



ACTIVITY DETERMINATION

Project No. BGYVZ

Conflict of Interest¹

In this matter:

1. I have declared any possible conflict of interests (real, potential or perceived) to the Acting Chief Executive, Land & Housing Corporation.
2. I do not consider I have any personal interests that would affect my professional judgement.
3. I will inform the Acting Chief Executive, Land & Housing Corporation as soon as I become aware of a possible conflict of interest.

Signed..........
Emma Nicholson
A/Head of Policy and Innovation
Land and Housing Corporation
Department of Planning & Environment

Dated.....22 December 2023

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

2-10 & 20

Street or property name

Birch Street & Debrincat Avenue

Suburb, town or locality

North St Marys NSW

Postcode

2760

Local Government Area(s)

Penrith

Real property description (Lot and DP)

Lots 346-350 in Deposited Plan 31990 and Lot 305 in Deposited Plan 30223

ACTIVITY DESCRIPTION

Provide a description of the activity

Demolition of existing dwellings and structures, removal of trees, boundary adjustment with 20 Debrincat Avenue, and the construction of 22 independent living seniors housing units comprising 10 x 1 bedroom and 12 x 2 bedroom units, with associated landscaping and fencing, surface parking for 10 cars, creation of a stormwater easement across 20 Debrincat Avenue and consolidation into a single lot.

1. 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.

Signed.....

Dated..... 22 December 2023

Emma Nicholson
A/Head of Policy and Innovation
Land and Housing Corporation
Department of Planning & Environment

SCHEDULE 1

IDENTIFIED REQUIREMENTS

PART A – Standard Identified Requirements

THE DEVELOPMENT

The following Identified Requirements are to ensure that the residential activity is carried out in accordance with the plans / documents and any amendments arising from the Review of Environmental Factors under Part 5 of the Environmental Planning & Assessment Act 1979, Section 171 of the Environmental Planning and Assessment Regulation 2021 and the requirements of State Environmental Planning Policy (Housing) 2021.

1. The development shall 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:
Architectural				
Cover Page	1 of 22	-	15.11.2023	DTA Architects
Block Analysis Plan	2 of 22	C	15.11.2023	DTA Architects
Site Analysis Plan	3 of 22	C	15.11.2023	DTA Architects
Demolition Plan	4 of 22	C	15.11.2023	DTA Architects
Subdivision Plan	5 of 22	C	15.11.2023	DTA Architects
Development Data	6 of 22	C	15.11.2023	DTA Architects
Site Plan	7 of 22	C	15.11.2023	DTA Architects
Ground Floor Plan	8 of 22	C	15.11.2023	DTA Architects
First Floor Plan	9 of 22	C	15.11.2023	DTA Architects
Roof Plan	10 of 22	C	15.11.2023	DTA Architects
Elevations	11 of 22	C	15.11.2023	DTA Architects
Elevation & Internal Elevations	12 of 22	C	15.11.2023	DTA Architects
Internal Elevations	13 of 22	C	15.11.2023	DTA Architects
Sections	14 of 22	C	15.11.2023	DTA Architects
Sections	15 of 22	C	15.11.2023	DTA Architects
Shadow Diagrams – 21st June 9am	16 of 22	C	15.11.2023	DTA Architects
Shadow Diagrams – 21st June 12pm	17 of 22	C	15.11.2023	DTA Architects
Shadow Diagrams – 21st June 3pm	18 of 22	C	15.11.2023	DTA Architects
Solar Access – View From Sun	19 of 22	C	15.11.2023	DTA Architects
Solar Access – View From Sun	20 of 22	C	15.11.2023	DTA Architects
Solar Access – View	21 of 22	C	15.11.2023	DTA Architects

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
From Sun				
Perspectives	22 of 22	C	15.11.2023	DTA Architects
Civil/ Stormwater				
Specification Sheet	1 of 8	E	29.11.2023	MSL Consulting Engineers
Site Drainage Plan	2 of 8	E	29.11.2023	MSL Consulting Engineers
Drainage Plan – Sheet 1	3 of 8	E	29.11.2023	MSL Consulting Engineers
Drainage Plan – Sheet 2	4 of 8	E	29.11.2023	MSL Consulting Engineers
OSD Section and Stormwater Details	5 of 8	E	29.11.2023	MSL Consulting Engineers
Stormwater Details	6 of 8	E	29.11.2023	MSL Consulting Engineers
Sediment Control Plan	7 of 8	E	29.11.2023	MSL Consulting Engineers
OSD Catchment Plan	8 of 8	E	29.11.2023	MSL Consulting Engineers
Landscape				
Landscape Plan	1 of 1	D	03.11.2023	DTA Architects
Survey				
Detail & Survey Level	1 of 10	A	31.03.2023	Norton Survey Partners
Detail & Survey Level	2 of 10	-	-	Norton Survey Partners
Detail & Survey Level	3 of 10	-	-	Norton Survey Partners
Detail & Survey Level	4 of 10	-	-	Norton Survey Partners
Detail & Survey Level	5 of 10	-	-	Norton Survey Partners
Detail & Survey Level	6 of 10	-	-	Norton Survey Partners
Detail & Survey Level	7 of 10	-	-	Norton Survey Partners
Detail & Survey Level	8 of 10	-	-	Norton Survey Partners
Detail & Survey Level	9 of 10	-	-	Norton Survey Partners
Detail & Survey Level	10 of 10	-	-	Norton Survey Partners
Footpath Survey and Upgrades				
Footpath Layout Plan	1 of 4	B	29.11.2023	MSL Consulting Engineers
Footpath Standard Details	2 of 4	B	29.11.2023	MSL Consulting Engineers
Footpath Long section – 1	3 of 4	B	29.11.2023	MSL Consulting Engineers
Footpath Long section – 2	4 of 4	B	29.11.2023	MSL Consulting Engineers
BASIX				
BASIX Certificate	BASIX Certificate No 1376255M_02	-	14.06.2023	Greenview Consulting Pty Ltd
Nationwide house energy rating scheme – class 2 summary	NatHERS Certificate No 0008706870	-	25.06.2023	Greenview Consulting Pty Ltd
Reports				

Title / Name:	Drawing No / Document Ref	Revision / Issue:	Date [dd/mm/yyyy]:	Prepared by:
Access Report	22088-DA	R1.2	23.05.2023	Access-i
Arborist's Impact Assessment and Tree Management Plan	7800.1	-	30.11.2023	Redgum Horticultural
Statutory Compliance Report	J4409	FINAL	22.05.2023	DPC
Geotechnical Investigation	22/1495	-	May 2022	STS Geotechnics Pty Ltd
Waste Management Plan	-	-	-	Land and Housing Corporation
Traffic Impact Assessment – Seniors Housing	-	3	18.05.2023	ParkTransit Pty Ltd
Cut and Fill Plan	1 of 1	B	19.06.2023	MSL Consulting Engineers

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 implemented.
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 determination shall be consolidated into a single lot. The plan of consolidation shall be lodged at the NSW Land Registry Services and shall be registered prior to the occupation of the development. A copy of the registered plan shall be provided to the Land & Housing Corporation.

It is noted that the boundary adjustment between Lot 350 DP31990 and Lot 305 DP30223 (affecting the rear portion of 20 Debrincat Avenue, North St Marys) is to be registered prior to the commencement of building works for the seniors housing development, as detailed in Identified Requirement 79 below.

OPERATIONAL MATTERS

The following Identified Requirements relate to the use of the site and are to ensure that the activity and its operation do not interfere with the amenity of the surrounding area.

Stormwater Run-off

6. Stormwater shall be collected within the site and conveyed in a pipeline to the appropriate gutter or drain under the control of Penrith City Council substantially in accordance with the approved concept stormwater drainage plans.
7. Alterations to the natural surface contours or surface absorption characteristics of the site shall not impede, increase, or divert natural surface water runoff so as to cause a nuisance to adjoining property owners.
8. All driveways shall be graded in such a manner as to provide continuous surface drainage flow paths to the 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 and Parking

10. Concrete vehicular crossings and laybacks shall be provided at the entrances / exits to the property. The crossings and laybacks shall be constructed in accordance with Penrith City Council's standard requirements for residential crossings. Council shall be provided with plans for the crossings and laybacks together with the payment of any council inspection fees.
11. Particular care shall 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 shall be borne by the Land & Housing Corporation. Obsolete gutter laybacks shall be constructed as kerb in accordance with Penrith City 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 shall 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 manoeuvring 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 shall be maintained during the entire period of the works until all the 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 shall be sited well clear of any easements affecting the site. The builder shall ascertain if any easements do exist and, if they do, 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 E2.2a of the Building Code of Australia. Detectors and alarms shall comply with AS 3786 and AS 1670 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 shall be inspected by a suitably qualified person to identify any contaminated or hazardous material present. A proposal for remediation shall be prepared, which may include preparation of a Remedial Action Plan, and remediation shall be carried out in accordance with the proposal. A Validation Report, prepared in accordance with Environment Protection Authority requirements, shall 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 shall be provided to the Land & Housing Corporation on completion of the remediation works.

Landscaping

18. Landscaping shall be carried out substantially in accordance with the approved Landscape Plan and maintained for a period of 12 months by the building contractor. Penrith City Council shall be consulted in relation to the planting of any street trees.
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 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 Arboricultural Impact Assessment and Tree Management Plan and no other trees shall be removed without further approval(s).

Fencing

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

Provision of Letterbox Facilities

22. Suitable letterbox facilities are to 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, including demolition.

Disconnection of Services

24. All services that are required to be disconnected shall 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.

25. All existing services within the boundary to remain live shall be identified, pegged and made safe.

Demolition

26. The builder shall notify the occupants of premises on either side, opposite and at the rear of the site a minimum of 5 working days prior to demolition. Such notification shall be clearly written on an A4 size paper giving the date demolition will commence and be placed in the letterbox of every premise (including every unit in a multi-unit residential building or mixed use building). The demolition shall not commence prior to the date that is stated in the notice letter.
27. Prior to the demolition, a Work Plan shall be prepared by a competent person(s) in accordance with AS 2601 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, the precautions to be employed to minimise any dust nuisance and the disposal methods for hazardous materials.
28. If buildings to be demolished are determined as, or suspected of, containing asbestos cement, a standard commercially manufactured sign containing the words 'DANGER ASBESTOS REMOVAL IN PROGRESS', and measuring not less than 400mm x 300mm, shall be erected in a prominent visible position on the site for the duration of the demolition works.

Note:

Any buildings constructed before 1987 is assumed to contain asbestos.

Utilities Service Provider Notification

29. The demolition / construction plans shall be submitted to the appropriate water utility's office (e.g. Sydney Water office) to determine whether or not the development will affect the utility's sewer and water mains, stormwater drains and any easements.

Note:

If the development complies with water utility's requirements, the plans will be stamped indicating that no further requirements are necessary.

