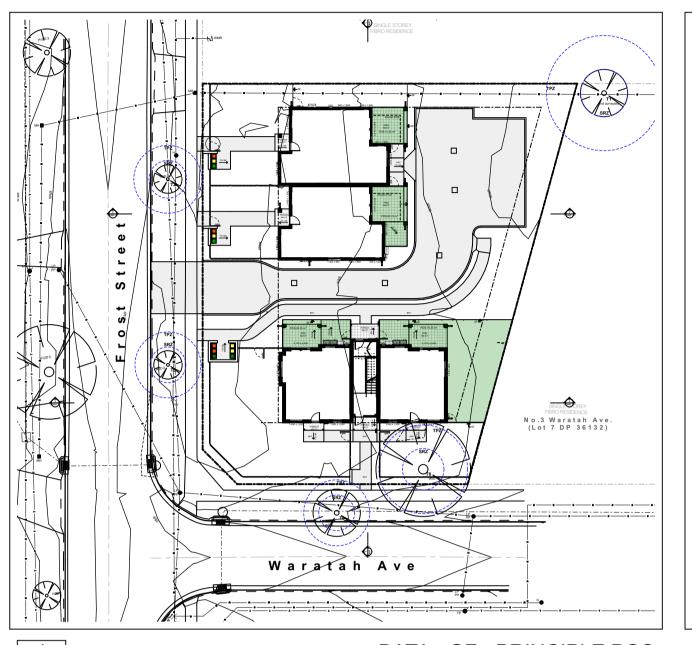
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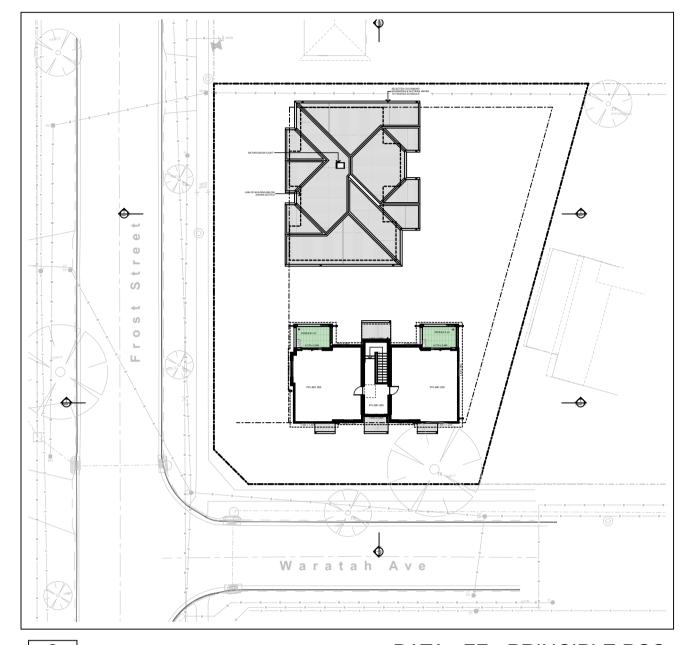
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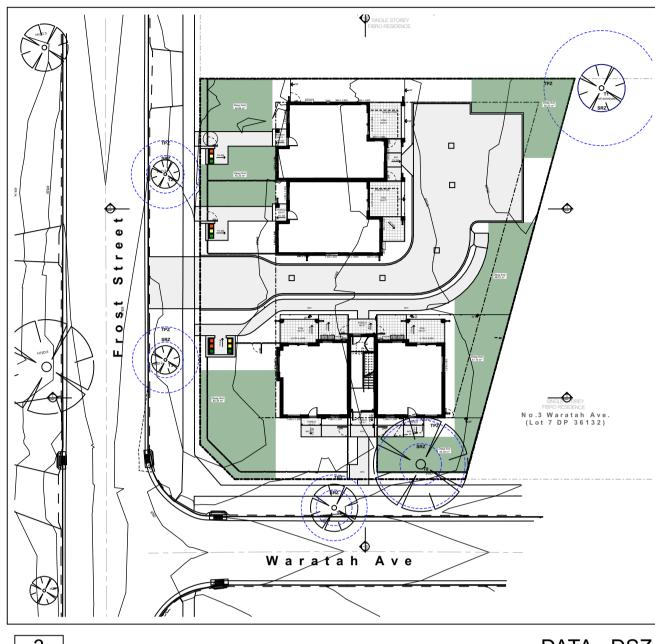




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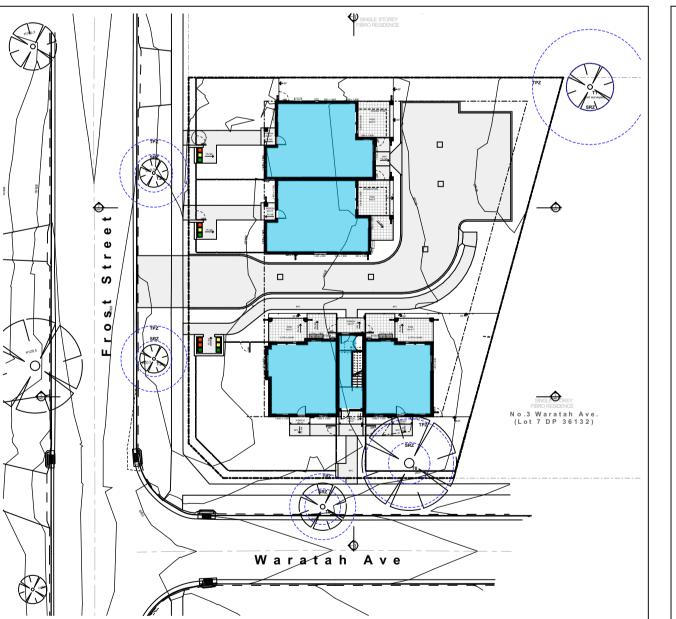


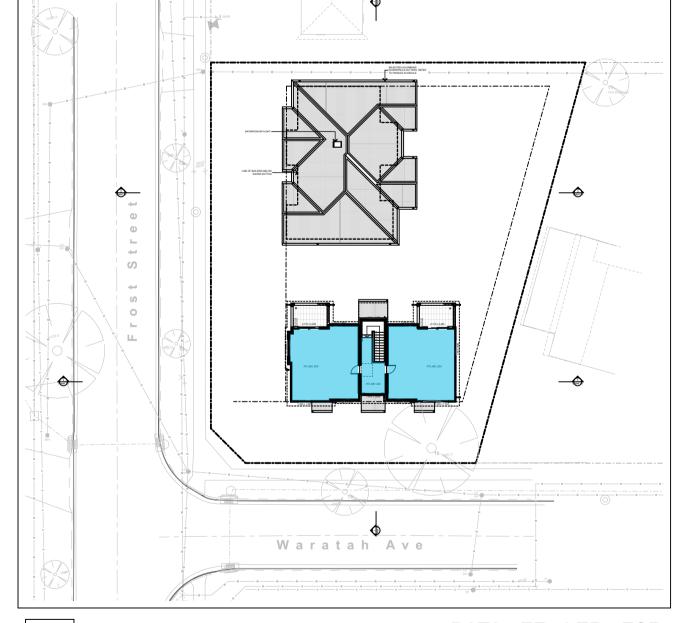


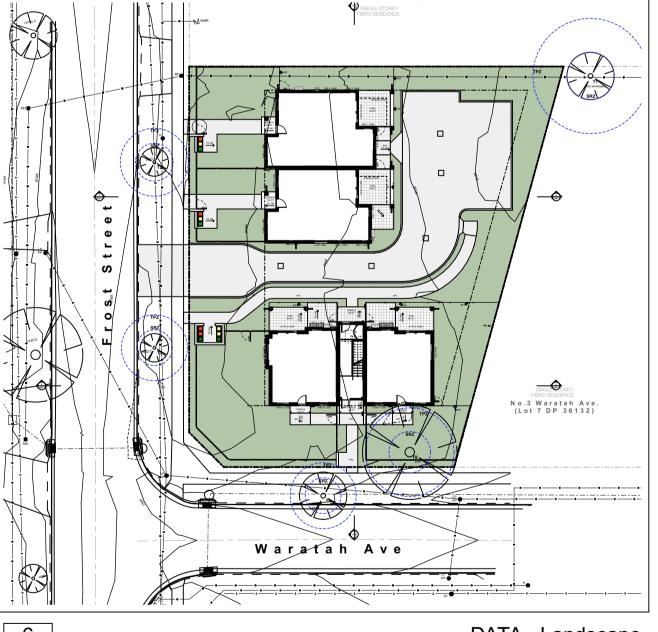


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DATA - GF - LEP - FSR 5 DATA - FF - LEP - FSR 1:400

6 DATA - Landscape

	DEV	ELOPMENT D	ATA	– Ge	neral Housir	ng		
Job Reference	BGXUP							
_ocality / Suburb	Orange							
Street Address		1 Waratah & 50 Frost St, Orange NSW 2800						
Lot Number(s) & Deposited Plan	Lots 5 & 6 IN DP 36132							
SITE AREA sqm)		1426.8 m2						
NUMBER OF EXISTING LOTS		2						
PROPOSED GFA* (sqm)		Orange LEP (m2) 382.1 m ²						
NUMBER OF DWELLINGS		6 (2	2 x 2 be	drooms	s, 4 x 1 bedrooms	3)		
DWELLINGS	Number	Type*	1	lo of E	Bedrooms	Are	ea*(m²)	POS*
	1	Ground	2	Gene	eral - Adaptable		74.93	14.32
	2	Ground	2	Ge	neral - Livable		70.32	20.15
	3	Ground	1	Ge	neral - Livable		52.22	20.35
	4	Ground	1	Ge	neral - Livable		51.19	79.35
	5	First	1	Ge	neral - Livable		53.98	8.21
	6	First	1	Ge	neral - Livable		53.41	8.21
	Co	ontrol		Re	equirement		Prop	osed
BUILDING HEIGHT	ARH SEPP				8.5m		7.6	6m
PARKING	ARH SEPP	Non- Accessible	(no.	1 beds	s) $\times 0.5 = 4 \times 0.5$	= 2	4 sp	aces
			(n	o. 2 be	eds) x 1 = 2 x 1 =	2		
FSR	Orange C	Council - LEP			-		0.2	7:1
SETBACK(s)	Orange Council -	Front Setback	Cons	istent v	with adjoining sett 7.58 m	oack	8	m
	DCP	Secondary Setback			2 m		6.5m	
		Side / Rear Setback	Min	. 900m	nm setback to wal	ls.	2.5m /	' 3.8 m
			Contained within height plane - 45deg, commencing 2.5m above existing ground level at site boundary.					
DEEP SOIL - min 15% Site area		LUDG PP as guide)	15% (Min 214.02m2) 2/3 deep soil at rear (142.68m2)			(347.24	plies m² Total) n² at rear)	
LANDSCAPING	SI	LUDG	30% of site area = 428.04m ² Complies (637.08 m2)			plies		
SOLAR ORIENTATION		l SEPP PP as guide)	70% of dwellings have 3 hours of sunlight between 9am and 3pm in mid-winter			POS 83% Living ro	es (83%) (5/6 units) oms 83% units)	

LAHC*- development data for LAHC new housing supply. For details refer to Current version of LAHC Design Requirements.

GFA* – gross floor area calculated as per relevant Planning Instrument
Orange LEP: Sum of the floor area of each floor of a building measured from the internal face of external walls

AREA* – Dwelling floor area includes internal walls but excludes external walls POS* – Private open space

Type* - E.g. Universal/non-universal

Solar Orientation* - % with min 3hours of direct sunlight into living areas and private open space

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GENERAL HOUSING
at LOT 5 & 6 in DP 36132 1 WARATAH AVENUE & 50 FROST STREET, ORANGE NSW

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PLANT SCHEDULE

REFER TO LANDSCAPE PLAN

Code Latin Name (Common Name - Mature Height)

Elaeocarpus reticulatus (Blue berry ash - 8m)

Pyrus calleryana 'Chanticleer' (Callery Pear - 10m)

Lagerstroemia indica 'Natchez' (Crepe myrtle - 5m)

Pistachio chinensis (Chinese pistachio - 10m)

Buxus sempervirens sufruticosa (Dwarf Box - 1m)

Callistemon 'Better John' (Dwarf Bottlebrush - 1m)

Casuarina 'Cousin it' (Prostrate casuarina - 0.3m)

Callistemon 'White Anzac' (White Bottlebrush - 1.5m)

Hymenosporum flavum 'Lushious' (Native frangipani - 0.5m)

Melaleuca bracteata revolution green (Bracelet myrtle - 3m)

Callistemon 'Macarthur' (Bottlebrush - 1.8m)

Grevillea Rhyolitica (Deua Grevillea - 1.5m)

Gardenia augusta 'florida' (gardenia - 1.2m)

Melaleuca thymifolia (Rock Myrtle - 1m)

Nandina 'Gulf Stream' (Nandina - 0.4m)

Photinia 'Red Robin' (Photinia - 2.5m)

Clivea miniata (Kaffir lilly - 0.5m)

Melaleuca 'Claret Tops' (Paperbark - 1.2m)

Leptospermum 'Cardwell' (Dwarf Tea Tree - 2m)

Phillodendron xanadu (Dwarf phillodendron - 0.5m)

Syzygium australe 'Resilience' (Lilly Pilly - 3m)

Hibbertia scandens (Guinea flower - climber)

Liriope 'Evergreen Giant' (Giant liriope - 0.5m)

Myoporum parvifolium (Creeping Boobiala - 0.2m)

Trachelospermum jasminoides (Star jasmine - 0.3m)

Lomandra longifolia 'Tanika' (Fine leaf dwarf lomandra - 0.6m)

Westringia 'Wynyabbie gem' (Coastal rosemary - 2m)

Raphiolepis 'Snow maidens' (Indian hawthorne - 0.75m) Raphiolepis 'Oriental Pearl' (Dwarf Indian hawthorne - 1m)

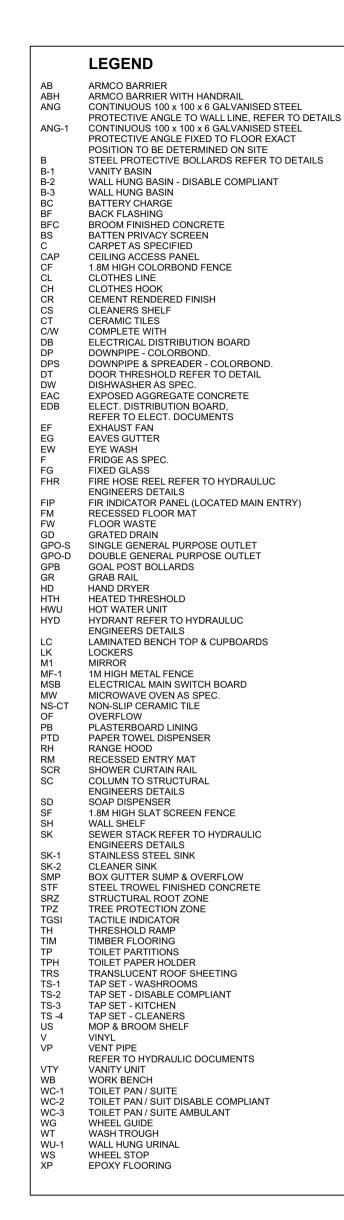
Grevillea 'Peaches & Cream' (Grevillea - 1.5m)

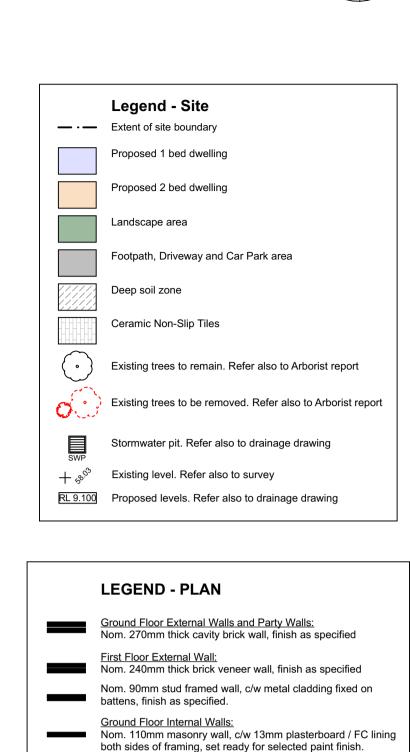
Buxus microphylla 'Japonica' (Box - 1m)

Camellia sasanqua (Sasanqua - 3m)

Fraxinus griffithsii (Evergreen ash - 5m)







First Floor Internal Walls:

FFL 9.100 Proposed floor levels.

BASIX REQUIREMENTS

Common Areas:

Nom. 90mm stud framed wall, c/w 13mm plasterboard / FC

Non-slip ceramic floor tiles. Refer to finishes schedule

Ceramic floor tiles. Refer to finishes schedule

- Shower to have a min rating of 4 stars (>4.5 but <=6.0 L/min)

- Taps for kitchens and bathrooms to have a min rating of 5 stars

- Provide ceiling fan to main bedroom and living room to all units

- Hot water units to be gas instantaneous system with a min rating of 6 stars

- Rainwater tank to be a min of 17000 Litres and be of a central rain water tank,

- Solar panels to be provided with a min electrical output of 1.1 peak kW

collecting a min of 400sqm of roof area. Landscape connection to all ground floor units and common landscaped area. Toilet and Laundry connection to all units

- Toilet flushing system to have a min rating of 4 stars

- Provide gas cooktop and electric oven to all units

Carpet / vinyl floor finish. Refer to finishes schedule

lining both sides of framing, set ready for selected paint finish.



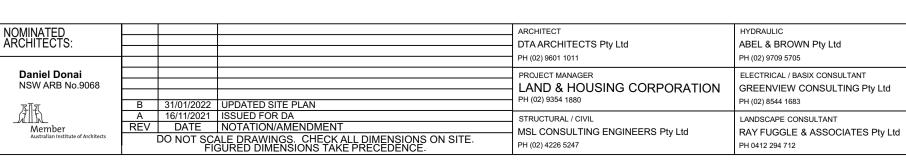


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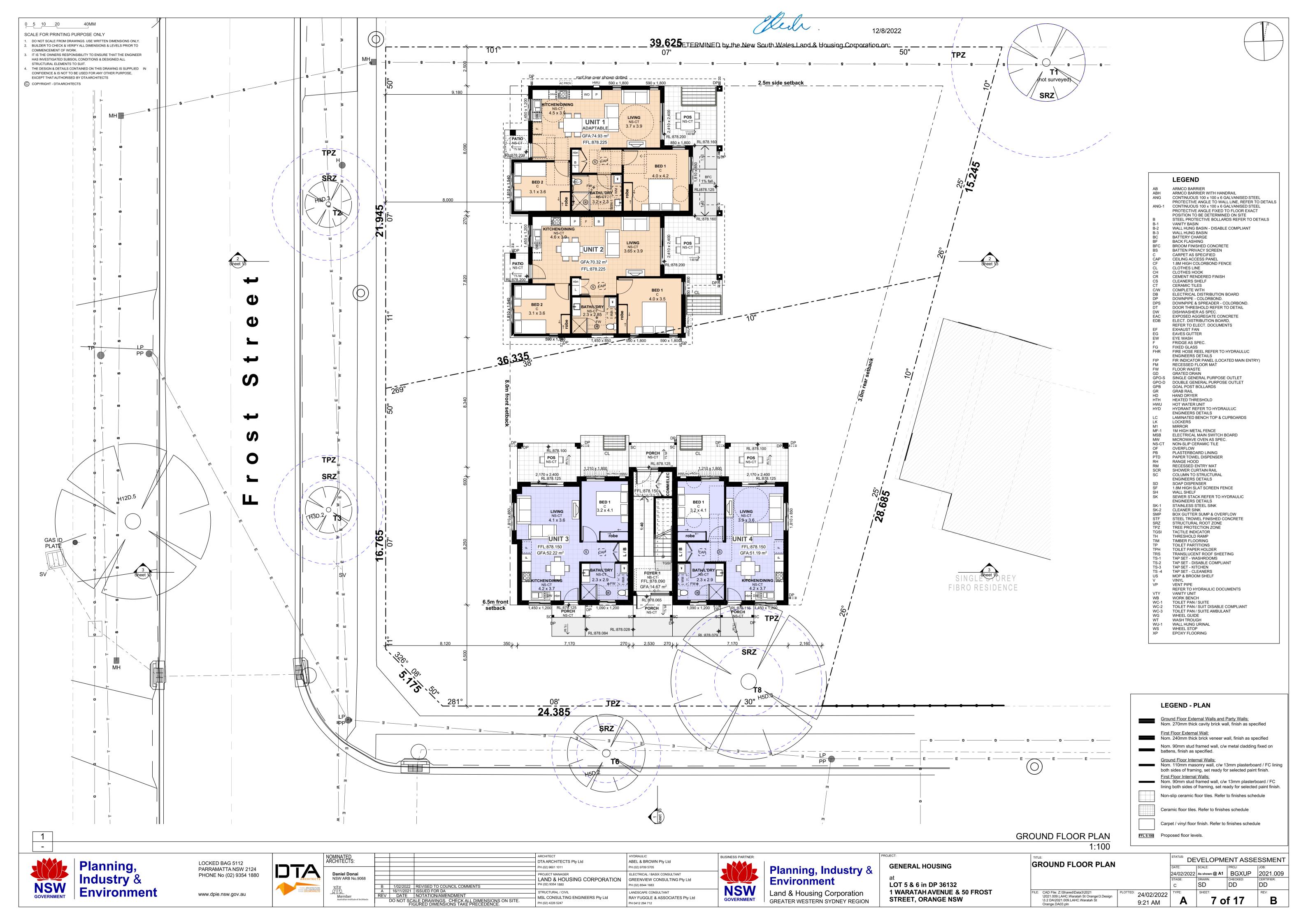


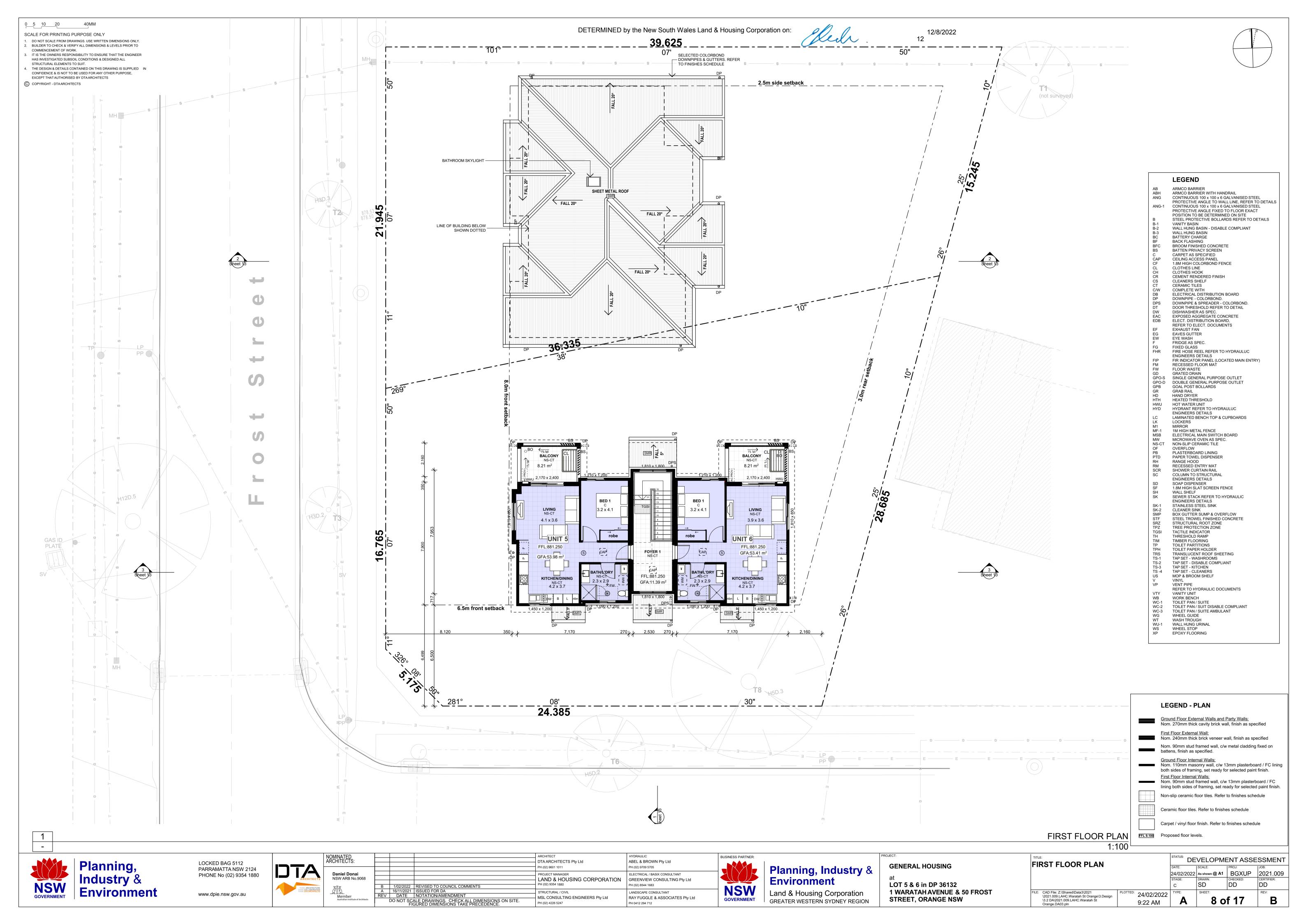
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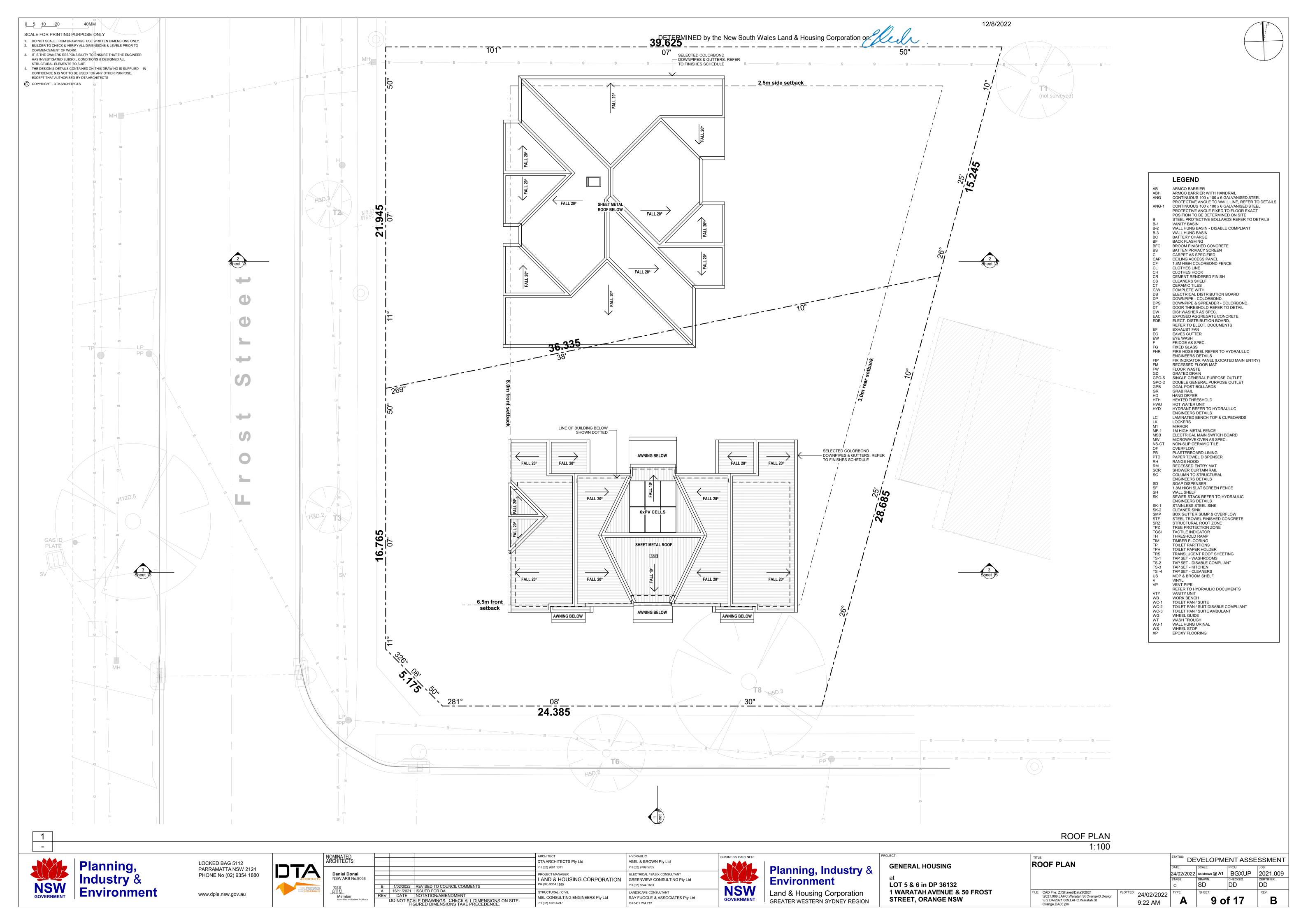
GENERAL HOUSING LOT 5 & 6 in DP 36132

1 WARATAH AVENUE & 50 FROST STREET, ORANGE NSW

DEVELOPMENT ASSESSMENT SITE PLAN 24/02/2022 As shown @ A1 | BGXUP | 2021.009 SD DD FILE: CAD File: Z:\Shared\Data3\2021 \2021.009.LAHC.Waratah St Orange\3.Design \3.2 DA\2021.009.LAHC.Waratah St Orange.DA03.pln 24/02/2022 6 of 17 9:21 AM