Council Notification

30. Penrith City Council shall be advised in writing, of the date it is intended to commence work, including demolition. A minimum period of 5 working days notification shall be given.

Site Safety

31. A sign shall 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 outside working hours, and

- (c) stating that unauthorised entry to the work site is prohibited.

The sign shall be maintained while the work is being carried out but shall 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.

32. A minimum 1.8m high security fence or Class A / 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.

33. No building or demolition materials are to be stored on the footpath or roadway.

Site Facilities

34. 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 Penrith City Council 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 shall not to be placed on any property other than that which this approval relates to.
35. Access to the site shall only be provided via an all-weather driveway on the property and is not to be provided from any other site.

Protection of Trees

36. Trees and other vegetation that are to be retained on site shall be protected prior to the commencement of works and for the duration of the construction period in accordance with the details provided in the Arboricultural Impact Assessment and Tree Management Plan.

Waste Management

37. A final Waste Management Plan shall be prepared and submitted to the Land & Housing Corporation by the building contractor 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.

PRIOR TO ANY CONSTRUCTION WORK COMMENCING ON SITE

The following Identified Requirements are to be complied with prior to any construction works occurring on the site, excluding demolition.

Service Authority Clearances

38. A compliance certificate, or other evidence, shall be obtained from the relevant water utility provider (e.g. Sydney Water), confirming service availability 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.

39. A written clearance from an electricity supply authority stating that electrical services are available to the site, or that arrangements have been entered into for the provision of services to the site, shall be obtained prior to work commencing.
40. A certificate from an approved telecommunications carrier certifying that satisfactory arrangements have been made for the provision of underground telephone services, to the site and to each dwelling, shall be obtained prior to work commencing.
41. 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 each dwelling in the development shall be obtained prior to work commencing.

Stormwater Disposal

42. A detailed stormwater drainage plan(s), substantially in accordance with the approved concept stormwater drainage plan(s), shall be prepared and submitted to the Land & Housing Corporation. Any on-site detention system shall be designed in accordance with the relevant catchment authority's requirements (e.g. the Upper Parramatta River Catchment Trust On-site Detention Handbook) and/or Penrith City Council's drainage code.
43. A drainage easement is required, proof of lodgement of the plan of the drainage easement at the NSW Land Registry Services shall be submitted to the Land & Housing Corporation prior to commencement of works. Registration of the plan of easement shall be completed prior to occupation of the development and a copy of the registered plan shall be provided to the Land & Housing Corporation.

DURING DEMOLITION AND CONSTRUCTION WORKS

The following Identified Requirements are to be complied with whilst demolition and construction works are occurring on the site.

Landfill

44. Where site filling is necessary, a minimum of 95% standard compacting shall be achieved and certified by a NATA registered Soils Lab.
45. 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.

Heritage

46. 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 immediately in the affected area. Subsequently, in cases where historical or indigenous items have been uncovered, the Department of Planning and Environment must be contacted.
47. All workers / contractors on the site shall be informed of their obligations, under the *Heritage Act* and *National Parks and Wildlife Act 1974*, that it is illegal to disturb, damage or destroy a relic without the prior approval of the Department of Planning and Environment.

Demolition

48. Any existing structures identified for demolition shall be demolished prior to commencement of the construction of the activity.
49. Demolition shall be carried out in accordance with the appropriate provisions of AS 2601.
50. Where materials containing asbestos are to be removed, demolition shall be carried out by a licensed contractor(s) who have current SafeWork NSW accreditation in asbestos removal.
51. 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)].
52. Hazardous or intractable wastes, including all asbestos laden waste, arising from the demolition process shall be removed and disposed of in accordance with the requirements of SafeWork NSW and the Department of Planning and Environment.
53. Documentary evidence, in the form of tip receipts from an approved Waste Management Facility, shall be obtained by the demolition contractor and submitted to the Land & Housing Corporation demonstrating the appropriate disposal of the asbestos waste.
54. Demolition procedures shall maximise the reuse and recycling of demolished materials in order to reduce the environmental impacts of waste disposal.
55. During demolition, the public footpath and the public road shall not be obstructed by any vehicles. The public road and footpath shall be swept (not hosed) clean of any material, including clay, soil and sand.
56. All vehicles leaving the site with demolition materials shall have their loads covered and vehicles shall not track soil and other material onto the public roads and

footpaths. The footpath shall be suitably protected against damage when plant and vehicles access the site. All loading of vehicles with demolished materials shall occur on site.

Survey Reports

57. Survey reports shall be submitted by the building contractor 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 allotment boundaries.

Hours of Demolition / Construction / Civil Work

58. Demolition / construction / Demolition / construction / civil work shall only occur on the site between the hours of 7.00am to 5.00pm Monday to Saturday with no work permitted on Sundays or public holidays.

Excavation and Backfilling

59. All excavations and backfilling associated with the demolition or erection of building(s) shall be executed safely and in accordance with appropriate professional standards. All such work shall be guarded and protected to prevent it from being dangerous to life or 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 former Department of Environment and Climate Change.
61. No fires shall be lit or waste materials burnt on the site.
62. No washing of concrete forms or trucks shall occur on the site.
63. Any contamination / spills on the site during construction works shall be actively managed and reported immediately to appropriate regulatory authorities to minimise any potential damage to the environment.
64. Dust generation during demolition / 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 shall be secured (ie closed tail gate and covered) to minimise dust generation.
66. Non-recyclable waste and containers shall 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.

Impact of Construction Works

67. The Land & Housing Corporation shall bear the cost of any necessary adjustments to utility mains and services.

68. Care shall be taken to prevent any damage to adjoining properties. The building contractor shall be liable to pay compensation to any adjoining owner if, due to demolition/construction works, damage is caused to such adjoining property.

Termite Protection

69. To protect buildings from subterranean termite, termite barriers installed in accordance with AS 3660.1, shall be placed on the underside and in 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 and
- (d) the need to maintain and inspect the system on a regular basis.

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 use or occupation of the development shall not commence until all the Identified Requirements of this determination have been complied with.

Council Infrastructure Damage

71. The cost of repairing any damage caused to Penrith City Council's assets in the vicinity of the site as a result of demolition / construction works shall be met in full by the building contractor.

Stormwater Drainage

72. Prior to occupation, a Work As Executed Plan shall be prepared by the building contractor clearly showing all aspects of the constructed stormwater drainage system, including any on-site detention system. The plan shall demonstrate general compliance with the approved concept stormwater drainage plan(s) and shall include:

- sufficient levels and dimensions to verify the constructed storage volumes; and
- location and surface levels of all pits; and
- invert levels of the internal drainage lines, orifice plates fitted and levels within the outlet control pits; and
- finished floor levels of all structures; and
- verification that any required trash screens have been installed; and
- locations and levels of any overland flow paths; and
- verification that any drainage lines are located wholly within easements, where applicable.

The Work-As-Executed Plan information shall be shown on the final civil works drawings.

A positive covenant and restriction-as-to-user shall be placed over the onsite detention system in accordance with Penrith City Council's on-site detention policy to ensure that the system will be adequately maintained. The positive covenant and restriction-as-to-user shall be registered at NSW Land Registry Services prior to occupation. A copy of the registered restriction-as-to-user shall be provided to the Land & Housing Corporation and Penrith City Council.

PART B – Additional Identified Requirements

Specific Requirements for Seniors Housing

73. The independent living units shall comply with the accessibility and useability standards referenced in section 85 and set out in Schedule 4 of *State Environmental Planning Policy (Housing) 2021*.

Note:

This requirement does not apply to the provisions set out under sections 2, 7-13 and 15-20 of Schedule 4 for an independent living unit, or part of such a unit, that is located above the ground floor.

74. Only the following kinds of people shall be accommodated in the approved development:
- (a) seniors or people who have a disability; or
 - (b) people who live within the same household with seniors or people who have a disability; or
 - (c) staff employed to assist in the administration and provision of services to the seniors housing development.

Note:

It should be noted that 'seniors', as defined in the Housing SEPP, are any of the following:

- (a) people aged 60 or more years,
- (b) people who are resident at a facility at which residential care (within the meaning of the Aged Care Act 1997 of the Commonwealth) is provided, and
- (c) people who have been assessed as being eligible to occupy housing for aged persons provided by a social housing provider.

A restriction as to user shall be registered against the title of the property, prior to occupation, in accordance with Section 88E of the Conveyancing Act 1919 limiting the use of any accommodation to the kinds of people referred to above and that the dwellings cannot be subdivided.

75. Pathway lighting shall be designed to provide a minimum of 20 lux at ground level and be located to avoid glare for pedestrians and adjacent dwellings.
76. Access to, and within, the site shall be provided in accordance with AS 1428.1 so that a person using a wheelchair can use common areas and common facilities associated with the activity.
77. A 1.2m wide concrete footpath across the site frontage, connecting to the existing footpath system in Debrincat Avenue shall be constructed in accordance with the Penrith City Council specifications to provide an accessible pathway from the site to the bus stops ID 276024 (Debrincat Ave after Birch St) and ID276017 (North St Mary's neighbourhood centre, Debrincat Ave). The footpath upgrades must be designed and

constructed to satisfy the access and gradient requirements under clause 93(4) in the *State Environmental Planning Policy (Housing) 2021*.

Note:

The responsible officer at the Penrith City Council shall be contacted regarding council's specifications and any necessary approvals. Should the footpath upgrade works conflict with existing service utility pits, and adjustments are required to these pits, the builder is to contact the relevant authorities for concurrence on the proposed works to the utility pits.

78. Entry doors to units shall be provided with door viewers to enable residents to view approaches to their units without the need to open the door.

Site Specific Requirements

79. The plan of subdivision to facilitate the boundary adjustment between Lot 350 DP31990 and Lot 305 DP30223 shall be lodged at the NSW Land Registry Services and shall be registered prior to commencement of construction. A copy of the registered plan shall be provided to the Land & Housing Corporation.

Requirements Resulting from Council Comments

80. The existing sewer line must be inspected prior to the construction of the stormwater infrastructure and associated easement to ensure the stormwater pipeline does not impact on the integrity of the sewer main.
81. The detailed construction documentation for stormwater management must be amended to incorporate an additional junction pit at the new property boundary within 20 Debrincat Avenue, as well as at the end of the drainage easement prior to the connection to the Council drainage system on Debrincat Avenue.
82. The existing bus shelters at bus stop ID 276024 and ID 276017) at Debrincat Avenue must be upgraded, where required, to comply with the relevant accessibility standard prior to occupation.
83. LAHC is to consult with Penrith City Council regarding the utilisation of Council's Waste Collection Service and enter into necessary agreements.

ADVISORY NOTES

- i. 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 dialing 1100.

DECISION STATEMENT

Project No. BGYVZ

SITE IDENTIFICATION	
STREET ADDRESS	
Unit/Street No	Street or property name
2-10 & 20	Birch Street & Debrincat Avenue
Suburb, town, or locality	Postcode
North St Marys NSW	2760
Local Government Area(s)	Real property description (Lot and DP)
Penrith	Lots 346-350 in Deposited Plan 31990 and Lot 305 in Deposited Plan 30223
ACTIVITY DESCRIPTION	
Provide a description of the activity	
Demolition of existing dwellings and structures, removal of trees, boundary adjustment with 20 Debrincat Avenue, and the construction of 22 independent living seniors housing units comprising 10 x 1 bedroom and 12 x 2 bedroom units, with associated landscaping and fencing, surface parking for 10 cars, creation of a stormwater easement across 20 Debrincat Avenue and consolidation into a single lot.	

The Land & Housing Corporation (LAHC) has proposed the above activity under the provisions of *State Environmental Planning Policy (Housing) 2021* (Housing SEPP) which requires determination under Part 5 of the *Environmental Planning & Assessment Act 1979* (EP&A Act). This Decision Statement relates to the Review of Environmental Factors (REF) for the above activity prepared under Part 5 of the EP&A Act and the *Environmental Planning and Assessment Regulation 2021*.

Based on the REF document and supporting documentation, including advice from Penrith City Council a decision to proceed with the proposed activity has been made. This decision included consideration of the following:

Significant Impact on the Environment

- The proposed activity is not likely to have a significant impact on the environment and therefore an EIS is not required.
- The proposed activity will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats or impact biodiversity values, meaning a SIS and/or BDAR is not required.

Reasons for the Decision

- Following an assessment of the proposed activity and associated environmental impacts within the REF document it was decided that the proposed development will have economic and social benefits and any minor short-term impacts on the environment or surrounding properties can be appropriately mitigated.
- The proposed development will assist in the provision of much needed social and affordable housing and assist in addressing the existing and growing demand for housing in the local government area.

Mitigation Measures

Mitigation measures are required to minimise or manage environmental impacts and are detailed throughout the REF and specifically within Section 8. All mitigation measures are detailed as Identified Requirements within the Activity Determination. Additional mitigation measures, detailed in the Activity Determination have been imposed to minimise the impact on the surrounding environment, ensure appropriate site safety and to ensure legislative compliance.

Signed.....

Dated..... 22 December 2023

Emma Nicholson
Acting Head of Policy and Innovation
Land and Housing Corporation
Department of Planning & Environment

DA ISSUE ONLY

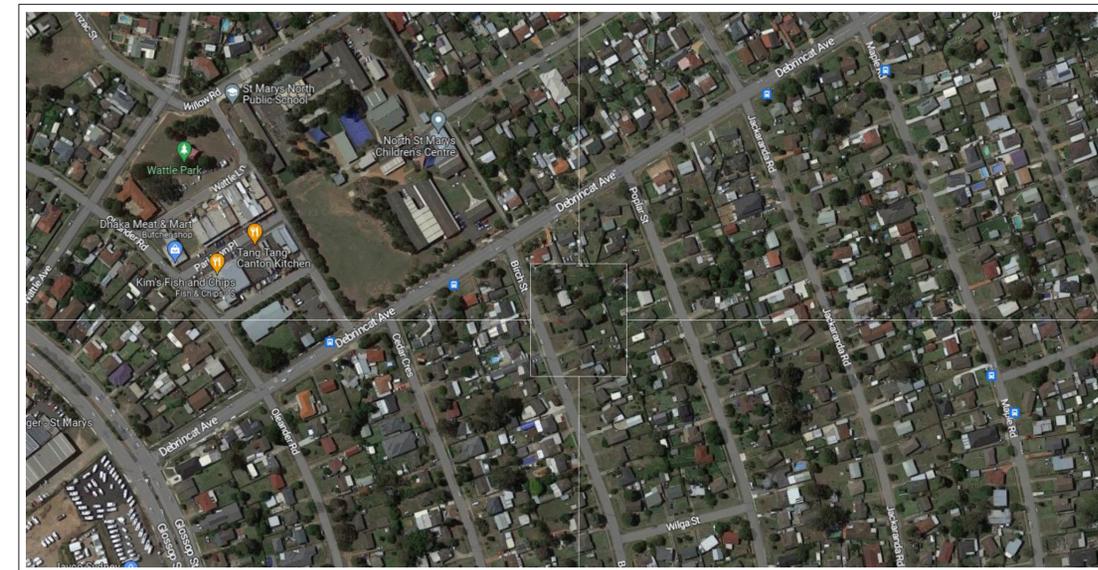
SENIORS LIVING DEVELOPMENT

Lots 346-350 in DP 31990 & Lot 305 in DP 30223
2-10 Birch Street & 20 Debrincat Ave, North St Marys NSW 2760

DRAWING SCHEDULE:

ARCHITECTURAL	Type	Sheet No.	Rev	HYDRAULIC	Type	Sheet No.	Rev
COVER PAGE	A	01 of 22	C	LEGENDS & NOTES	H	1 of 4	B
BLOCK ANALYSIS PLAN	A	02 of 22	C	SITE / GROUND FLOOR PLAN	H	2 of 4	B
SITE ANALYSIS PLAN	A	03 of 22	C	FIRST FLOOR PLAN	H	3 of 4	B
DEMOLITION PLAN	A	04 of 22	C	ROOF PLAN	H	4 of 4	B
SUBDIVISION PLAN	A	05 of 22	C				
DEVELOPMENT DATA	A	06 of 22	C	CIVIL	Type	Sheet No.	Rev
SITE PLAN	A	07 of 22	C	<u>CUT AND FILL</u>			
GROUND FLOOR PLAN	A	08 of 22	C	CUT AND FILL PLAN	C	1 of 1	B
FIRST FLOOR PLAN	A	09 of 22	C	<u>STORMWATER CONCEPT PLAN</u>			
ROOF PLAN	A	10 of 22	C	SPECIFICATION SHEET	C	1 of 7	D
ELEVATIONS	A	11 of 22	C	SITE DRAINAGE PLAN	C	2 of 7	D
ELEVATIONS & INTERNAL ELEVATIONS	A	12 of 22	C	DRAINAGE PLAN - SHEET 1	C	3 of 7	D
INTERNAL ELEVATIONS	A	13 of 22	C	DRAINAGE PLAN - SHEET 2	C	4 of 7	D
SECTIONS	A	14 of 22	C	OSD SECTION AND STORMWATER DETAILS	C	5 of 7	D
SECTIONS	A	15 of 22	C	STORMWATER DETAILS	C	6 of 7	D
SHADOW DIAGRAMS - 21st JUNE 9AM	A	16 of 22	C	SEDIMENT CONTROL PLAN	C	7 of 7	D
SHADOW DIAGRAMS - 21st JUNE 12PM	A	17 of 22	C	<u>FOOTPATH UPGRADE PLAN</u>			
SHADOW DIAGRAMS - 21st JUNE 3PM	A	18 of 22	C	FOOTPATH LAYOUT PLAN	C	1 of 4	A
SOLAR ACCESS - VIEW FROM SUN	A	19 of 22	C	FOOTPATH STANDARD DETAILS	C	2 of 4	A
SOLAR ACCESS - VIEW FROM SUN	A	20 of 22	C	FOOTPATH LONGSECTION - 1	C	3 of 4	A
SOLAR ACCESS - VIEW FROM SUN	A	21 of 22	C	FOOTPATH LONGSECTION - 2	C	4 of 4	A
PERSPECTIVES	A	22 of 22	C				
				LANDSCAPE	Type	Sheet No.	Rev
SURVEY	Type	Sheet No.	Rev	LANDSCAPE PLAN	L	1 of 1	D
DETAIL & LEVEL SURVEY	S	1 of 10	A				
DETAIL & LEVEL SURVEY	S	2 of 10	-				
DETAIL & LEVEL SURVEY	S	3 of 10	-				
DETAIL & LEVEL SURVEY	S	4 of 10	-				
DETAIL & LEVEL SURVEY	S	5 of 10	-				
DETAIL & LEVEL SURVEY	S	6 of 10	-				
DETAIL & LEVEL SURVEY	S	7 of 10	-				
DETAIL & LEVEL SURVEY	S	8 of 10	-				
DETAIL & LEVEL SURVEY	S	9 of 10	-				
DETAIL & LEVEL SURVEY	S	10 of 10	-				

LOCATION PLAN:



1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
2. BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
3. IT IS THE OWNER'S 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 AUTHORIZED BY DTA ARCHITECTS