EXTERNAL	FINISHES SCHEDULE
1	ROOF SHEET (SMR) - Sheet Metal Roof Profile: Custom Orb - Colorbond Shale Grey
2	GUTTER / DOWNPIPES / BARGE BOARD / FASCIA Colorbond, Colorbond Windspray
3	EXTERNAL WALL - (FBK1) - Face Brick Type 1 PGH: Range - Classic Collections Foundations, Name - Pilbara
4	WALL CLADDING (MC1) - Metal Wall Cladding Custom Orb, Windspray Horizontal Orientation
5	WALL CLADDING (MC1) - Metal Wall Cladding Custom Orb, Shale Grey Horizontal Orientation
6	WALL CLADDING (MC1) - Metal Wall Cladding Custom Orb, Windspray Vertical Orientation
7	WALL CLADDING (MC1) - Metal Wall Cladding Custom Orb, Shale Grey Vertical Orientation
8	SOFFIT LINING Colour - Dulux Vivd White
9	WINDOW & DOOR FRAMES / BALCONY PRIVACY SCREEN BATTENS / BALCONY BALUSTRADE FRAME Powdercoat - Shale Grey
10	CONCRETE SLAB EDGE Colour - Dulux Shale Grey
11	SLAT SCREEN COURTYARD FENCE (SF) / FRONT METAL FENCE (MF1) / COLORBOND FENCE (CF). Aluminium Powdercoat - Basalt

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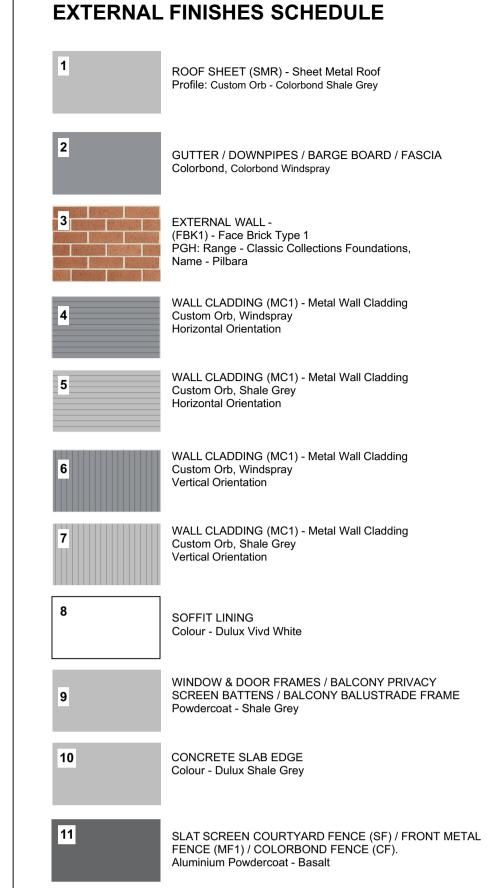
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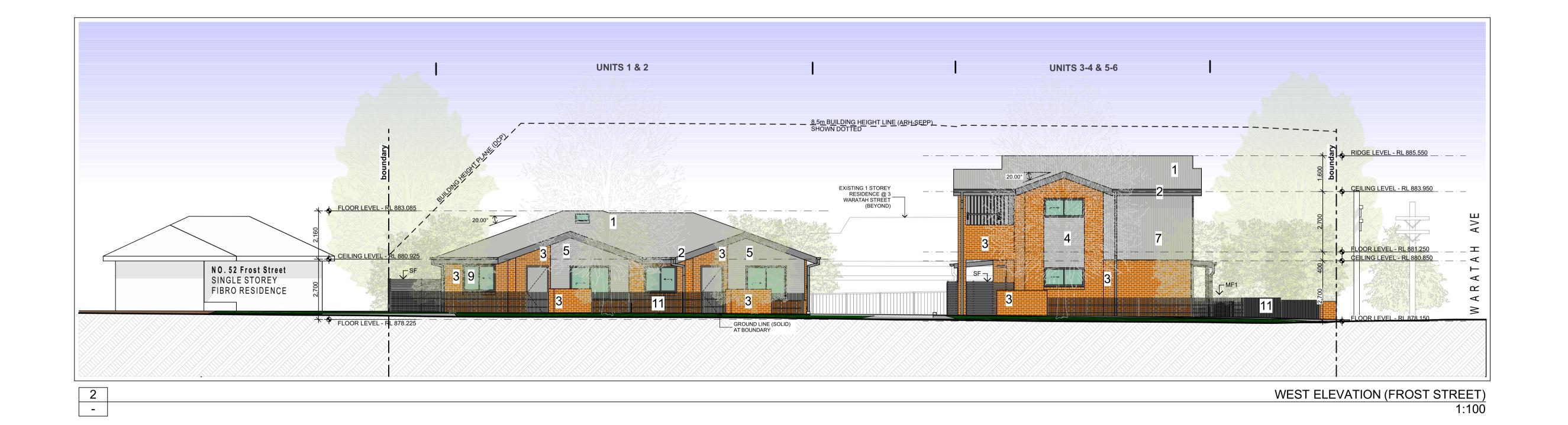
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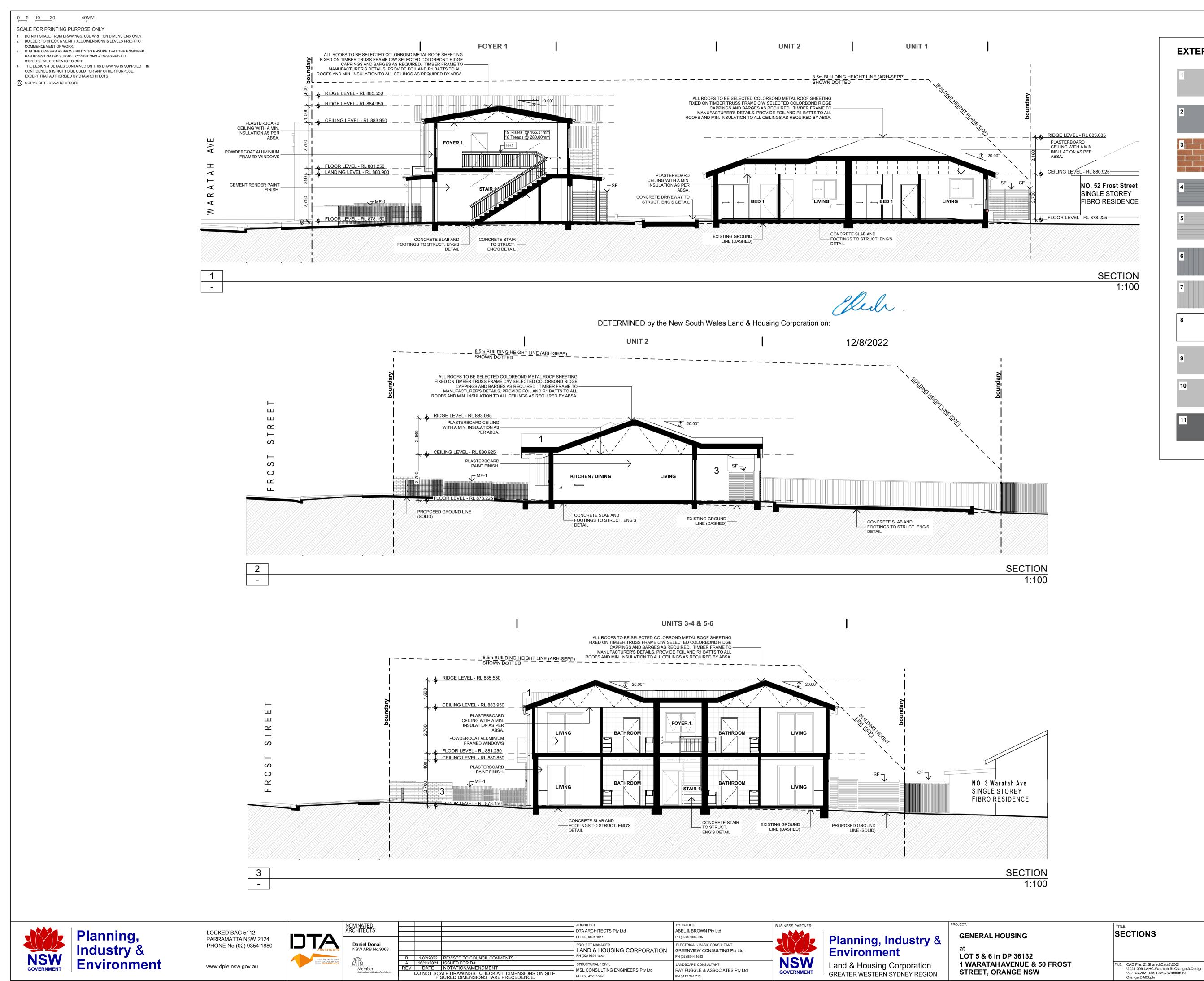