ST MARY'S NORTH PUBLIC SCHOOL & CHILDRENS CENTRE



EXISTING SINGLE STOREY DUPLEX



EXISTING 2 STOREY DUPLEX

LEGEND: BLOCK PLAN

 PROPOSED DEVELOPMENT OWNED BY DEPARTMENT OF HOUSING

 BOUNDARY LINE TO LOTS OWNED BY OTHERS

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



20 DEBRINCAT AVE. SINGLE STOREY RESIDENCE



TYPICAL 2 STOREY RESIDENCE



TYPICAL 2 STOREY RESIDENCE



TYPICAL 2 STOREY RESIDENCE

2-10 BIRCH ST. PROPOSED DEVELOPMENT OWNED BY LAND AND HOUSING CORPORATION



2 BIRCH STREET



4 BIRCH STREET



6 BIRCH STREET

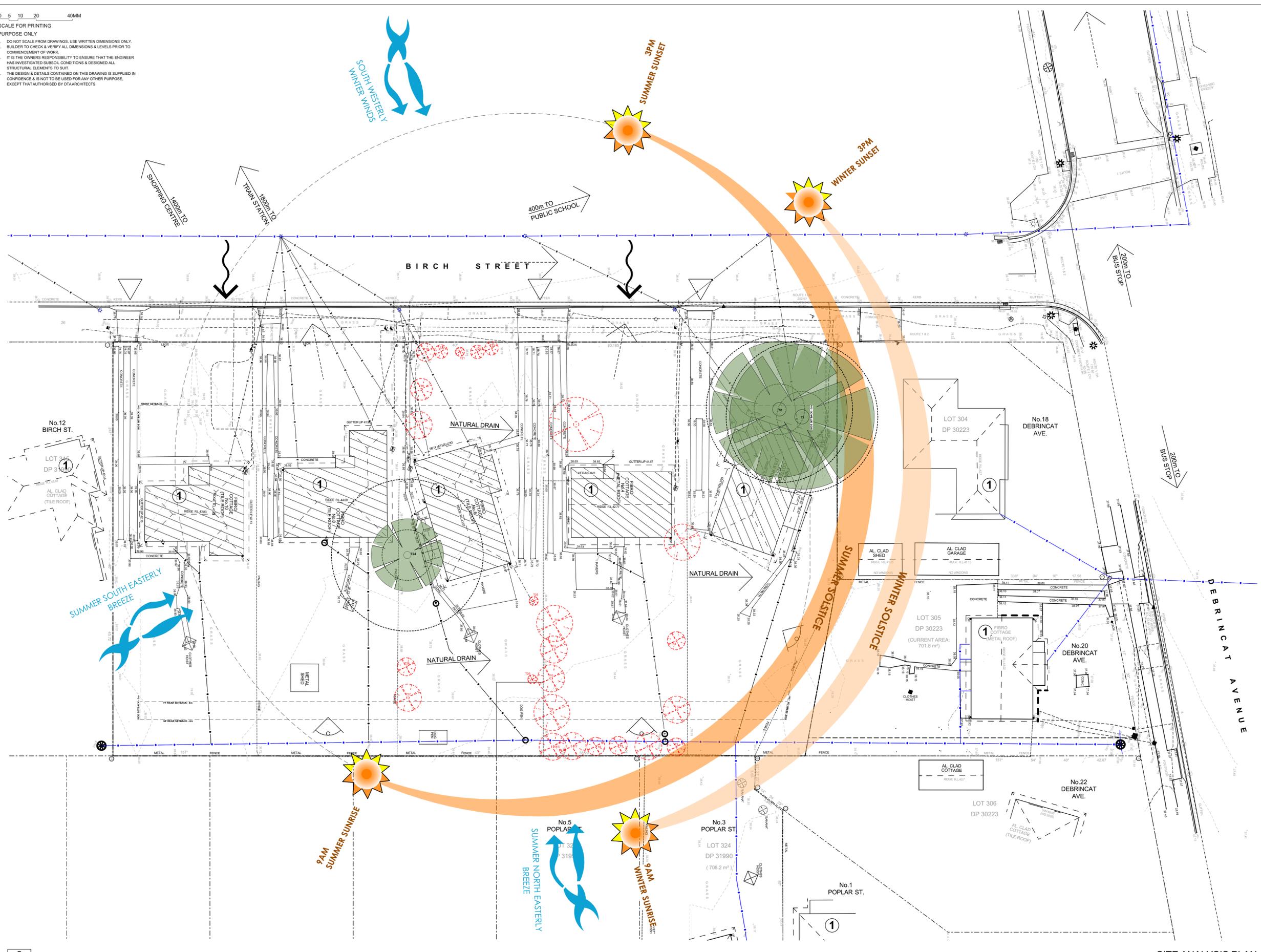


8 BIRCH STREET



10 BIRCH STREET

0 5 10 20 40MM
SCALE FOR PRINTING
PURPOSE ONLY
1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
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 DTA ARCHITECTS



SITE ANALYSIS LEGEND

- BOUNDARY
- EXISTING BUILDINGS TO REMAIN
- EXISTING BUILDINGS TO BE REMOVED
- NEIGHBOURING PRIVATE OPEN SPACE
- EXISTING TREES TO REMAIN
- EXISTING TREES TO BE REMOVED
- ◇ OVERLOOKING
- 25 EXISTING CONTOURS
- ▽ ACCESS TO SITE
- - - VIEWS
- ~ NOISE SOURCE
- ② NUMBER OF STOREYS
- OVERHEAD POWERLINE
- UNDERGROUND SEWER

2

SITE ANALYSIS PLAN
1:200

NSW GOVERNMENT
Planning and Environment
LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No. 1800 738 718
www.dpie.nsw.gov.au

DTA ARCHITECTS
Member of the Institute of Architects

NOMINATED ARCHITECTS:

NAME	Daniel Donal	
NSW A/RB No.	NSW A/RB No. 9068	
REV	DATE	NOTATION/AMENDMENT
C	28/10/2023	UPDATED DA ISSUE
B	23/08/2023	DA ISSUE
A	16/05/2023	DA ISSUE

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE.
FIGURED DIMENSIONS TAKE PRECEDENCE.

ARCHITECT	DTA ARCHITECTS Pty Ltd PH (02) 9601 0111
PROJECT MANAGER	LAND & HOUSING CORPORATION PH (02) 9354 1880
STRUCTURAL / CIVIL	MSL CONSULTING ENGINEERS Pty Ltd PH (02) 4228 5247
HYDRAULIC	ABEL & BROWN Pty Ltd PH (02) 9709 8705
ELECTRICAL / BASIC CONSULTANT	GREENVIEW CONSULTING Pty Ltd PH (02) 8544 1683
LANDSCAPE CONSULTANT	RAY FUGGLE & ASSOCIATES Pty Ltd PH (04) 22 294 712

BUSINESS PARTNER:
NSW GOVERNMENT
Planning and Environment
Land & Housing Corporation
GREATER WESTERN SYDNEY REGION

PROJECT:
SENIORS HOUSING DEVELOPMENT
at
Lots 346-350 in DP 31990 & Lot 305 in DP 30223
2-10 Birch Street & 20 Debrincat Ave, North St
Marys NSW 2760

TITLE:
SITE ANALYSIS PLAN

DATE	15/11/2023	SCALE	As shown @ A1	PROJ.	BGVYZ	JOB	2022.011
STAGE	C	DRAWN	SD	CHECKED	DD	CERTIFIER	DD
TYPE	A	SHEET	3 of 22	REV.	C		

FILE: CAD File: S:\Data\3\2022\2022.011 LAHC SL 2-10 Birch St North St Marys\3_Design\3.2 DA 3022.011 LAHC 2-10 Birch Street North St DA02.dwg
PLOTTED: 15/11/2023 2:48 PM

STATUS:	DA ISSUE
DATE:	15/11/2023
SCALE:	As shown @ A1
PROJ.:	BGVYZ
JOB:	2022.011
STAGE:	C
DRAWN:	SD
CHECKED:	DD
CERTIFIER:	DD
TYPE:	A
SHEET:	3 of 22
REV.:	C

- DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
- BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
- IT IS THE OWNER'S 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 AUTHORIZED BY DTA ARCHITECTS.



LEGEND - DEMOLITION

- EXTENT OF SITE BOUNDARY
- EXISTING STRUCTURES TO BE DEMOLISHED. REPAIR & REINSTATE ADJOINING SURFACES.
- EXISTING SITE WORKS TO BE REMOVED / DEMOLISHED
- ⊗ EXISTING TREES TO REMAIN. REFER ALSO TO LANDSCAPE DRAWING.
- ⊗ EXISTING TREES TO BE REMOVED. REFER ALSO TO LANDSCAPE DRAWING.
- + EXISTING LEVELS

PERFORM ALL THE DEMOLITION AS SHOWN ON THE DRAWING AND/OR AS NECESSARY REQUIRED CARRYING OUT THE WORKS UNDER THE CONTRACT.

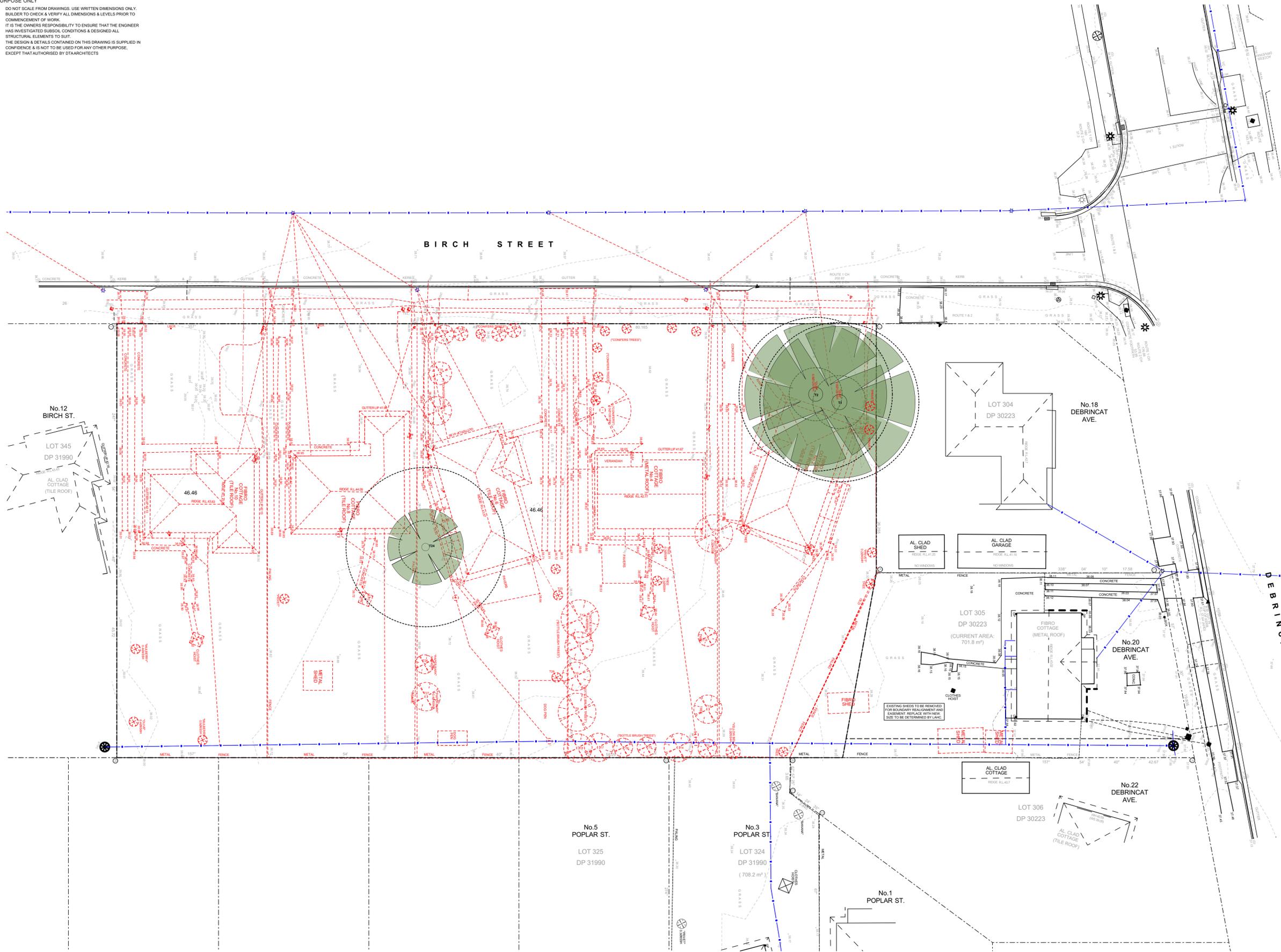
NB: CARE MUST BE TAKEN WHILE CARRYING OUT THE WORKS.

PROTECT EXISTING PROPERTY FROM DAMAGE BY APPROPRIATE MEANS INCLUDING SHORING, STRUTTING, PROTECTIVE SCREENS, SHEETING AND THE LIKE.

REPAIR & REINSTATE ANY SUCH DAMAGE TO MATCH EXISTING.

EXISTING SERVICES: DEAL AS APPROPRIATE WITH EXISTING SERVICES INCLUDED IN OR ENCOUNTERED DURING THE COURSE OF THE DEMOLITIONS.

BEFORE DEMOLISHING AND REMOVING PARTS OF BUILDING HAVING ELECTRICAL WIRING, GAS, SEWER AND WATER PIPES, CONDUIT OR SIMILAR ITEMS EMBEDDED IN THEM, NOTIFY THE PROJECT MANAGER/ SUPERINTENDENT, AUTHORITIES HAVING JURISDICTION, AND MAKE SURE THAT THESE ITEMS ARE OUT OF SERVICE SO THAT THEY CAN BE REMOVED WITHOUT DANGER.



1

DEMOLITION PLAN 1:200

NSW GOVERNMENT
Planning and Environment

LOCKED BAG 5022
 PARRAMATTA NSW 2124
 PHONE No. 1800 738 718
 www.dpie.nsw.gov.au

DTA ARCHITECTS

NOMINATED ARCHITECTS:
 Daniel Donal
 NSW ARB No. 9068

REV	DATE	NOTATION/AMENDMENT
C	28/10/2023	UPDATED DA ISSUE
B	23/08/2023	DA ISSUE
A	16/05/2023	DA ISSUE

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.

ARCHITECT
 DTA ARCHITECTS Pty Ltd
 PH (02) 9601 5011

PROJECT MANAGER
 LAND & HOUSING CORPORATION
 PH (02) 9354 1880

STRUCTURAL / CIVIL
 MSL CONSULTING ENGINEERS Pty Ltd
 PH (02) 4228 5247

HYDRAULIC
 ABEL & BROWN Pty Ltd
 PH (02) 9709 5705

ELECTRICAL / BASIC CONSULTANT
 GREENVIEW CONSULTING Pty Ltd
 PH (02) 8544 1683

LANDSCAPE CONSULTANT
 RAY FUGGLE & ASSOCIATES Pty Ltd
 PH 0412 294 712

BUSINESS PARTNER:
NSW GOVERNMENT
Planning and Environment
 Land & Housing Corporation
 GREATER WESTERN SYDNEY REGION

PROJECT:
 SENIORS HOUSING DEVELOPMENT
 at
 Lots 346-350 in DP 31990 & Lot 305 in DP 30223
 2-10 Birch Street & 20 Debrincat Ave, North St
 Mays NSW 2760

DATE	SCALE	PROJ.	JOB
15/11/2023	As shown @ A1	BGVZ	2022.011
STAGE	DRAWN	CHECKED	CERTIFIER
C	SD	DD	DD
TYPE	SHEET	REV.	
A	4 of 22	C	

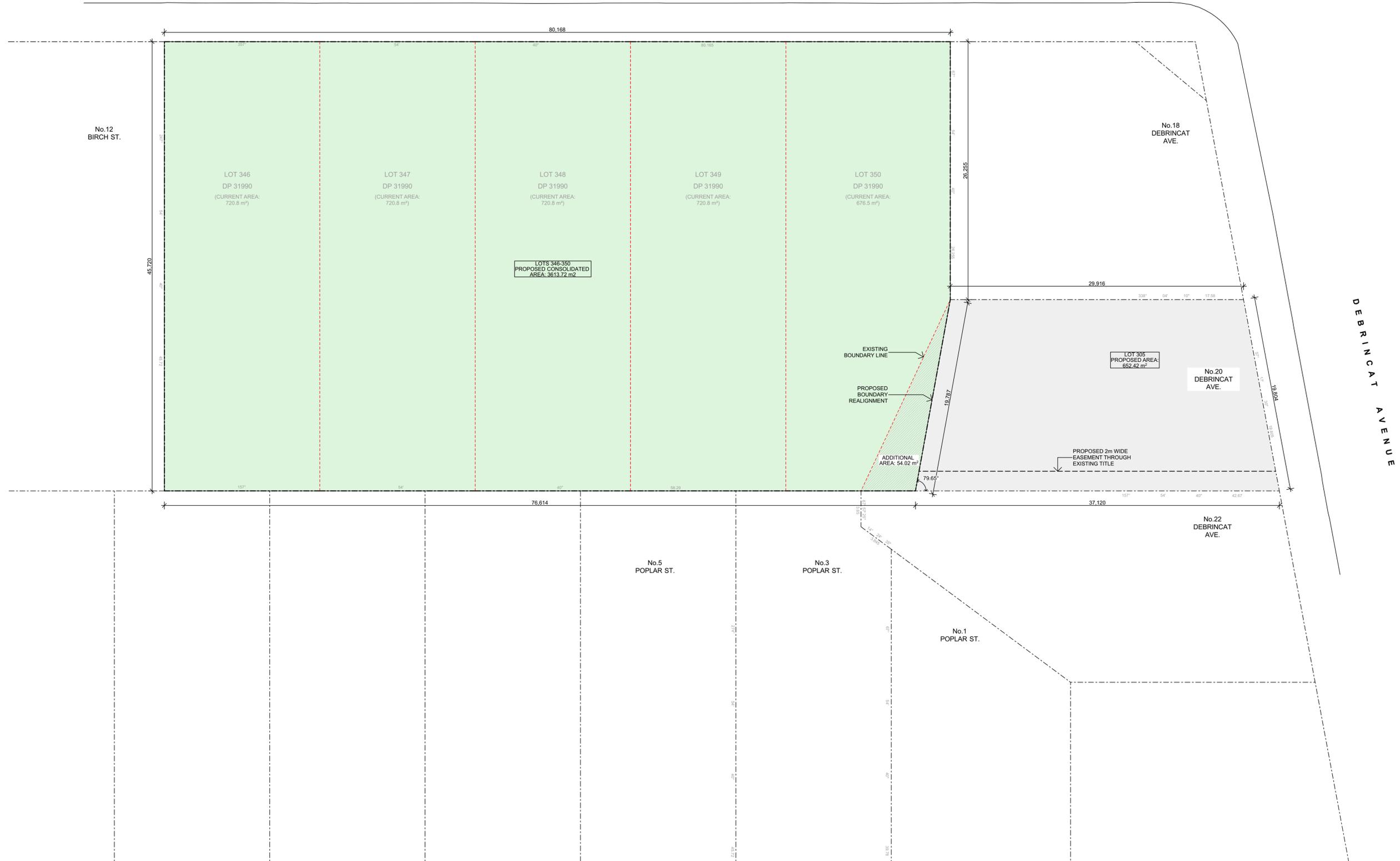
TITLE:
 DEMOLITION PLAN

FILE: CAD File: S:\Data\3\2022\2022.011.LAHG.SL
 2-10 Birch St North St Mays\3.Dwg\3.2.DA
 3022.011.LAHG.2-10 Birch Street North St
 DA02.pn

PLOTTED: 15/11/2023
 2:48 PM

PURPOSE ONLY
1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
2. BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
3. IT IS THE OWNER'S 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 AUTHORIZED BY DTA ARCHITECTS

BIRCH STREET



1

SUBDIVISION PLAN 1:200



LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No. 1800 738 718
www.dpie.nsw.gov.au



NOMINATED ARCHITECTS:

Daniel Donal
NSW ARB No. 9068

Table with columns for REV, DATE, and NOTATION/AMENDMENT. Includes revision A (16/05/2023) for DA ISSUE and B (23/08/2023) for DA ISSUE.

ARCHITECT: DTA ARCHITECTS Pty Ltd
PROJECT MANAGER: LAND & HOUSING CORPORATION
STRUCTURAL / CIVIL: MSL CONSULTING ENGINEERS Pty Ltd

HYDRAULIC: ABEL & BROWN Pty Ltd
ELECTRICAL / BASIS CONSULTANT: GREENVIEW CONSULTING Pty Ltd
LANDSCAPE CONSULTANT: RAY FUGGLE & ASSOCIATES Pty Ltd

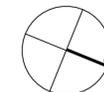
BUSINESS PARTNER: NSW GOVERNMENT
Planning and Environment
Land & Housing Corporation
GREATER WESTERN SYDNEY REGION

PROJECT: SENIORS HOUSING DEVELOPMENT
at
Lots 346-350 in DP 31990 & Lot 305 in DP 30223
2-10 Birch Street & 20 Debrincat Ave, North St
Mays NSW 2760

TITLE: SUBDIVISION PLAN
DATE: 15/11/2023
STAGE: C
TYPE: A
SHEET: 5 of 22

STATUS: DA ISSUE
SCALE: As shown @ A1
PROJ: BGYVZ
JOB: 2022.011
DRAWN: SD
CHECKED: DD
CERTIFIER: DD
REV: C

PURPOSE ONLY
 1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
 2. BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
 3. IT IS THE OWNER'S 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 DTA ARCHITECTS



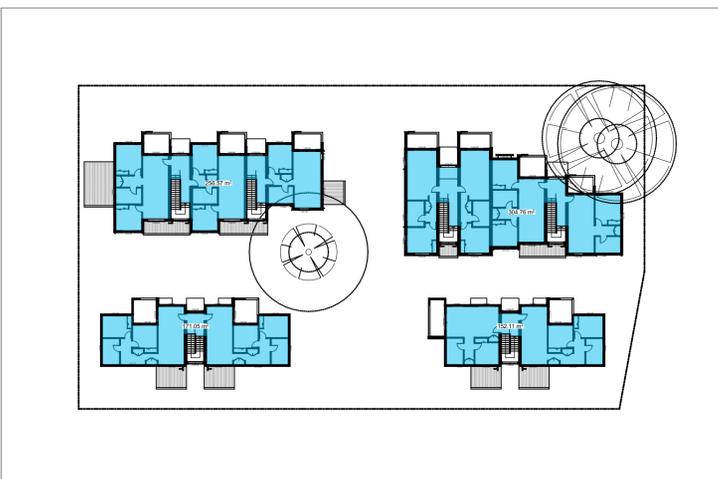
1 CALCULATION PLAN - GF FSR (DCP) 1:500



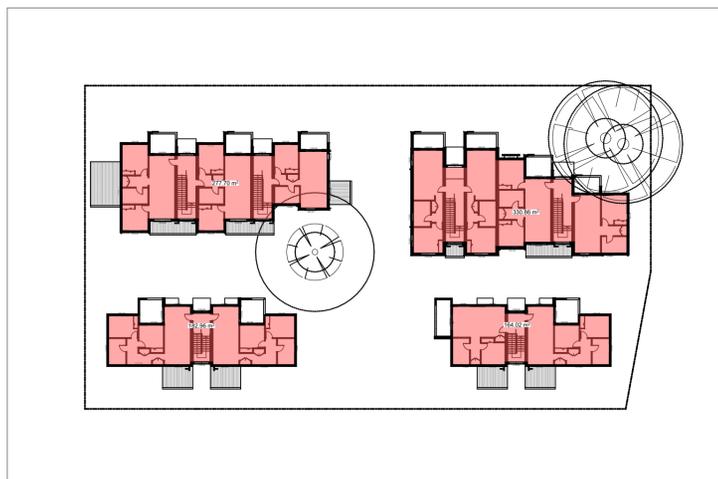
2 CALCULATION PLAN - GF FSR (SEPP) 1:500