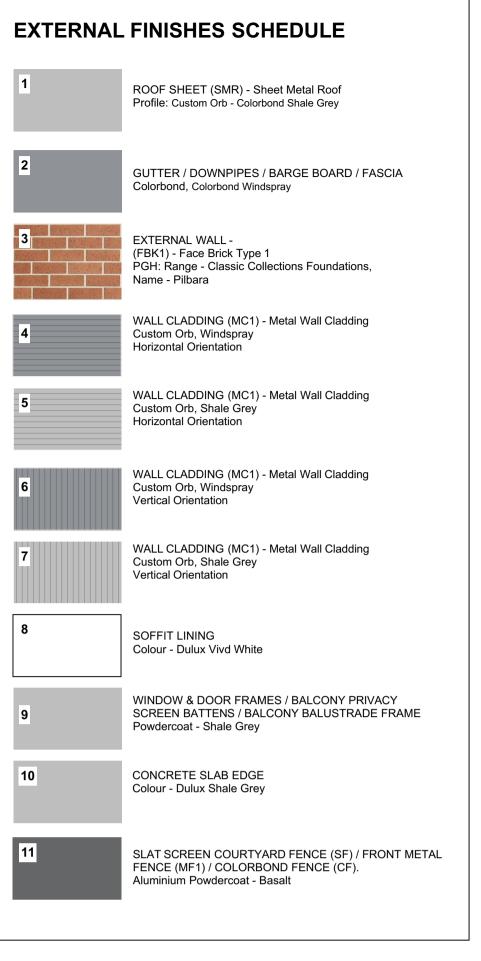
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at
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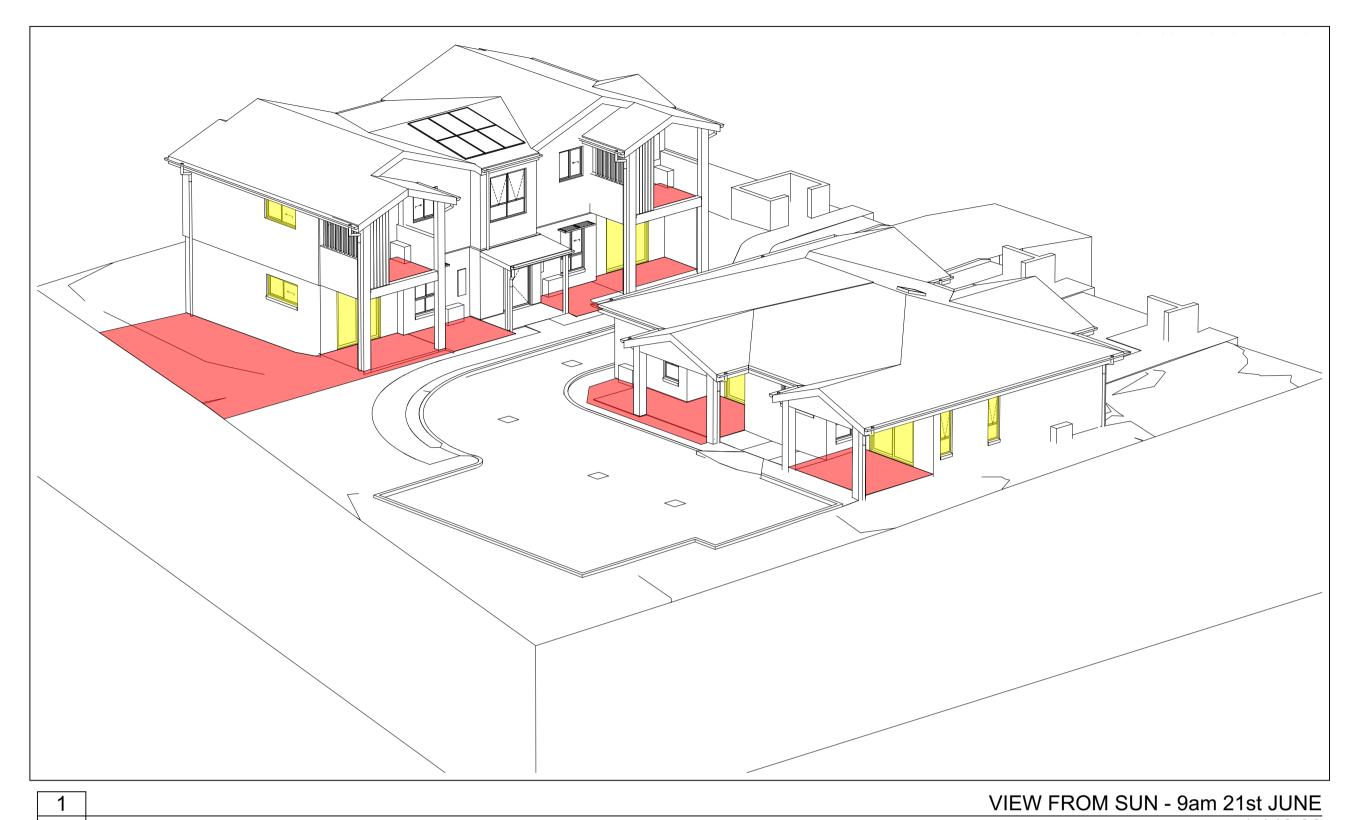
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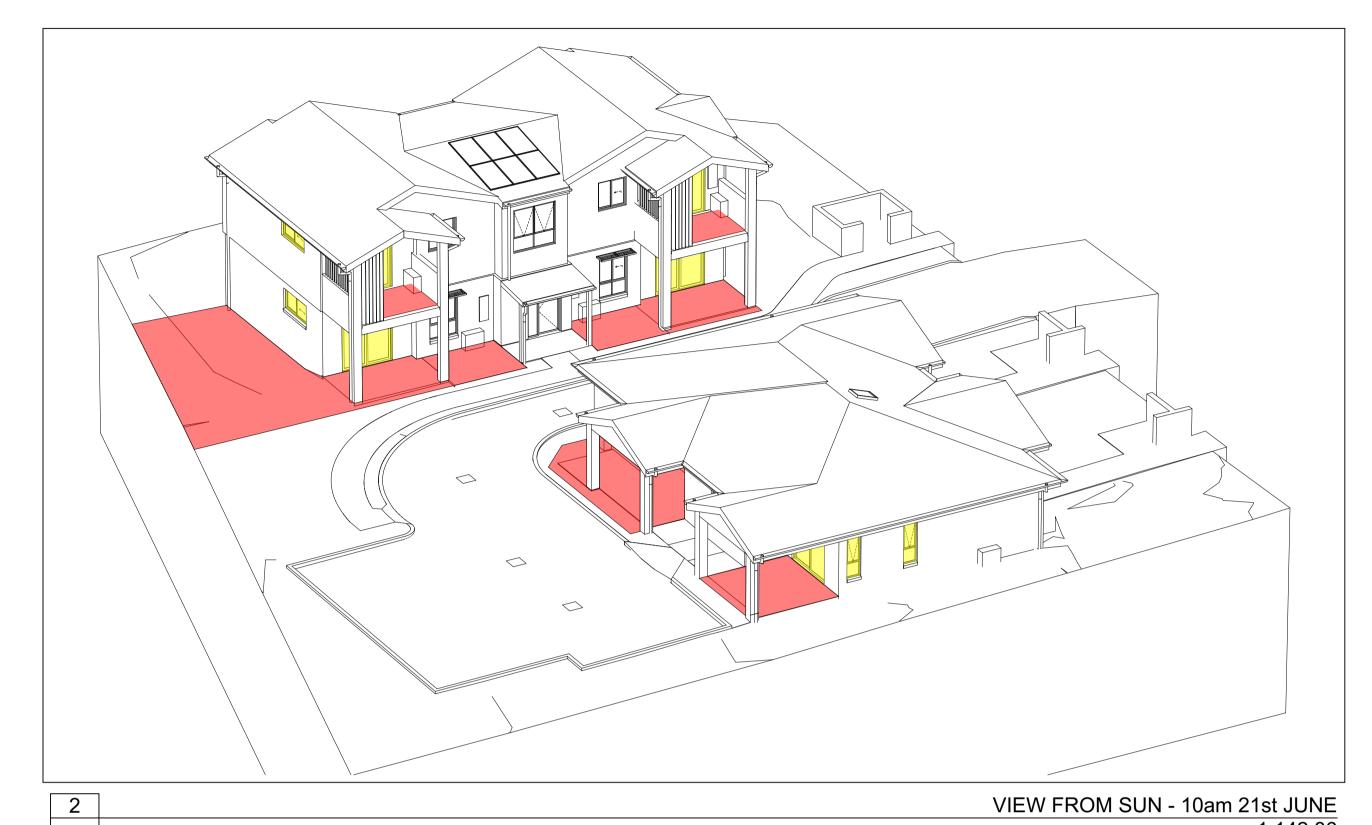
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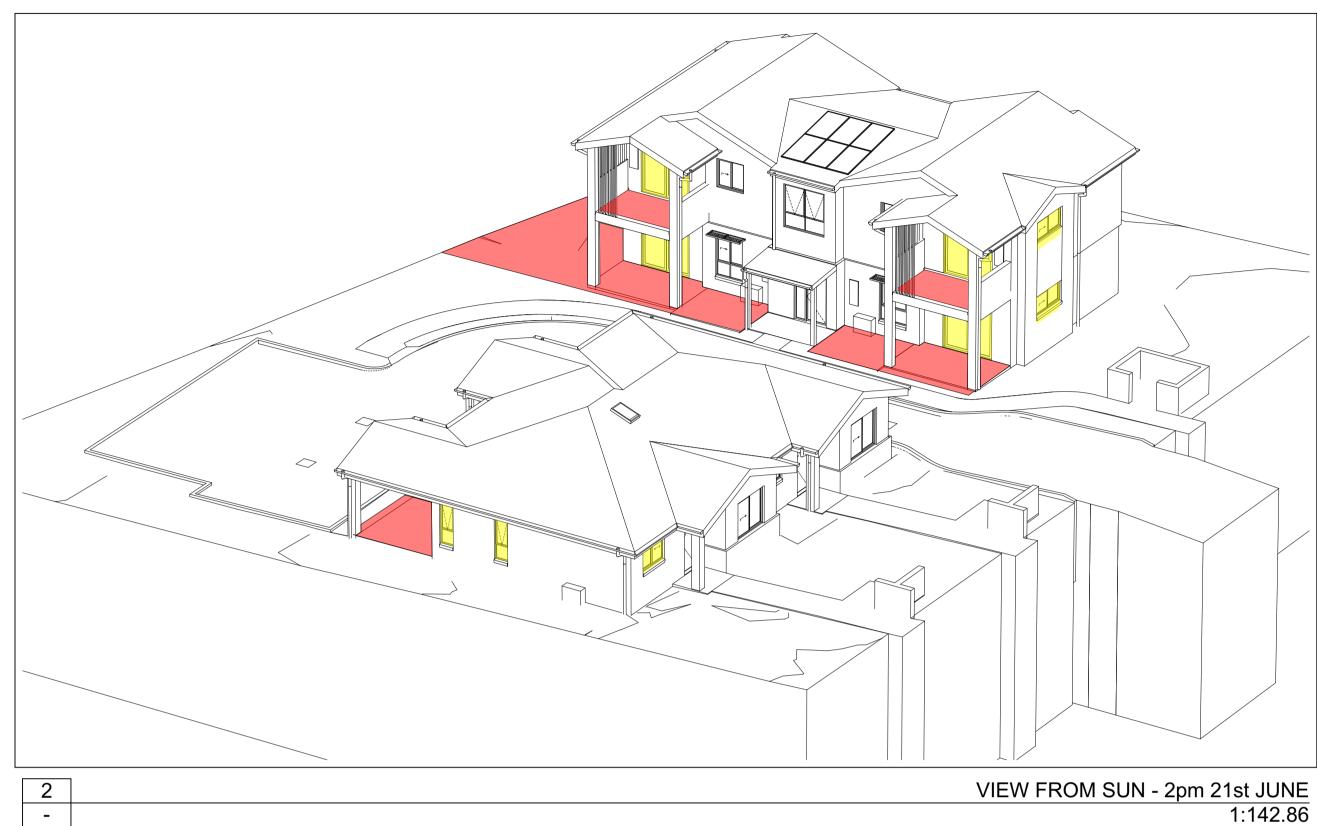
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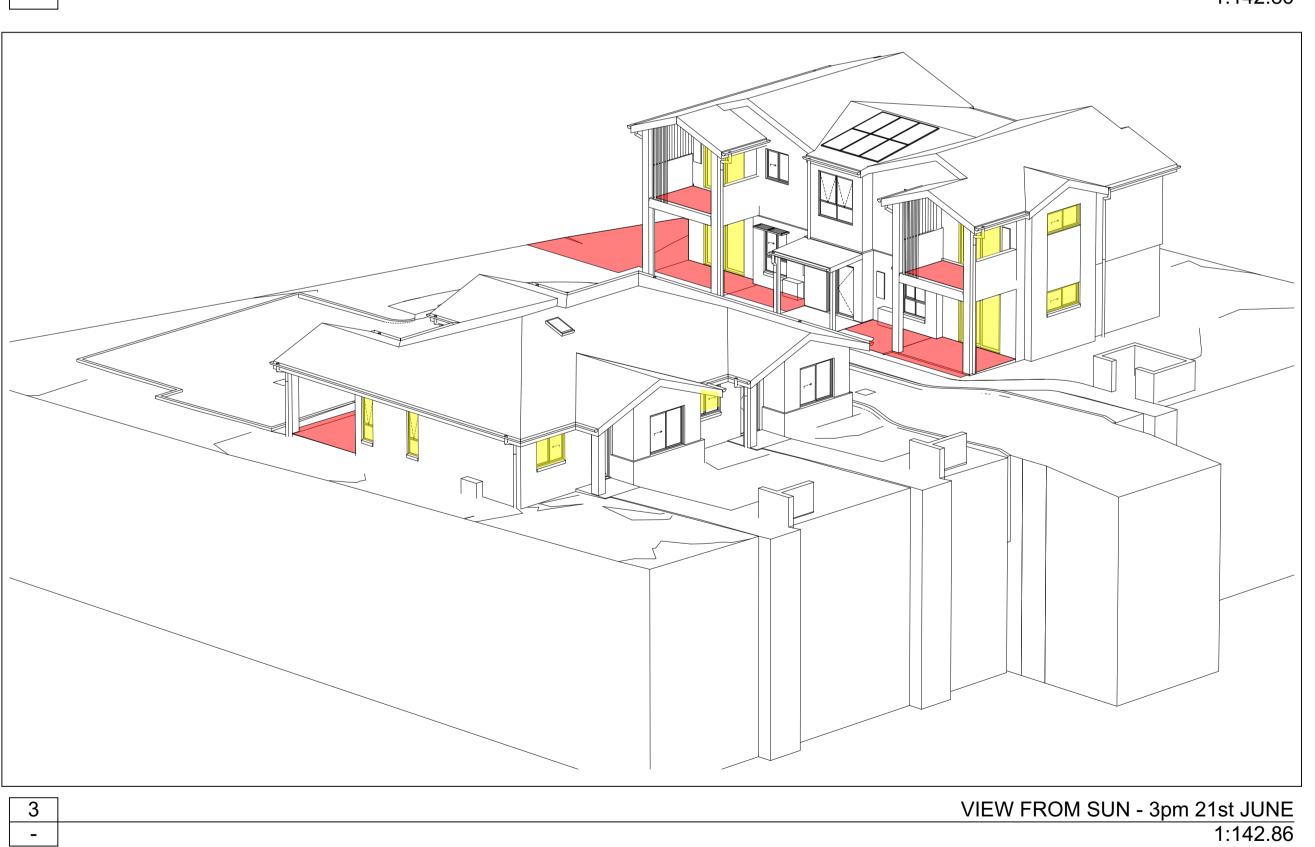


DETERMINED by the New South Wales Land & Housing Corporation on:

12/8/2022







Solar Access to Living Rooms								
	9-10am	10-11am	11-12pm	12-1pm	1-2pm	2-3pm	Hours	
Unit 1							6	
Unit 2							1.5	
Unit 3							6	
Unit 4							6	
Unit 5							5	
Unit 6							5	

Solar Access to Private Open Space							
	9-10am	10-11am	11-12pm	12-1pm	1-2pm	2-3pm	Hours
Unit 1							6
Unit 2							2.5
Unit 3							6
Unit 4							6
Unit 5							6
Unit 6							6



LOCKED BAG 5112 PARRAMATTA NSW 2124 PHONE No (02) 9354 1880 www.dpie.nsw.gov.au



NOMINATED				ARCHITECT	HYDRAULIC	
ARCHITECTS:				DTA ARCHITECTS Pty Ltd	ABEL & BROWN Pty Ltd	
				PH (02) 9601 1011	PH (02) 9709 5705	
Daniel Donai				PROJECT MANAGER	ELECTRICAL / BASIX CONSULTANT	
NSW ARB No.9068 Member Australian institute of Architects				LAND & HOUSING CORPORATION	GREENVIEW CONSULTING Pty Ltd	
	В	1/02/2022	REVISED TO COUNCIL COMMENTS	PH (02) 9354 1880	PH (02) 8544 1683	
	Α	16/11/2021	ISSUED FOR DA	STRUCTURAL / CIVIL	LANDSCAPE CONSULTANT	
	REV DATE NOTATION/AMENDMENT			MSL CONSULTING ENGINEERS Pty Ltd	RAY FUGGLE & ASSOCIATES Pty Ltd	
	DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.			PH (02) 4226 5247	PH 0412 294 712	





NOSEOT:	T
GENERAL HOUSING	S
at LOT 5 & 6 in DP 36132	
1 WARATAH AVENUE & 50 FROST STREET, ORANGE NSW	FIL

SOLAR ACCESS - VIEW FROM SUN							
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				С			
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SCALE FOR PRINTING PURPOSE ONLY

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 BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
 IT IS THE OWNERS RESPONSIBILITY TO ENSURE THAT THE ENGINEER

THE DESIGN & DETAILS CONTAINED ON THIS DRAWING IS SUPPLIED IN CONFIDENCE & IS NOT TO BE USED FOR ANY OTHER PURPOSE, EXCEPT THAT AUTHORISED BY DTA ARCHITECTS

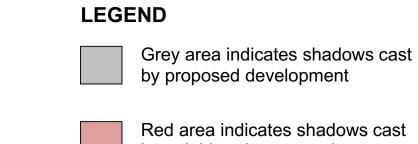
HAS INVESTIGATED SUBSOIL CONDITIONS & DESIGNED ALL STRUCTURAL ELEMENTS TO SUIT.



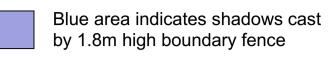
12/8/2022

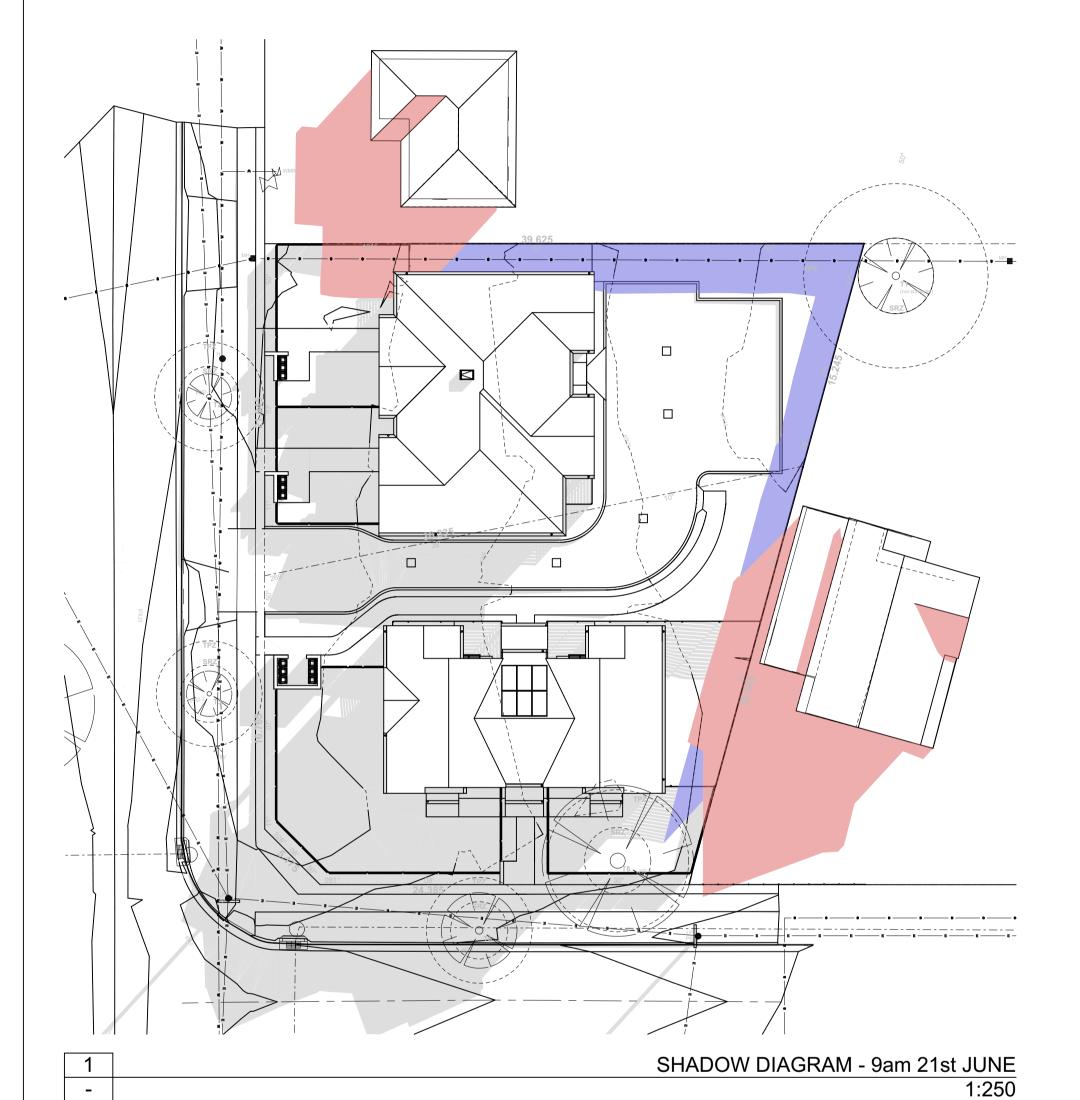
DETERMINED by the New South Wales Land & Housing Corporation on:

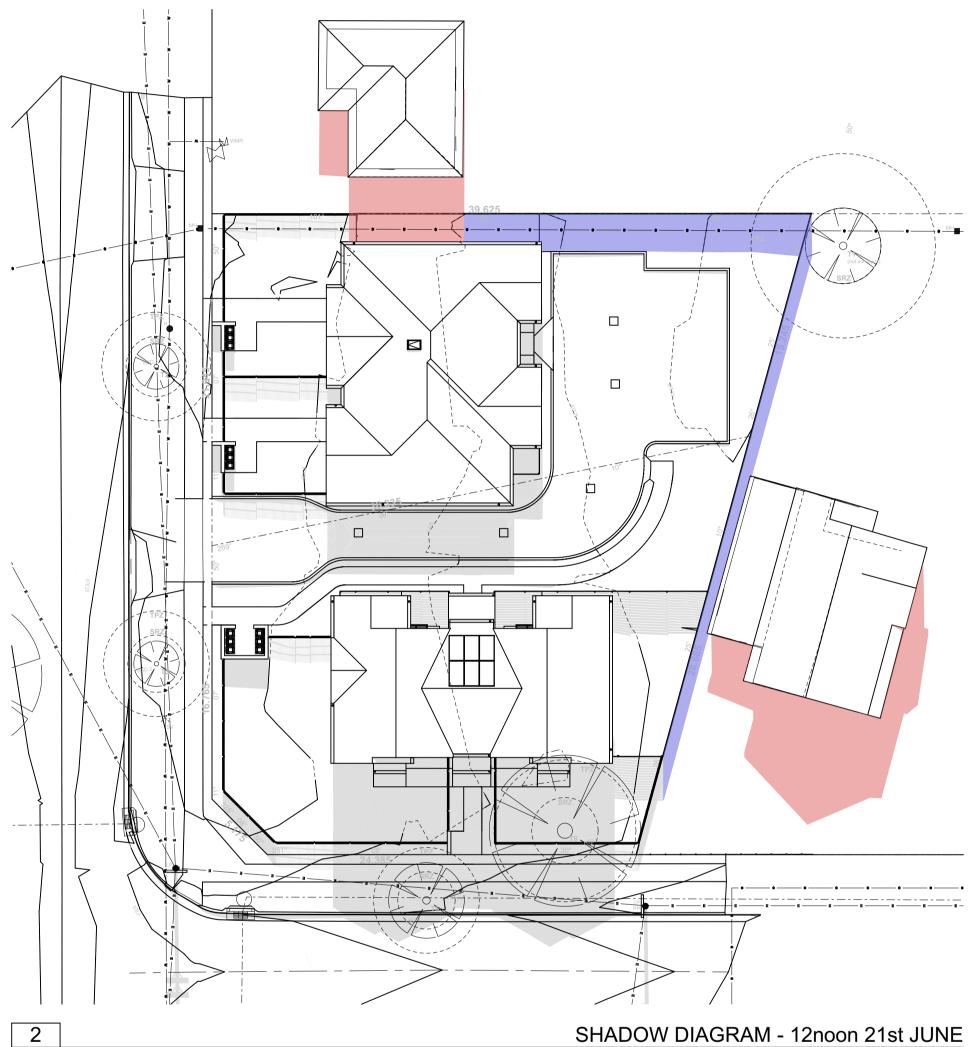


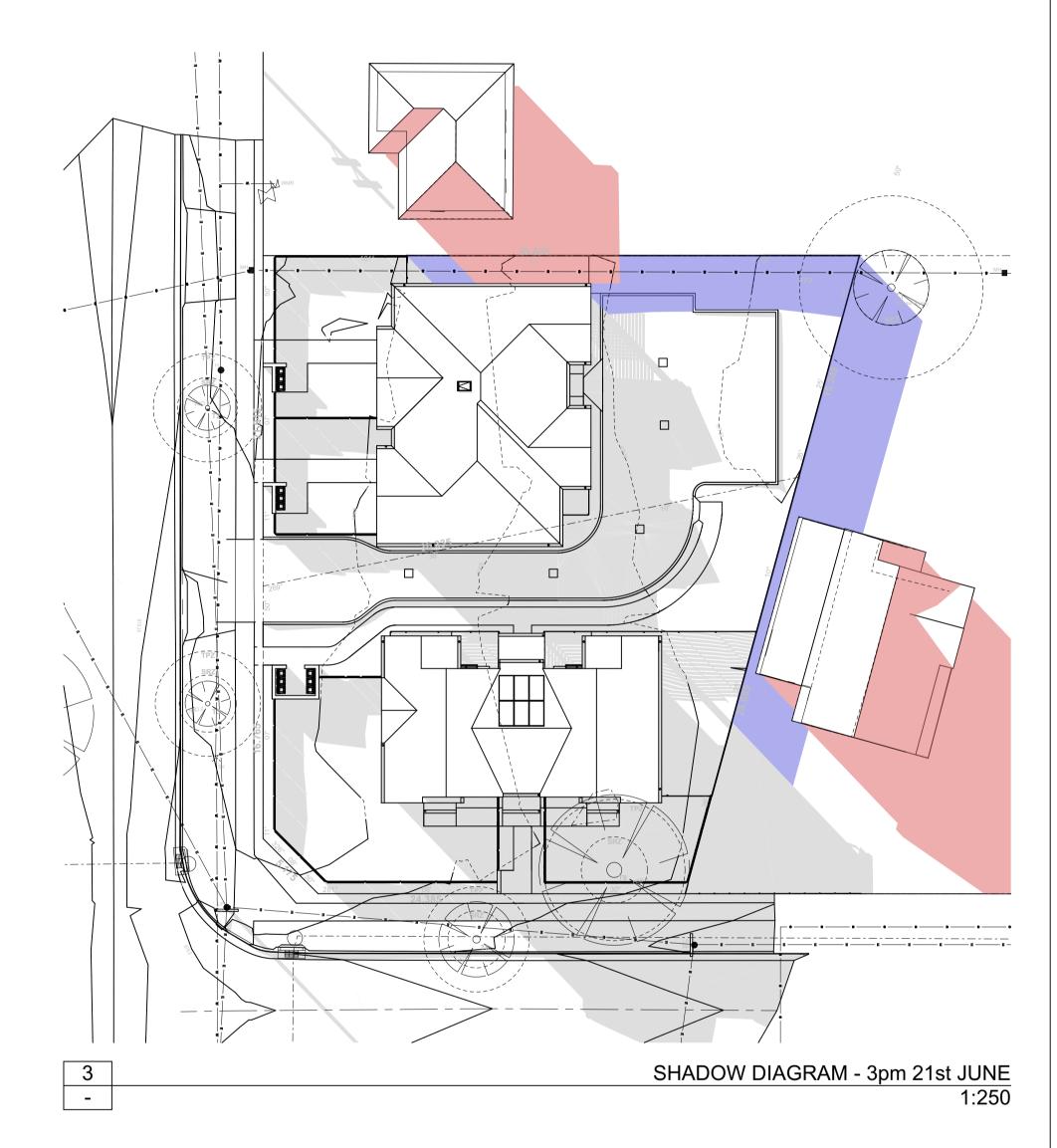


by neighbouring properties









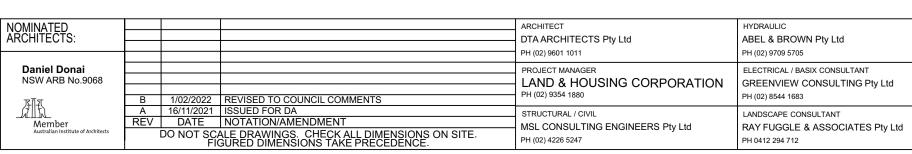




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 2. BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
 3. IT IS THE OWNERS RESPONSIBILITY TO ENSURE THAT THE ENGINEER HAS INVESTIGATED SUBSOIL CONDITIONS & DESIGNED ALL STRUCTURAL ELEMENTS TO SUIT.
 4. THE DESIGN & DETAILS CONTAINED ON THIS DRAWING IS SUPPLIED IN CONFIDENCE & IS NOT TO BE USED FOR ANY OTHER PURPOSE, EXCEPT THAT AUTHORISED BY DTAARCHITECTS

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View 1 - Waratah Avenue



View 2 - Corner of Waratah & Frost 2



View 3 - Frost Street

DETERMINED by the New South Wales Land & Housing Corporation on:



View 4 - Frost Street

12/8/2022 Elede.

PHOTOMONTAGE - VIEW FROM FROST STREET



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NOMINATED ARCHITECTS:				ARCHITECT DTA ARCHITECTS Pty Ltd
				PH (02) 9601 1011
Daniel Donai				PROJECT MANAGER
NSW ARB No.9068				LAND & HOUSING CO
				PH (02) 9354 1880
利	В	1/02/2022	REVISED TO COUNCIL COMMENTS	111 (02) 3004 1000
	Α	16/11/2021	ISSUED FOR DA	STRUCTURAL / CIVIL
Member	REV	DATE	NOTATION/AMENDMENT	MSL CONSULTING ENGINE
Australian Institute of Architects		DO NOT SCA	ALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. GURED DIMENSIONS TAKE PRECEDENCE.	PH (02) 4226 5247

HYDRAULIC
ABEL & BROWN Pty Ltd PH (02) 9709 5705 ELECTRICAL / BASIX CONSULTANT CORPORATION GREENVIEW CONSULTING Pty Ltd PH (02) 8544 1683 LANDSCAPE CONSULTANT
RAY FUGGLE & ASSOCIATES Pty Ltd PH 0412 294 712



Planning, Industry & Environment Land & Housing Corporation
GREATER WESTERN SYDNEY REGION

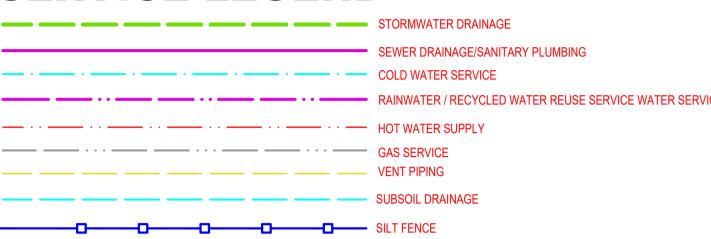
GENERAL HOUSING at LOT 5 & 6 in DP 36132 1 WARATAH AVENUE & 50 FROST STREET, ORANGE NSW PERSPECTIVES

FILE: CAD File: Z:\Shared\Data3\2021 \2021.009.LAHC.Waratah St Orange\3.Design \3.2 DA\2021.009.LAHC.Waratah St Orange.DA03.pln

DEVELOPMENT ASSESSMENT 24/02/2022 | As shown @ A1 | BGXUP | 2021.009 |
STAGE: | DRAWN: | CHECKED: | CERTIFIER: | DD | DD | 9:22 AM 17 of 17 B

PROPOSED GENERAL HOUSING DEVELOPMENT 1 WARATAH & 50 FROST STREET, ORANGE

SERVICE LEGEND



GENERAL HYDRAULIC SERVICES NOTES

- a. IF IN DOUBT, ASK. REFER ANY QUESTIONS OR CLARIFICATIONS YOU HAVE PRIOR TO THE CLOSE OF TENDER TO THE HYDRAULIC ENGINEER, ARCHITECT, OR OTHER RELEVANT PARTY. FAILURE TO DO SO DOES NOT ABSOLVE THE CONTRACTOR OF THEIR RESPONSIBILITIES UNDER THE CONTRACT DOCUMENTS
- REQUIREMENTS OF AUSTRALIAN STANDARDS / AUTHORITY REQUIREMENTS WILL NOT BE ENTERED INTO
- EXISTING SITE CONDITIONS WILL NOT BE ENTERED INTO.
- THEY HAVE MADE DUE ALLOWANCE FOR ALL REQUIREMENTS NECESSARY FOR THE EXECUTION OF THE WORKS IN ACCORDANCE WITH THE STANDARDS AS SET OUT BY THE RELEVANT AUSTRALIAN STANDARD APPLICABLE TO THAT SERVICE. THE RELEVANT LOCAL AUTHORITY REQUIREMENTS AND FOR THOSE REQUIREMENTS AS SET OUT IN THE HYDRAULIC SERVICES DRAWINGS AND THE ACCOMPANYING SPECIFICATION.
- e. HYDRAULIC SERVICES DRAWINGS ARE TO BE READ IN CONJUNCTION WITH HYDRAULIC SERVICES SPECIFICATION AND DRAWINGS OF ALL OTHER DISCIPLINES FOR THIS PROJECT. IGNORANCE OF THE CONTENTS OF ANY DOCUMENT RELATIVE TO THE PROJECT SHALL NOT PROVIDE A BASIS FOR ANY VARIATION TO THE CONTRACT.
- f. ALLOW TO OBTAIN ALL APPROVALS AND PAY ALL FEES AND CHARGES TO ALL AUTHORITIES IN RELATION TO THE PROPOSED SERVICE INSTALLATIONS INDICATED ON THE DRAWINGS.
- g. ALLOW TO DISCONNECT & SEAL ALL REDUNDANT HYDRAULIC SERVICES RELATED TO THE INSTALLATION OF THE PROPOSED WORKS TO THE REQUIREMENTS OF THE RELEVANT AUTHORITY
- h. ALL WORK BE CARRIED OUT IN ACCORDANCE WITH WATER & SEWER AUTHORITY REGULATIONS, SUPERINTENDENTS APPROVAL & HYDRAULIC SPECIFICATION
- i. DRAINS TO BE SUPPORTED ON OR FROM SOLID GROUND. LOCATION & DEPTH / INVERT LEVEL OF BRANCH SHALL BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORK.
- REUSED DRAINS UNDER BUILDINGS SHALL BE RETESTED WHERE DIRECTED BY SUPERINTENDENT.
- k. INSPECTION OPENINGS SHALL BE PROVIDED AT
- THE PROPERTY BOUNDARY
- m. ON EACH WC OR BRANCH
- n. AT MAX. 30m INTERVALS SPREAD EQUIDISTANT WHERE POSSIBLE
- o. IMMEDIATELY UPSTREAM & DOWNSTREAM OF ALL JUMP-UPS
- p. AS REQUIRED BY THE AUTHORITY FOR INSPECTION & MAINTENANCE
- q. ALL SERVICES THAT CROSS PAVEMENTS, FOOTING ETC SHALL BE BACKFILLED WITH GRANULAR MATERIAL TO SUBGRADE LEVEL & COMPACTED TO 95% M.M.D.D
- r. PROVIDE 80mm COMPRESSIBLE MATERIAL OVER PIPEWORK WHERE CLEARANCE TO UNDERSIDE OF FOOTING IS LESS THAN 150mm UNLESS NOTED OTHERWISE.
- s. ON COMPLETION OF PIPE INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION INCLUDING: KERBS, FOOTPATH, CONCRETE AREAS, GRAVEL AREAS & ROAD PAVEMENTS.
- t. CARE SHALL BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATION SHALL BE MADE OVER AUTHORITY SERVICES, TELSTRA OR ELECTRICAL SERVICES. EXCAVATE BY HAND IN THESE AREAS.
- THE PLUMBING CONTRACTOR SHALL OBTAIN ALL AUTHORITY APPROVALS & PAY ALL FEES.
- v. INVERT LEVELS SHOWN ARE INDICATIVE ONLY. CONFIRM ALL LEVELS ON SITE BEFORE COMMENCING INSTALLATION WORK.
- w. ACCESS PANEL ARE TO BE INSTALLED WHERE REQUIRED TO ACCESS CONTROL VALVES IN WATER LINES AS REQUIRED & INSPECTION OPENINGS ON STORMWATER & SEWER RISERS. ACCESS PANELS SHALL MATCH PROPOSED FINISH. REFER TO ARCHITECTURAL DRAWING FOR FINISHES.