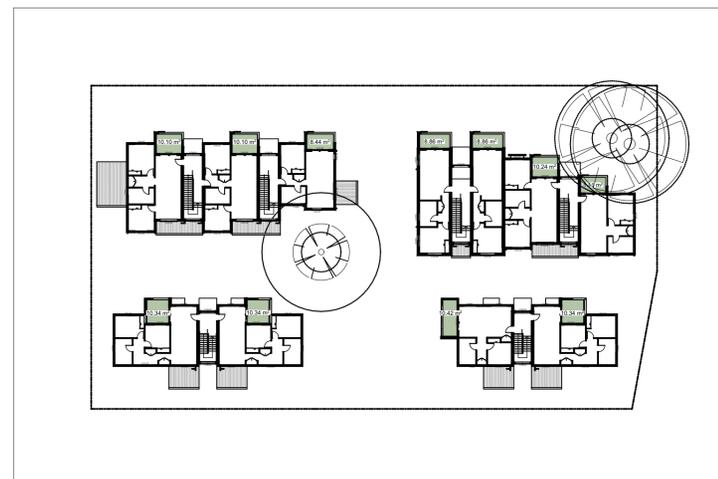
5 CALCULATION PLAN - GF POS 1:500



3 CALCULATION PLAN - FF FSR (DCP) 1:500



4 CALCULATION PLAN - FF FSR (SEPP) 1:500



6 CALCULATION PLAN - FF POS 1:500



7 CALCULATION PLAN - GF LANDSCAPE 1:500



8 CALCULATION PLAN - GF DEEP SOIL 1:500

BASIX REQUIREMENTS

All Dwellings:
 - Shower to have a min rating of 4 stars (~4.5 but <=6.0 L/min)
 - Toilet flushing system to have a min rating of 4 stars
 - Taps for kitchens and bathrooms to have a min rating of 5 stars
 - Hot water units to be gas instantaneous system with a min rating of 4 stars
 - Provide electric cooktop and electric oven to all units

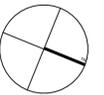
Common Areas:
 - Rainwater tank to be a min of 7500 Litres and be of a central rain water tank, collecting a min of 1270sqm of roof area. Toilet & Laundry connection to all dwellings. Landscape connection to all ground floor units and common landscape area.
 - Solar panels to be provided with a min electrical output of 23 peak kW

DEVELOPMENT DATA					
Site Area	3613.72m ²				
Number of existing lots	5				
Number of dwellings	22 units - 12 x 2bed + 10 x 1bed (55:45 ratio)				
Dwellings	Number	Type	No. of Bedrooms	Area (m ²)	POS (m ²)
	1	Ground	1 (SEPP Sch. 4)	60.97	61.11
	2	Ground	2 (SEPP Sch. 4)	77.85	104.06
	3	First	1	61.71	8.11
	4	First	2	78.35	10.24
	5	Ground	1 (SEPP Sch. 4)	60.02	46.38
	6	Ground	1 (SEPP Sch. 4)	60.57	43.91
	7	First	1	60.71	8.86
	8	First	1	61.26	8.86
	9	Ground	2 (SEPP Sch. 4)	79.41	158.14
	10	Ground	1 (SEPP Sch. 4)	60.97	56.24
	11	First	2	80.64	10.48
	12	First	1	62.55	10.52
	13	Ground	1 (SEPP Sch. 4)	60.25	56.71
	14	Ground	2 (SEPP Sch. 4)	78.61	91.15
	15	Ground	2 (SEPP Sch. 4)	78.62	207.12
	16	First	1	61.45	8.44
	17	First	2	78.78	10.10
	18	First	2	79.37	10.10
	19	Ground	2 (SEPP Sch. 4)	79.41	103.30
	20	Ground	2 (SEPP Sch. 4)	79.41	151.71
	21	First	2	80.64	10.48
	22	First	2	80.64	10.48

		Control	Requirement	Provided
Proposed FSR	HOUSING SEPP (excl. external walls)		0.5:1	1902.35m ² 0.52:1
	Penrith LEP (excl. external walls & vertical circulation)		not prescribed	1785.43m ² 0.49:1
Building Height	Penrith LEP		max. 8.5m	8.2m
	HOUSING SEPP		max. 9.5m	8.2m
Setbacks	Penrith DCP	Front	a. average of immediate neighbours (7.7m) b. 5.5m (whichever is greater)	8.06m (6.55m to balcony)
		Side	2m (max. 50% of any boundary)	3.1m
		Rear	Single Storey - 4m Second Storey - 6m	6m
Car parking	LAHC		10 (0.4/1bed, 0.5/2bed)	10
Landscaping	HOUSING SEPP		5 (1/5 accessible)	1472.9 m ²
	HOUSING SEPP		35m ² / unit (770m ²) 15% of site = 542m ² preferably 65% deep soil to rear = 352m ²	768.5m ² 420.5m ² to rear
Solar Orientation	HOUSING SEPP		70% of dwellings to receive 2 hours of sunlight between 9am and 3pm mid winter	Living - 86% POS - 86%
				72% (16/22 Dwellings Overall)

NCC 2022 NatHERS Thermal Performance Specification - North St Marys			
Wall Type	Insulation	Colour	Comments
Clay brick	R0.7	Med. SA 0.475 - 0.70	As per elevations
Metal cladding	R2.5	Dark SA > 0.70	As per elevations
		SA: Solar Absorbance	
Wall Type	Insulation	Comments	
Single skin brick	None	Internally in units (Ground floor)	
Plasterboard stud	None	Internally in units (Level 1)	
Clay brick	None	Shared walls between units/balconies	
Floor Type	Insulation	Comments	
Concrete slab on ground	None	Ground floor	
Concrete	None	Level 1 (Units below)	
Ceiling Type	Insulation	Comments	
Plasterboard	None	Unit above	
Plasterboard	R2.5	Roof/Tar above	
Insulation base due to daylight & heat been included in this assessment. A shaded exhaust fan has been included in every kitchen, bathroom, laundry and ensuite.			
Roof Type	Insulation	Colour	Comments
Metal	R1.3 for faced battens	Med. SA 0.475 - 0.70	Throughout (ventilated cavity)
		SA: Solar Absorbance	
Opening Type	U-Value	SHGC	Glazing & Frame Type
Sliding - Fixed (throughout except below)	4.0	0.50	e.g. Single glazed high performing Low-e clear Aluminium frame
Sliding - Fixed (U30 and U35)	4.5	0.61	e.g. Single glazed high performing Low-e clear Aluminium frame
Awning (throughout except below)	4.8	0.61	e.g. Single glazed high performing Low-e clear Aluminium frame
Awning (U30 and U35)	4.5	0.50	e.g. Single glazed high performing Low-e clear Aluminium frame
U and SHGC values are based on the AFRC Default Windows Set. Glazing systems to be installed must have an equal or lower U-value and a SHGC value a 10% of the above specified values.			
Skylight Type	Frame Type	Comments	
Fixed	Timber and Aluminium	Single glazed clear	
	Ceiling fan		
Size	Location	Comments	
1200mm in diameter	LIVING	Throughout	
900mm in diameter	Bedrooms	Throughout	

- 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 AUTHORIZED BY DTA ARCHITECTS.



SITE LEGEND

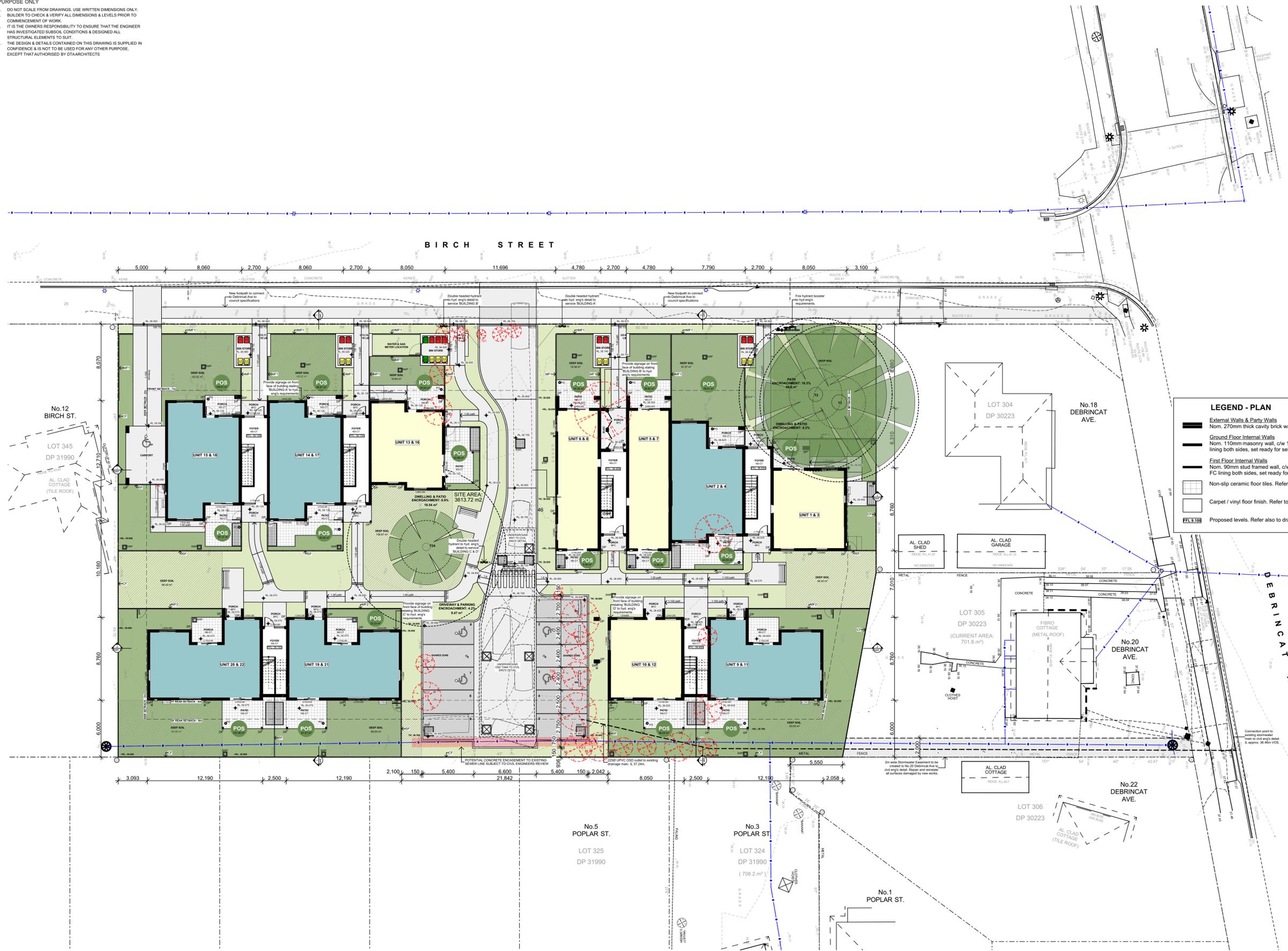
- 1 BED
- 2 BED
- PRIVATE OPEN SPACE (POS)
- LANDSCAPE AREA
- DRIVEWAY, FOOT PATH & PAVED AREA
- DEEP SOIL ZONE
- CERAMIC TILE (NS-CT)
- BRICK RETAINING WALL
- EX. TREES TO BE RETAINED
- EX. TREES TO BE REMOVED
- STORMWATER PIT
- OVERHEAD POWERLINE
- UNDERGROUND SEWER

LEGEND - PLAN

- External Walls & Party Walls: Nom. 270mm thick cavity brick wall, finish as specified
- Ground Floor Internal Walls: Nom. 110mm masonry wall, c/w 13mm plasterboard / FC lining both sides, set ready for selected paint finish.
- First Floor Internal Walls: Nom. 90mm stud framed wall, c/w 13mm plasterboard / FC lining both sides, set ready for selected paint finish.
- Non-slip ceramic floor tiles. Refer to finishes schedule
- Carpet / vinyl floor finish. Refer to finishes schedule
- Proposed levels. Refer also to drainage drawing.

LEGEND

- AB ARMCO BARRIER
- ABH ANG CONTINUOUS 100 x 100 x 6 GALVANISED STEEL PROTECTIVE ANGLE TO WALL LINE. REFER TO DETAILS
- ANG-1 CONTINUOUS 100 x 100 x 6 GALVANISED STEEL PROTECTIVE ANGLE FIXED TO FLOOR EXACT POSITION TO BE DETERMINED ON SITE
- B VANITY BASIN
- B-1 WALL HUNG BASIN - DISABLE COMPLIANT
- B-2 WALL HUNG BASIN
- B-3 BATTERY CHARGE
- BC BACK FLASHING
- BF BROOM FINISHED CONCRETE
- C CARPET AS SPECIFIED
- CAP CEILING ACCESS PANEL
- CH CLOTHES HOOK
- CR CEMENT RENDERED FINISH
- CS CLEANERS SHELF
- CT CERAMIC TILES
- CW COMPLETE WITH
- DB ELECTRICAL DISTRIBUTION BOARD
- DP DOWNPIPE - COLORBOND
- DPS DOWNPIPE & SPREADER - COLORBOND
- DT DOOR THRESHOLD REFER TO DETAIL
- DW DISHWASHER AS SPEC.
- EAC EXPOSED AGGREGATE CONCRETE
- EDB REFER TO ELEC. DOCUMENTS
- EF EXHAUST FAN
- EG EAVES GUTTER
- EW EYE WASH
- F FRIDGE AS SPEC.
- F2 FIXED GLASS
- FHR FIRE HOSE REEL REFER TO HYDRAULIC ENGINEERS DETAILS
- FIR FIRE INDICATOR PANEL (LOCATED MAIN ENTRY)
- FM RECESSED FLOOR MAT
- FW FLOOR WASTE
- GD GRATED DRAIN
- GPO-S SINGLE GENERAL PURPOSE OUTLET
- GPO-D DOUBLE GENERAL PURPOSE OUTLET
- GPR GIAL POST BOLLARDS
- GR GRAB RAIL
- HD HAND DRYER
- HTH HEATED THRESHOLD
- HUW HOT WATER UNIT
- HYD HYDRANT REFER TO HYDRAULIC ENGINEERS DETAILS
- LC LAMINATED BENCH TOP & CUPBOARDS
- LK LOCKERS
- M1 MIRROR
- MSB ELECTRICAL MAIN SWITCH BOARD
- MW MICROWAVE OVEN AS SPEC.
- NS-CT NON-SLIP CERAMIC TILE
- OP OVERFLOW
- PB PLASTERBOARD LINING
- PTD PAPER TOWEL DISPENSER
- PH RANGE HOOD
- RM RECESSED ENTRY MAT
- SCR SHOWER CURTAIN RAIL
- COLL TO STRUCTURAL ENGINEERS DETAILS
- SD SOAP DISPENSER
- SH WALL SHELF
- SK SEWER STACK REFER TO HYDRAULIC ENGINEERS DETAILS
- SK-1 STAINLESS STEEL SINK
- SK-2 CLEANER SINK
- SNP BOX CUTTER SUMP & OVERFLOW
- STF STEEL TROWEL FINISHED CONCRETE
- TGSI TACTILE INDICATOR
- TH THRESHOLD RAMP
- TIM TIMBER FLOORING
- TP TOILET PARTITIONS
- TPH TOILET PAPER HOLDER
- TRS TRANSLUCENT ROOF SHEETING
- TS-1 TAP SET - WASHROOMS
- TS-2 TAP SET - DISABLE COMPLIANT
- TS-3 TAP SET - KITCHEN
- TS-4 TAP SET - CLEANERS
- US MOP & BROOM SHELF
- V VINYL
- VP VENT PIPE
- VTY REFER TO HYDRAULIC DOCUMENTS
- WB VANITY UNIT
- WC-1 WORK BENCH
- WC-2 TOILET PAN / SUITE
- WC-3 TOILET PAN / SUITE AMBULANT
- WG WHEEL GUIDE
- WT WASH TROUGH
- WU-1 WALL HUNG URINAL
- WS WHEEL STOP
- XP EPOXY FLOORING



SITE PLAN 1:200

1

NSW GOVERNMENT Planning and Environment

LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No. 1800 738 718
www.dpie.nsw.gov.au

DTA ARCHITECTS

NOMINATED ARCHITECTS:
Daniel Donal
NSW ARB No. 9068

REV	DATE	NOTATION/AMENDMENT
C	28/10/2023	UPDATED DA ISSUE
B	23/08/2023	DA ISSUE
A	16/05/2023	DA ISSUE

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.

ARCHITECT
DTA ARCHITECTS Pty Ltd
PH (02) 9601 1011

PROJECT MANAGER
LAND & HOUSING CORPORATION
PH (02) 8544 1880

STRUCTURAL / CIVIL
MSL CONSULTING ENGINEERS Pty Ltd
PH (02) 4228 5247

HYDRAULIC
ABEL & BROWN Pty Ltd
PH (02) 9709 8705

ELECTRICAL / BASIC CONSULTANT
GREENVIEW CONSULTING Pty Ltd
PH (02) 8544 1683

LANDSCAPE CONSULTANT
RAY FUGGLE & ASSOCIATES Pty Ltd
PH (04) 224 712

BUSINESS PARTNER:
NSW GOVERNMENT Planning and Environment
Land & Housing Corporation
GREATER WESTERN SYDNEY REGION

PROJECT:
SENIORS HOUSING DEVELOPMENT
at
Lots 346-350 in DP 31990 & Lot 305 in DP 30223
2-10 Birch Street & 20 Debrincat Ave, North St
Mays NSW 2760

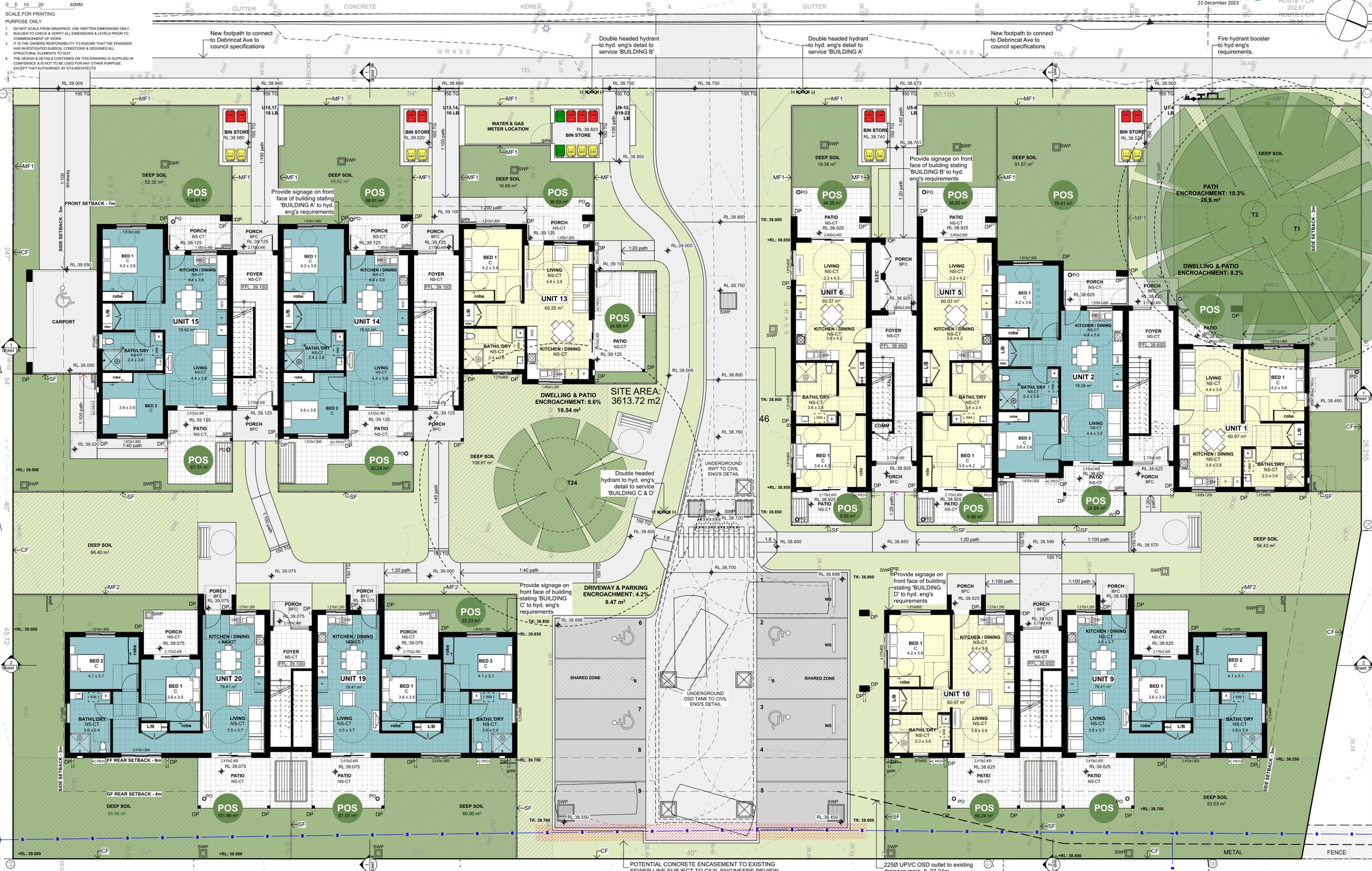
STATUS: **SITE PLAN**

DATE: 15/11/2023
SCALE: As shown @ A1
STAGE: DRAWN
TYPE: SHEET

FILE: CAD File: S:\Data\3022\2022\011 LAHC_SL_2\10 Birch St North St Mays\3_Design\3_D\3022\011 LAHC 2-10 Birch Street North St DA022.dwg