HYDRAULIC SERVICES PLAN



DETERMINED by the New South Wales Land & Housing Corporation on

EXISTING SERVICES NOTES

- SERVICES. THE CONTRACTOR IS ADVISED TO CONTACT THE 'DIAL BEFORE. YOU DIG' SERVICE TO ASCERTAIN THE LOCATIONS OF ANY EXISTING AUTHORITY SERVICES.
- 2. THE HYDRAULIC SUBCONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED. PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN APPROVAL OF THEIR PROGRAMME FOR THE RELOCATION/CONSTRUCTION OF TEMPORARY SERVICES.
- AND COMMISSIONED THE CONTRACTOR SHALL ALLOW TO REMOVE ALL TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT
- 4.INTERRUPTION TO SUPPLY OF EXISTING SERVICES SHALL BE DONE SO AS NOT TO CAUSE ANY INCONVENIENCE TO THE PRINCIPA CONTRACTOR TO GAIN APPROVAL OF SUPERINTENDENT FOR TIME OF INTERRUPTION.

Rainwater Tank Installation requirements

Sydney Water's plumbing inspector must be contacted when work is completed to carry out a final inspection of the property before the Certificate o

Materials used in the rainwater tank plumbing must comply with AS/NZS 3500 Part 1 Water Supply Section 2 Materials and Products

Pipe materials to be used for rainwater need to be approved products and be clearly and permanently identified 'RAINWATER' continuously along the length. This can be done for below ground pipes by using identification tape (made in accordance with A52648) or for above ground pipes by using adhesive pipe markers (made in accordance with A51345)

Identification tape marked 'RAINWATER' must be at least 75mm wide. The identification tape is to be installed on top of the rainwater pipeline, running longitudinally, and fastened to the pipe at not more than 3 metre intervals.

Every rainwater tank outlet must be labelled 'RAINWATER' on a permanent sign. An example is shown in Figure 2. A51319 provides direction as to appropriate layout, size and face materials for signs.

Rainwater pipes must be separated from any parallel drinking water service.

Any rainwater pipe installed above ground must be a minimum of 100mm away from any drinking water pipe.

Any rainwater pipe installed below ground must be a minimum of 300mm away from any drinking water pipe.

Check that all the following backflow protection is in place:

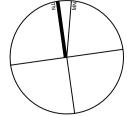
ct _ Cooktop

ORANGE NSW

Sydney Water has provided a meter with one containing an integral dual check valve.

FIXTURE LEGEND

vp	_	Vent Pipe	It	_	Laundry Tub
со	_	Clearout	wm	_	Washing Machine
aav	_	Air Admittance Valve	sk	_	Sink
fw	_	Floor Waste	wc	_	Water Closet
bsn	_	Basin	со	_	Clearout
ht	_	Hosetap	gr	_	Gas Riser
gd	_	Grated Drain	st	_	Stack
shr	_	Shower	npw	_	Non Potable Water
hwh	_	Hot Water Heater	dp	_	Downpipe
bf	_	Bayonet Fitting	cwr	_	Cold Water Riser





LOCKED BAG 4009

NOMINATED ARCHITECT

Feb.22 DA SUBMISSION ISSUE D Oct.21 DA SUBMISSION ISSUE Aug.21 DA SUBMISSION ISSUE B Aug.21 DA SUBMISSION ISSUE SKETCH ISSUE A Jun.21 REV: DATE: NOTATION/AMENDMEN DO NOT SCALE OFF DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.

DeANGELIS TAYLOR + ASSOCIATES Ptv PH (02) 9601 1011 FAX (02) 9821 2213 LAND & HOUSING CORPORATION PH (02) 8753 8100 FAX (02) 8753 8011 CONSULTANTS NAME

PH (02) XXXX XXXX FAX (02) XXXX XXXX

HYDRAULG

ENURONMENT

STRUCTURAL CONSULTAN

CONSULTANTS NAME

ABEL & BROWN PTY LTD

PH (02) 9709 5705 FAX (02) 8790 6401

PH (02) XXXX XXXX FAX (02) XXXX XXX

LANDSCAPE CONSULTANT

CONSULTANTS NAME

PH (02) XXXX XXXX FAX (02) XXXX XXXX

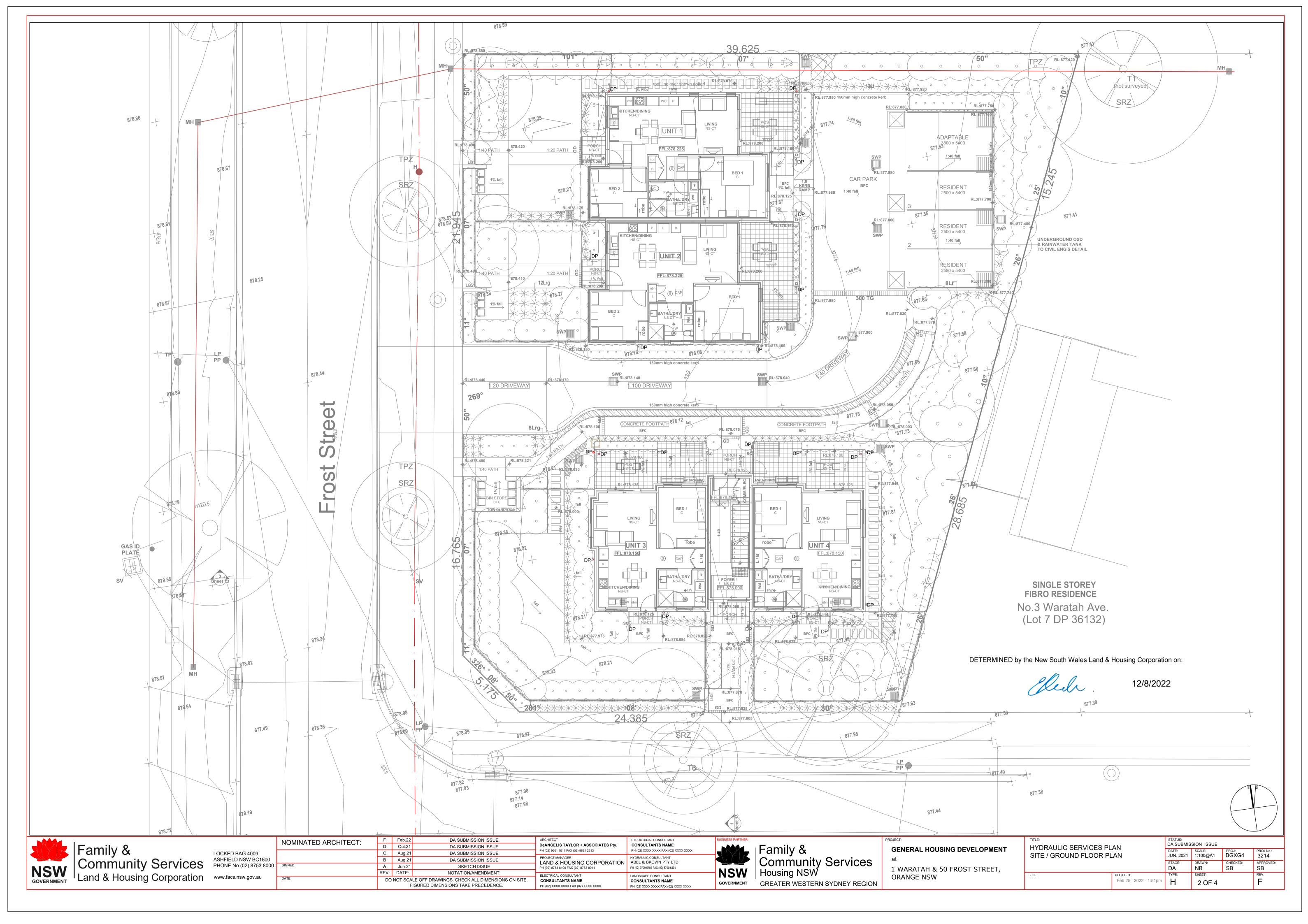
Community Services
Housing NSW GREATER WESTERN SYDNEY REGION

GENERAL HOUSING DEVELOPMENT

1 WARATAH & 50 FROST STREET,

HYDRAULIC SERVICES PLAN **LEGEND & NOTES**

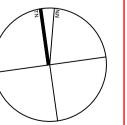
DA SUBMISSION ISSUE BGXG4 JUN. 2021 NTS@A1 3214 CHECKED: SB NB SB Feb 25, 2022 - 1:51pm 1 OF 4





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	NOMINATED A
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	DATE

MINATED ARCHITECT:	F	Feb.22	DA SUBMISSION ISSUE	
WINATED ARCHITECT.	D	Oct.21	DA SUBMISSION ISSUE	
	С	Aug.21	DA SUBMISSION ISSUE	
	В	Aug.21	DA SUBMISSION ISSUE	
D	Α	Jun.21	SKETCH ISSUE	
	REV:	DATE:	NOTATION/AMENDMENT:	
	DO NOT SCALE OFF DRAWINGS. CHECK ALL DIMENSIONS ON SITE FIGURED DIMENSIONS TAKE PRECEDENCE.			

RCHITECT PANGELIS TAYLOR + ASSOCIATES Pty. 1 (02) 9601 1011 FAX (02) 9821 2213	STRUCTURAL CONSULTANT CONSULTANTS NAME PH (02) XXXX XXXX FAX (02) XXXX XXXX
ROJECT MANAGER AND & HOUSING CORPORATION (02) 8753 8100 FAX (02) 8753 8011	HYDRAULIC CONSULTANT ABEL & BROWN PTY LTD PH (02) 9709 5705 FAX (02) 8790 6401
ECTRICAL CONSULTANT ONSULTANTS NAME I (02) XXXX XXXX FAX (02) XXXX XXXX	LANDSCAPE CONSULTANT CONSULTANTS NAME PH (02) XXXX XXXX FAX (02) XXXX XXXX

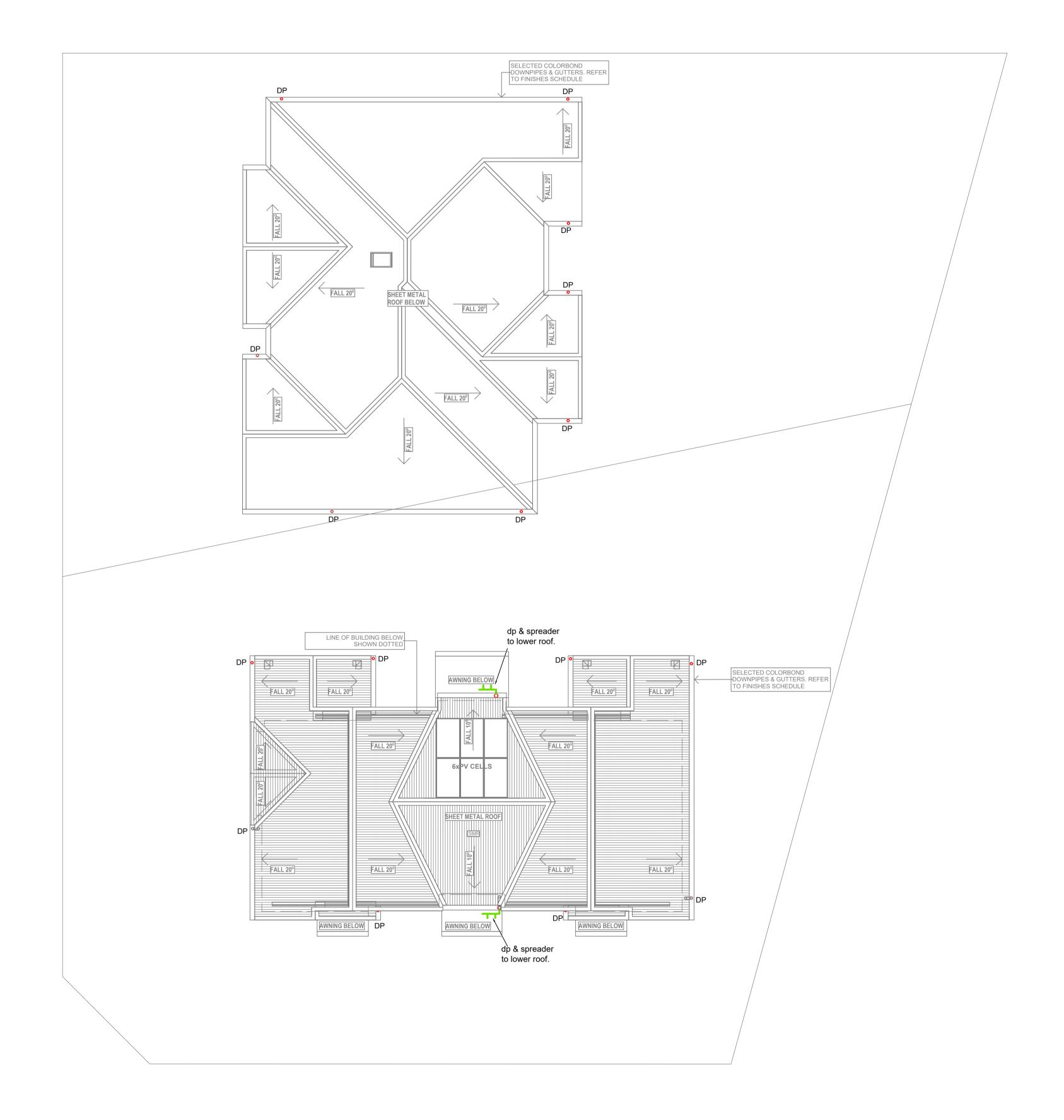


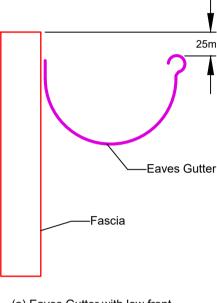
PROJECT:
GENERAL HOUSING DEVELOPMENT
at
1 WARATAH & 50 FROST STREET, ORANGE NSW

TITLE: HYDRAULIC SERVICES PLAN		STATUS: DA SUBMISSION ISSUE			
FIRST FLOOR / ROOF PLA	DATE: JUN. 2021	SCALE: 1:100@A1	PROJ: BGXG4	PROJ No.: 3214	
		STAGE: DA	DRAWN: NB	CHECKED: SB	APPROVED SB
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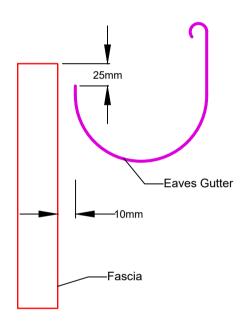


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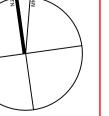


(a) Eaves Gutter with low front



(b) Eaves Gutter with high front and and min. 10mm gap to fascia.

EAVES GUTTER OVERFLOW METHODS Scale - NTS





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NED	Α	Jun.21	SKETCH ISSUE	PH	
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	FIGURED DIMENSIONS TAKE PRECEDENCE.				

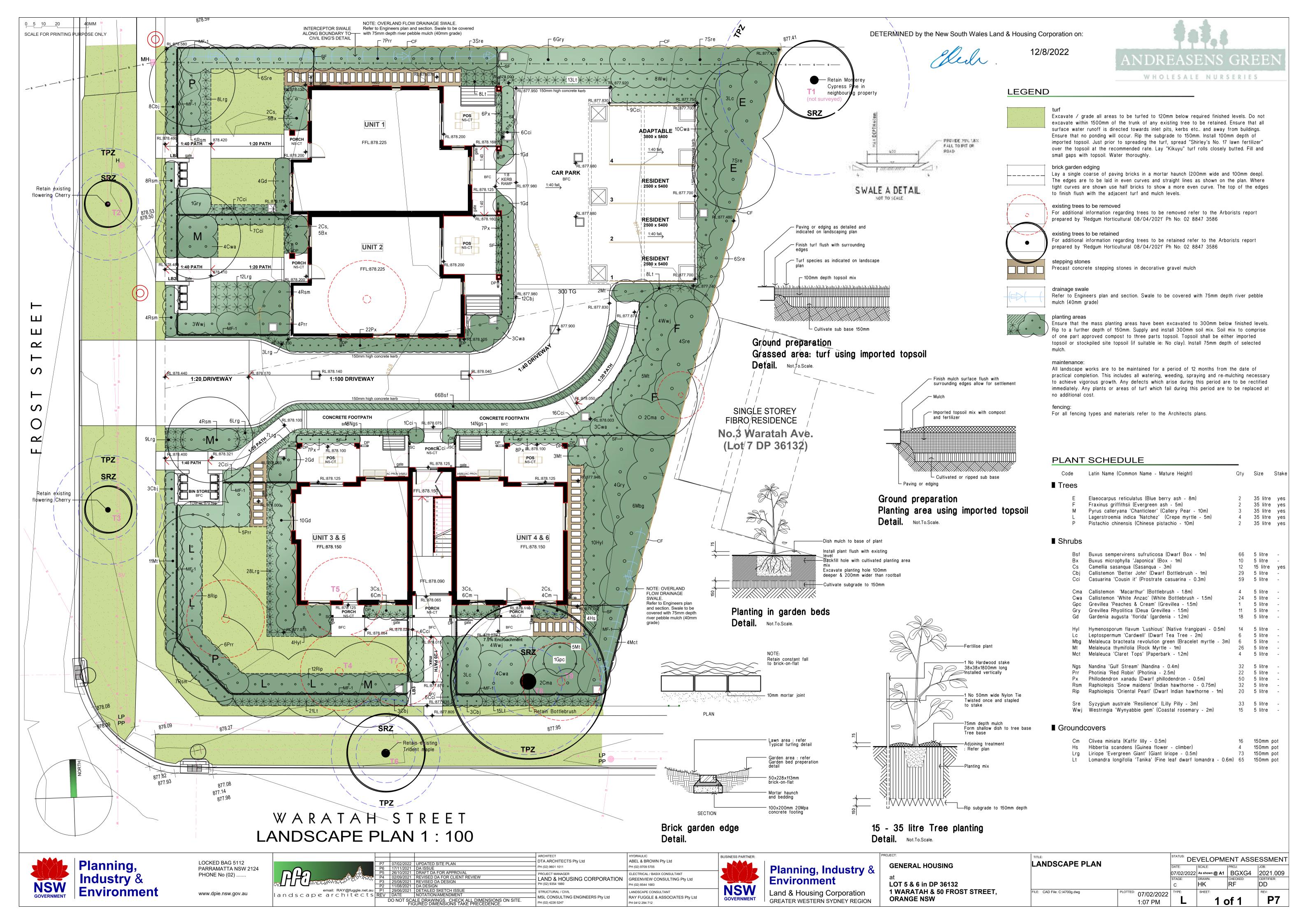






PROJECT:
GENERAL HOUSING DEVELOPMENT
at
1 WARATAH & 50 FROST STREET, ORANGE NSW

HYDRAULIC SERVICES ROOF PLAN		STATUS: DA SUBMISSION ISSUE			
		DATE: JUN. 2021	SCALE: 1:100@A1	PROJ: BGXG4	PROJ No.: 3214
		stage: DA	DRAWN: NB	CHECKED: SB	APPROVED SB
ILE:	PLOTTED:	TYPE:	SHEET:		REV:
	Feb 25, 2022 - 1:51pm	Н	4 OF 4		F



PURPOSE ONLY GENERAL

- 1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE OWNER FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- 2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
- 3. SETTING OUT DIMENSIONS SHOWN ON THE DRAWING SHALL BE VERIFIED BY THE CONTRACTOR. 4. DURING CONSTRUCTION, THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVER-STRESSED.

STORMWATER DRAINAGE

- 1. STORMWATER DRAINAGE SHALL BE GENERALLY IN ACCORDANCE WITH AS 3500.3.
- 2. PIPES OF 300mm DIA. AND UNDER SHALL BE UPVC TO AS 1254.
- 3. PIPES OF 375mm DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 TO AS 1342, RUBBER RING JOINTED UNO.
- 4. PIPES UP TO 150mm DIA. SHALL BE LAID AT A MINIMUM GRADE OF 1.0%. PIPES 225mm DIA. AND OVER TO BE LAID AT A MINIMUM GRADE OF 0.5%. UNO. BEDDING MATERIAL TO AS 2032 OR AS 3725 AS APPROPRIATE.
- 5. MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 450mm IN CARPARK & ROADWAY AREAS UNO.
- 6. BACKFILL TRENCHES WITH APPROVED FILL, SUCH AS SANDY LOAM, COMPACTED IN 200mm LAYERS TO
- 98% OF STANDARD DENSITY TO AS 1289. 5.1.1. 7. ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT ALL JOINTS IN ACCORDANCE
- WITH AS 3500.3.2. 8. PITS SHALL BE OF REINFORCED CONCRETE CONSTRUCTION AS DETAILED. METAL GRATES AT LEVELS INDICATED ALL PITS DEEPER THAN 1200mm TO HAVE CLIMB IRONS.
- 9. BUILD INTO UPSTREAM FACE OF ALL PITS A 3.0m SUBSOIL LINE FALLING TO PITS TO MATCH PIT
- 10. ALL LINES TO BE 100 DIA. AT 1% MIN. GRADE (U.N.O.)
- 11. ALL PITS TO BE BENCHED TO HALF PIPE SECTION AND TO HAVE GALVANISED STEEL GRATES AND
- 12. ALL PITS TO BE 600 SQUARE UNLESS NOTED OTHERWISE.
- 13. PITS & DOWNPIPE LOCATIONS AND LEVELS MAY BE VARIED TO SUIT SITE CONDITIONS AFTER CONSULTING THE ENGINEER.
- 14. ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE
- 15. SUBSOIL LINE: PIPES AND FITTINGS SHALL BE PERFORATED PLASTIC TO AS 2439 PART 1. LAY PIPES ON FLOOR OF TRENCH GRADED 1% AND OVERLAY WITH FILTER MATERIAL EXTENDING TO WITHIN 200mm OF SURFACE. PROVIDE FILTER FABRIC OF PERMEABLE POLYPROPYLENE BETWEEN FILTER MATERIAL AND TOPSOIL.

RAINWATER TANK NOTES

- 1. PUMP FOR RAINWATER TANK TO BE CONNECTED TO TOILETS, LAUNDRY AND GARDEN TAP FOR
- 1. PUMP MUST HAVE MAINS WATER BACKUP WITH AN APPROVED BACKFLOW PREVENTION DEVICE. DEVICE TO BE ACCESSIBLE FOR TESTING.
- 2. A FIRST FLUSH DEVICE OR FILTER BAG IS TO BE INSTALLED.
- 3. RAINWATER TANK MUST NOT BE CONNECTED TO THE MAIN DRINKING WATER SUPPLY.
- 4. RAINWATER TANK MUST CONTAIN A BYPASS OF THE PUMP IN THE EVENT OF A POWER FAILURE. 5. RAINWATER TANK MUST BE CONSTRUCTED IN ACCORDANCE WITH AUSTRALIAN STANDARD. AS/NZ 3500.1.2-2015: NATIONAL PLUMBING AND DRAINAGE - WATER SUPPLY- ACCEPTABLE SOLUTIONS, WHICH PROVIDES GUIDANCE ON THE DESIGN OF STORMWATER AND RAINWATER REUSE SYSTEMS.
- 6. RAINWATER TANK MUST BE PROVIDED WITH AN AIR GAP (SEE AS/NZ 3500.1.2 AND AS2845.2) 7. RAINWATER TANK MUST BE KEPT WELL MAINTAINED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURING REQUIREMENTS AND THE REQUIREMENTS OF SYDNEY WATER.

NOTE:

RAINWATER TANK - TANK CAPACITY TO BE IN ACCORDANCE WITH BASIX REQUIREMENT

ROOF DRAINAGE

ROOF & BALCONY DRAINAGE BY OTHER CIVIL/HYDRAULIC CONSULTANTS. CONTACT PROJECT MANAGER FOR HYDRAULIC PLANS. PROJECT MANAGER TO COORDINATE DOWNPIPE LOCATIONS TO SITE DRAINAGE PLAN.

REFER TO LATEST ARCHITECTURAL PLANS FOR FINISHED PAVEMENT LEVELS.

SYMBOLS & NOTATION						
MIN. Ø100 STORMWATER DRAINAGE LINE U.N.O.						
—— AGG> ——	90¢ AG LINE CONNECT TO STORMWATER OUTLET OR VERTICAL SLOT DRAIN					
RL:878.439	PROPOSED FINISHED FLOOR LEVEL					
	GRATED PIT					
150 TG	150 WIDE x 100 DEEP (INTERNAL DIM) (U.N.O) TRENCH GRATE @ MIN. 1.0% BASE FALL					
DP.	DOWNPIPE (REFER TO HYDRAULIC ENG. PLANS)					
-(SWALE					
	OVERLAND FLOWS					

BEFORE EXCAVATION FOR PIPEWORK LOCATE DEPTH OF EXISTING SERVICES & CONTACT DIAL BEFORE YOU DIG

ALL EXISTING LEVELS TO BE CONFIRMED ON SITE AND ENGINEER TO BE NOTIFIED PRIOR TO COMMENCEMENT OF

DEPTH AND LOCATION OF ALL EXISTING SERVICES TO BE CONFIRMED BY BUILDER ON SITE. ENGINEER TO BE NOTIFIED.

OSD SUMMARY

SITE AREA = $1430m^2$ PRE-DEVELOPMENT IMPERVIOUS AREA =20% POST DEVELOPMENT IMPERVIOUS AREA =59%

PRE-DEVELOPED SITE DISCHARGE

DRAINS ANALYSIS MINOR 5YR STORM = $0.011/m^3$ MAJOR 100YR STORM = 0.037/m³

POST-DEVELOPED SITE DISCHARGE DRAINS ANALYSIS

UN-RESTRICTED SITE DISCHARGE MINOR 5YR STORM = $0.025/m^3$ MAJOR 100YR STORM = 0.051/m³

RESTRICTED SITE DISCHARGE OSD MINOR 5YR STORM = 0.008/m³ MINOR 5YR STORM BYPASS = 0.003/m³ OSD MAJOR 100YR STORM = 0.024/m³

MAJOR 100YR STORM BYPASS = 0.011/m³

STORAGE REQUIRED

100YR =15.48m³

OSD INTERNAL STORAGE PROVIDED: $= 11.2 \times 3.2 \times 0.5 \text{ m DEEP} = 17.92 \text{ m}^3$

ORIFICE SIZE

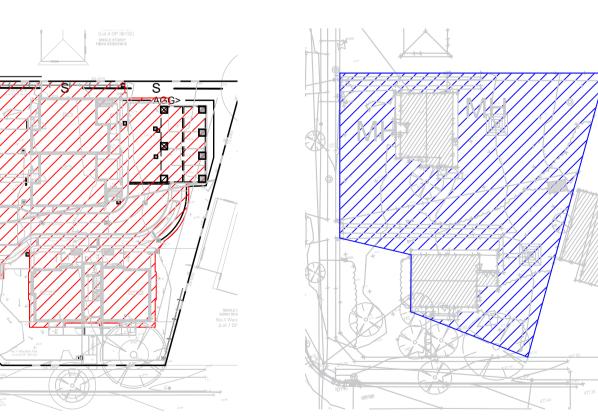
COMMENCEMENT OF WORK.

STRUCTURAL ELEMENTS TO SUIT.

-PROVIDE LOWER LEVEL Ø95mm ORIFICE RESTRICTION (AT INVERT OF OSD TANK RL = -PROVIDE UPPER LEVEL Ø130mm ORIFICE RESTRICTION (AT RL 877.25)

			Р	IT S	CHEDULE	
PIT	GRATE	SIZE	RL	IL	COMMENTS	CLASS OF GRATE AS3996.2006
P1	CLASS A	450x450	878.25	877.75	SURFACE GRATED PIT	A - 10kN PEDESTRIAN
P2	CLASS A	450×450	878.20	877.60	SURFACE GRATED PIT	B
Р3	CLASS A	450x450	878.05	877.70	SURFACE GRATED PIT	C(ii) - 150kN SLOW TRUCK
P4	CLASS C(ii)	600×600	878.14	877.64	SURFACE GRATED PIT	D - 210kN HIGHWAY VEHICLES
P5	CLASS C(ii)	600×600	878.04	877.54	SURFACE GRATED PIT	
P6	CLASS A	450x450	878.35	877.85	SURFACE GRATED PIT	
P7	CLASS A	450x450	877.95	877.45	SURFACE GRATED PIT	
P8	CLASS A	450x450	878.10	877.40	SURFACE GRATED PIT	
Р9	CLASS C(ii)	600x600	877.90	877.40	SURFACE GRATED PIT	
P10	CLASS A	450x450	878.30	877.90	SURFACE GRATED PIT	
P11	CLASS C(ii)	450x450	877.88	877.38	SURFACE GRATED PIT	
P12	CLASS C(ii)	450x450	877.88	877.38	SURFACE GRATED PIT	
P13	CLASS A	450×450	877.85	877.45	SURFACE GRATED PIT	
P14	CLASS A	450x450	877.85	877.35	SURFACE GRATED PIT	
						1

P15 | CLASS A | 450x450 | 877.63 | 876.73 | SURFACE GRATED PIT



OSD TRIBUTORY AREA

NOT TO SCALE

DENOTES OSD TRIBUTARY AREA

PRE-DEVELOPMENT OVERLAND FLOWS OF

NOT TO SCALE

OVERLAND FLOW

30.06.2021 PRELIMINARY ISSUE

(861m² REDUCTION)

POST-DEVELOPMENT OVERLAND FLOWS OF SITE = 127m^2

NOT TO SCALE

DENOTES POST OVERLAND FLOW AREA

> STRUCTURAL & CIVIL CONSULTANT MSL CONSULTING ENGINEERS PTY LTD PH (02) 4226 5247

8.09

PROVIDE INTERCEPTOR

BOUNDARY & DIRECT

Ø150 UPVC DRAINAGE -

Ø150 UPVC DRAINAGE –

LINE TO OSD TANK.

PROVIDE MIN. 1.0%

FALL

FALL.

PROVIDE FALL TO PITS

WITHIN DRIVEWAY. Ø150

UPVC DRAINAGE LINE TO

OSD TANK. PROVIDE MIN.

Ø150 UPVC CHARGED DRAINAGE LINE TO

RAINWATER TANK.

1.0% FALL.

LINE TO OSD TANK. PROVIDE MIN. 1.0%

_FALL.

Ø150 UPVC DRAINAGE –

APPROX. LOCATION OF -

EXISTING SEWER

UNIT 1

FFL:878.400

UNIT 2

FFL:878.400

FALL

150mm high concrete kerb

RL:878.374

FFL:878.090

ORANGE NSW 2800

LINE TO RAINWATER

TANK. PROVIDE MIN.

1.0% FALL.

SWALE ALONG

INTO OSD TANK.

TPZ

1.0% FALL. 877.98

φ100 UPVC DRAINAGE—

LINE TO KERB & GUTTER. PROVIDE MIN.

(Lot 6 DP 36132)

UNIT 3 & 5

FFL:878.150

LINE TO CONNECT TO KERB & GUTTER. PROVIDE MIN. 1.0% FALL. IL TO BE CONFIRMED ONSITE

877.95

EXISTING PIPE. PROVIDE MIN. 1.0% FALL. IL OF EXISTING = 876.68 (TO BE CONFIRMED ONSITE).

⁼ φ150 UPVC DRAINAGE LINE TO CONNECT TO

Ø150 UPVC CHARGED

- PROVIDE INTERCEPTOR

INTO BOUNDARY PIT.

SWALE ALONG **BOUNDARY & DIRECT**

DRAINAGE LINE TO

RAINWATER TANK.

SURFACE FLOWS -

ALONG NORTHERN

BOUNDARY TO

FOLLOW NATURAL

GROUND LEVELS.

29/10/21 As shown @ A1 BGXG4 21087

Planning, **Industry** & NSW

DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.

BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO

IT IS THE OWNERS RESPONSIBILITY TO ENSURE THAT THE ENGINEER

IN CONFIDENCE & IS NOT TO BE USED FOR ANY OTHER PURPOSE, EXCEPT THAT AUTHORISED BY MSL CONSULTING ENGINEERS

HAS INVESTIGATED SUBSOIL CONDITIONS & DESIGNED ALL

Environment

LOCKED BAG 5112

PARRAMATTA NSW 2124 PHONE No (02) 9354 1880

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ABN 72 903 080 591 ACN 142 291 165

Engineers Pty Limited

MSL Consulting Suite 102 - 62 Harbour St. Wollongong NSV PO Box 567 Dapto NSW p: 02 4226 5247 e: info@mslengineers.com.au

REV DATE NOTATION/AMENDMENT w: www.mslengineers.com.au

25.08.2021 ISSUE FOR DA 29.10.2021 ISSUE FOR DA DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.

LAND & HOUSING CORPORATION PH (02) 87598100 FAX (02) 87538011 DTA Architects Pty Ltd

GENERAL HOUSING LOTS 5 & 6 IN DP 36132 1 WARATAH & 50 FROST STREET

SPECIFICATIONS & SITE DRAINAGE PLAN

− Ø100 UPVC DRAINAGE

DETERMINED by the New South Wales Land & Housing Corporation on:

– Ø150 UPVC DRAINAGE

LINE TO RAINWATER

TANK. PROVIDE MIN.

1.0% FALL.

CAR PARK

DRAINAGE LINE TO

PROVIDE MIN. 1.0%

UNIT 4 & 6

FFL:878.150

OSD TANK.

17kL RWT

NLØ150WPVC

DRAINAGE

TANK. PROVIDE MIN. 1.0% FALL.

LINE TO OSD

/RESIDERL 877.70 🚣

OSD TANK

877.41

- RAINWATER TANK

OVERFLOW PIPE TO

OSD TANK, PROVIDE

− ø150 UPVC OSD

OUTLET DRAINAGE LINE TO EXISTING PIPE.

PROVIDE MIN. 1.0%

MIN. 1.0% FALL &

NON RETURN VALVE.

OSD VOLUME=17.92m³

DIM. TANK.

RL 877.70

PIT IL 877.00

+ Ø150 UPVC OSD OUTLET DRAINAGE

LINE TO EXISTING PIPE.

PROVIDE MIN. 1.0%

11.2mx3.2mx0.5m DEEP INTERNAL

PROVIDE FOUR 900sq GALV.

LOCKABLE GRATES TO TANK

(WHEELCHAIR ASSESSABLE).

PROVIDE PROVIDE LOWER LEVEL

Ø95mm ORIFICE RESTRICTION (AT

PROVIDE UPPER LEVEL Ø130mm

INVERT OF OSD TANK RL = 877.00).

ORIFICE RESTRICTION (AT RL 877.25)

SINGLE STOR

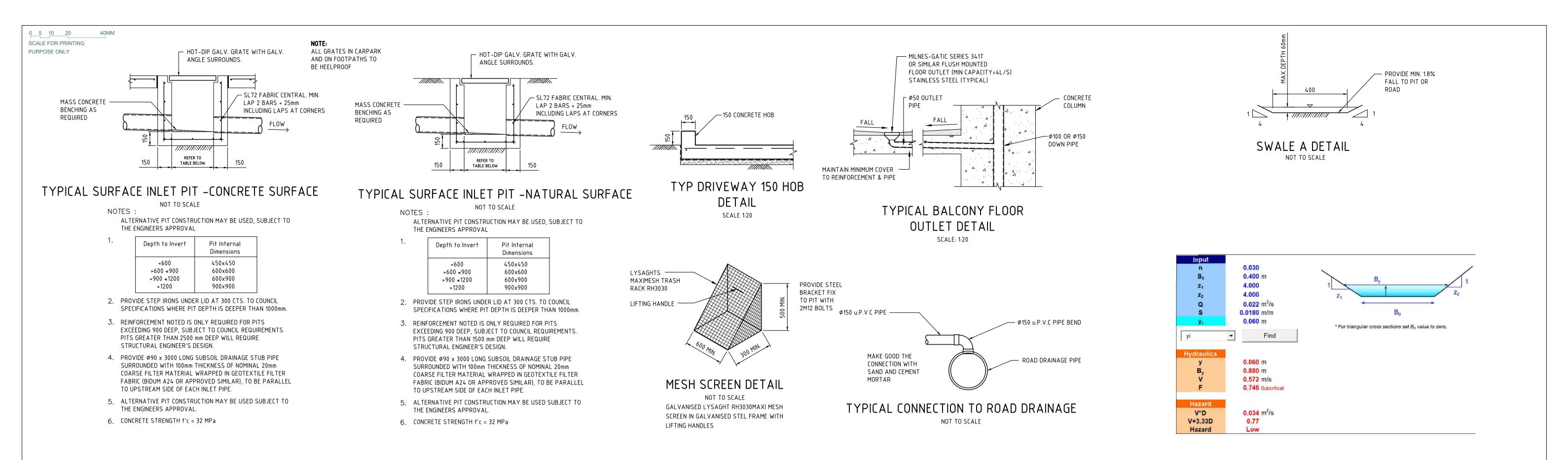
FIBRO RESIDEN

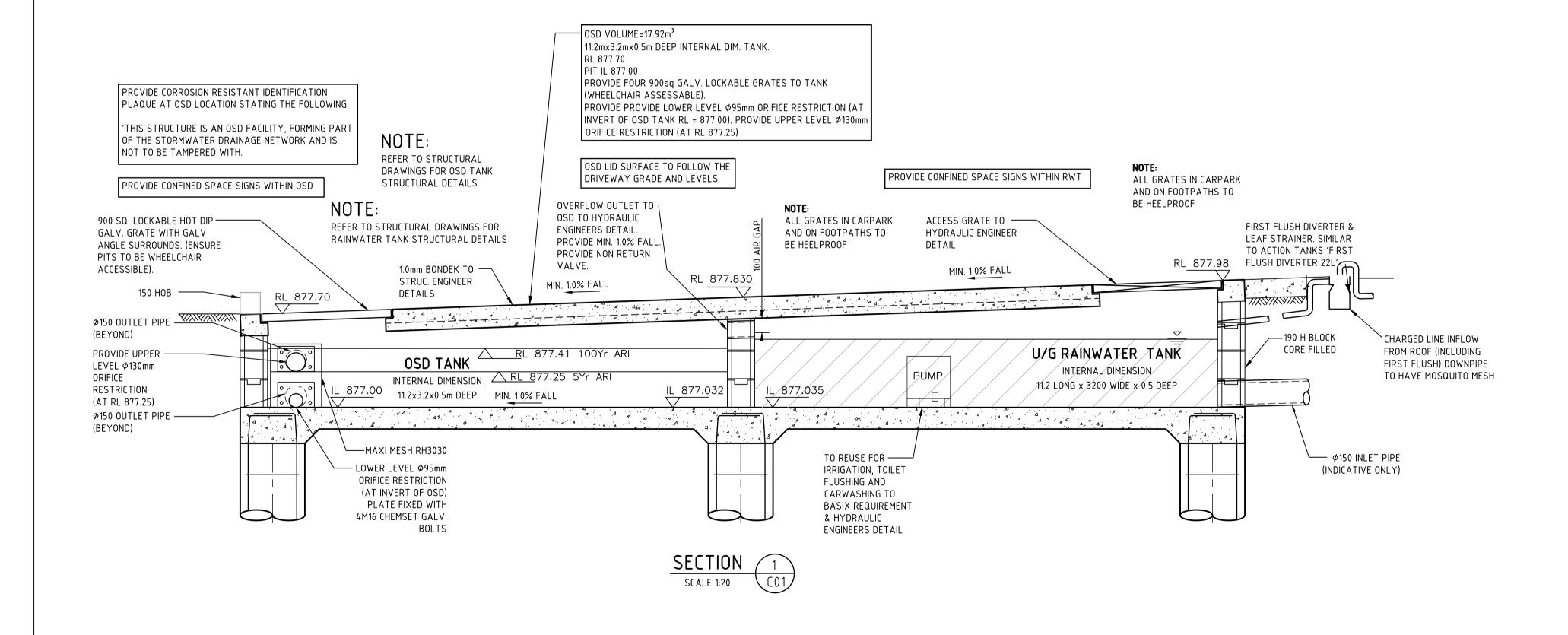
No.3 Waratah

(Lot 7 DP 36)

29/10/2021 1 of 3

877.38





DETERMINED by the New South Wales Land & Housing Corporation on:

12/8/2022

DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY. BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO

COMMENCEMENT OF WORK. IT IS THE OWNERS RESPONSIBILITY TO ENSURE THAT THE ENGINEER HAS INVESTIGATED SUBSOIL CONDITIONS & DESIGNED ALL

STRUCTURAL ELEMENTS TO SUIT. THE DESIGN & DETAILS CONTAINED ON THIS DRAWING IS SUPPLIED IN CONFIDENCE & IS NOT TO BE USED FOR ANY OTHER PURPOSE, EXCEPT THAT AUTHORISED BY MSL CONSULTING ENGINEERS

EXCELL HIAT ACTIONISES BY MISE CONCOUNTING ENGINEERS					
NICIM	Planning, Industry & Environment				

LOCKED BAG 5112 PARRAMATTA NSW 2124 PHONE No (02) 9354 1880

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	P1	30.06.2021	PRELIMINARY ISSUE	PROJECT MANAGER	STRUCTURAL & CIVIL CONSULTANT
1SL Consulting	Α	25.08.2021	ISSUE FOR DA	LAND & HOUSING CORPORATION	MSL CONSULTING ENGINEERS PTY LTD
ngineers Pty Limited	В	29.10.2021	ISSUE FOR DA	PH (02) 87598100 FAX (02) 87538011	PH (02) 4226 5247
N 72 903 080 591 N 142 291 165	С	17.02.2022	ISSUE FOR DA	ARCHITECT DTA Architects Pty Ltd	HYDRAULIC CONSULTANT
ite 102 - 62 Harbour St. Wollongong NSW				PH (02) 9601 1011	
0 Box 567 Dapto NSW 02 4226 5247	REV	DATE	NOTATION/AMENDMENT	ELECTRICAL/BASIX CONSULTANT	LANDSCAPE CONSULTANT
nfo@mslengineers.com.au www.mslengineers.com.au		DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.			

GENERAL HOUSING LOTS 5 & 6 IN DP 36132 1 WARATAH & 50 FROST STREET **ORANGE NSW 2800**

STORMWATER DETAILS AND 17/02/22 As shown @ A1 BGXG4 21087 SECTIONS AB MP 2 of 3 17/02/2022