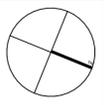
PLOTTED: 15/11/2023 2:48 PM

DATE	SCALE	PROJ.	JOB
15/11/2023	As shown @ A1	BGYVZ	2022.011
STAGE	DRAWN	CHECKED	CERTIFIER
DRAWN	SD	DD	DD
TYPE	SHEET	REV.	
A	7 of 22	C	



GROUND FLOOR PLAN
 1:100

		LOCKED BAG 5022 PARRAMATTA NSW 2124 PHONE No. 1800 738 718 www.dpie.nsw.gov.au		NOMINATED ARCHITECTS: Daniel Donal NSW ARB No. 9068	ARCHITECT DTA ARCHITECTS Pty Ltd PH (02) 9601 0111 PROJECT MANAGER LAND & HOUSING CORPORATION PH (02) 9554 1880 STRUCTURAL / CIVIL MSL CONSULTING ENGINEERS Pty Ltd PH (02) 4228 5247	HYDRAULIC ABEL & BROWN Pty Ltd PH (02) 9709 8705 ELECTRICAL / BASIC CONSULTANT GREENVIEW CONSULTING Pty Ltd PH (02) 8544 1683 LANDSCAPE CONSULTANT RAY FUGGLE & ASSOCIATES Pty Ltd PH (04) 224 712	BUSINESS PARTNER: Planning and Environment Land & Housing Corporation GREATER WESTERN SYDNEY REGION	PROJECT: SENIORS HOUSING DEVELOPMENT at Lots 346-350 in DP 31990 & Lot 305 in DP 30223 2-10 Birch Street & 20 Debrincat Ave, North St Mays NSW 2760	TITLE: GROUND FLOOR PLAN	STATUS: DA ISSUE	DATE: 15/11/2023	SCALE: As shown @ A1	PROJ. BGVYZ	JOB 2022.011
											STAGE: C	DRAWN SD	CHECKED DD	CERTIFIER DD
FILE: CAD File: S:\Data\2022\2022 011 LAHC SL... 2-10 Birch St North St Mays\3_Design\3.2 DA 2022 011 LAHC 2-10 Birch Street North St DA22.ppt										PLOTTED: 15/11/2023 2:48 PM	TYPE: A	SHEET: 8 of 22	REV: C	



0 5 10 20 40MM

SCALE FOR PRINTING

PURPOSE ONLY

- 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 DTA ARCHITECTS.



2 FIRST FLOOR PLAN 1:100

NSW GOVERNMENT
Planning and Environment
 Locked Bag 5022
 Parramatta NSW 2124
 PHONE No. 1800 738 718
 www.dpie.nsw.gov.au

DTA ARCHITECTS
 Daniel Donal
 NSW ARB No. 5068

REV	DATE	DESCRIPTION
C	28/10/2023	UPDATED DA ISSUE
B	23/08/2023	DA ISSUE
A	16/05/2023	DA ISSUE
REV	DATE	NOTATION/AMENDMENT

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE.
 FIGURED DIMENSIONS TAKE PRECEDENCE.

ARCHITECT
 DTA ARCHITECTS Pty Ltd
 PH (02) 9601 0111

PROJECT MANAGER
 LAND & HOUSING CORPORATION
 PH (02) 9554 1880

STRUCTURAL / CIVIL
 MSL CONSULTING ENGINEERS Pty Ltd
 PH (02) 4228 5247

HYDRAULIC
 ABEL & BROWN Pty Ltd
 PH (02) 9709 8705

ELECTRICAL / BASIC CONSULTANT
 GREENVIEW CONSULTING Pty Ltd
 PH (02) 8544 1683

LANDSCAPE CONSULTANT
 RAY FUGGLE & ASSOCIATES Pty Ltd
 PH 0412 294 712

BUSINESS PARTNER
NSW GOVERNMENT
Planning and Environment
 Land & Housing Corporation
 GREATER WESTERN SYDNEY REGION

PROJECT:
 SENIORS HOUSING DEVELOPMENT
 at
 Lots 346-350 in DP 31990 & Lot 305 in DP 30223
 2-10 Birch Street & 20 Debrincat Ave, North St
 Mays NSW 2760

TITLE:
 FIRST FLOOR PLAN

STATUS:
 DA ISSUE

DATE:
 15/11/2023

SCALE:
 As shown @ A1

PROJ.:
 BGYVZ

JOB:
 2022.011

STAGE:
 C

DRAWN:
 SD

CHECKED:
 DD

CERTIFIER:
 DD

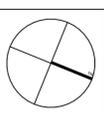
FILE:
 CAD File: S:\Data\30222\2022\011 LAHC.SL
 2-10 Birch St North St Mays\3-Dwg\3-2 DA
 3022.011 LAHC-2-10 Birch Street North St
 DA02.dwg

PLOTTED:
 15/11/2023
 2:48 PM

TYPE:
 A

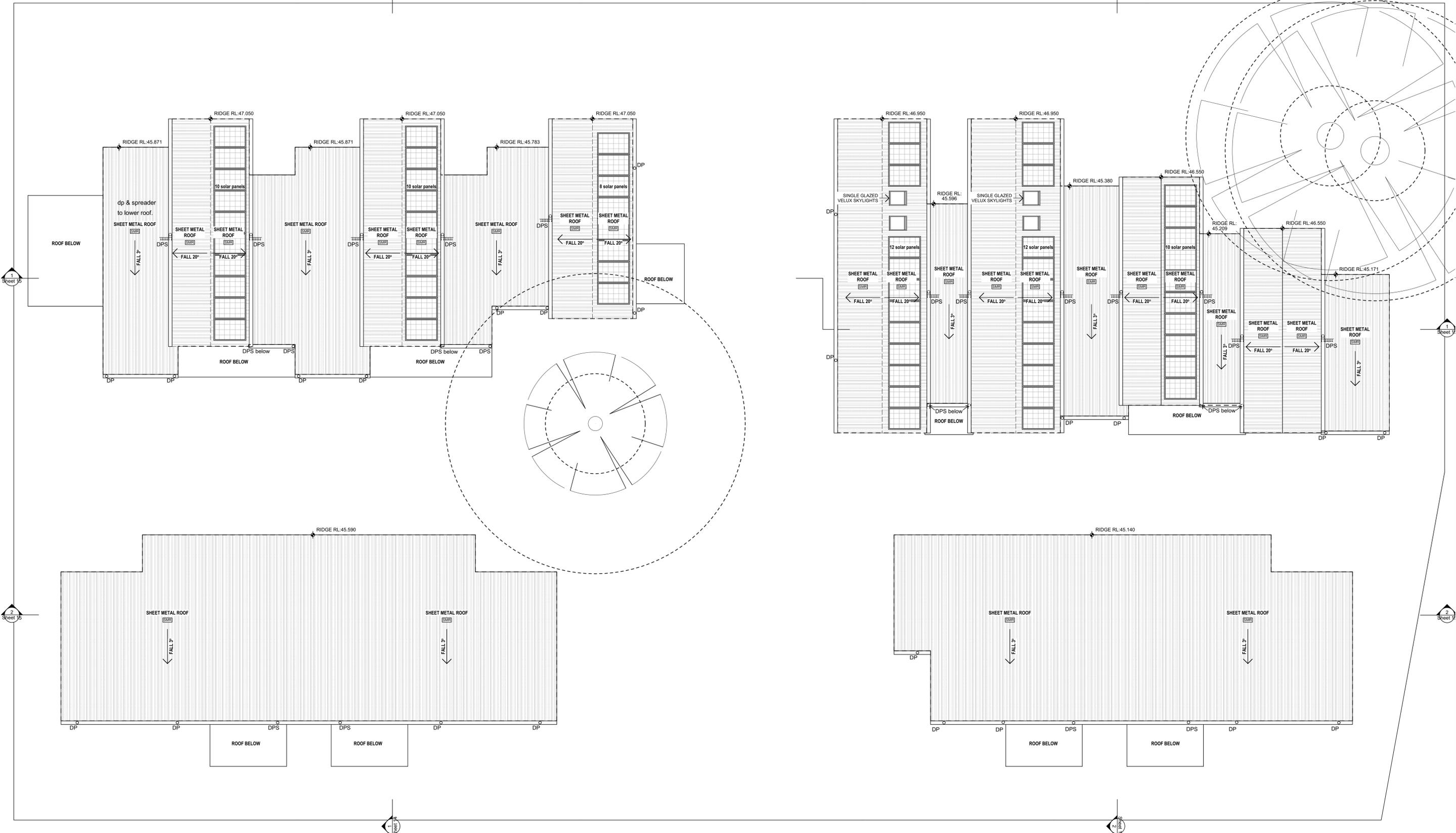
SHEET:
 9 of 22

REV:
 C



0 5 10 20 40MM
SCALE FOR PRINTING

- PURPOSE ONLY
- 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 DTAARCHITECTS



2
-

ROOF PLAN
1:100

Planning and Environment

LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No. 1800 738 718
www.dpie.nsw.gov.au

DTA ARCHITECTS

NOMINATED ARCHITECTS:

Daniel Donal
NSW ARB No. 9068

REV	DATE	NOTATION/AMENDMENT
C	28/10/2023	UPDATED DA ISSUE
B	23/08/2023	DA ISSUE
A	16/05/2023	DA ISSUE

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE.
FIGURED DIMENSIONS TAKE PRECEDENCE.

ARCHITECT
DTA ARCHITECTS Pty Ltd
PH (02) 9601 1011

PROJECT MANAGER
LAND & HOUSING CORPORATION
PH (02) 9354 1880

STRUCTURAL / CIVIL
MSL CONSULTING ENGINEERS Pty Ltd
PH (02) 4228 5247

HYDRAULIC
ABEL & BROWN Pty Ltd
PH (02) 9709 5705

ELECTRICAL / BASIC CONSULTANT
GREENVIEW CONSULTING Pty Ltd
PH (02) 8544 1683

LANDSCAPE CONSULTANT
RAY FUGGLE & ASSOCIATES Pty Ltd
PH 0412 294 712

BUSINESS PARTNER:

Planning and Environment
Land & Housing Corporation
GREATER WESTERN SYDNEY REGION

PROJECT:
SENIORS HOUSING DEVELOPMENT
at
Lots 346-350 in DP 31990 & Lot 305 in DP 30223
2-10 Birch Street & 20 Debrincat Ave, North St
Marys NSW 2760

TITLE:
ROOF PLAN

FILE: CAD File: S:\Data\3\2022\2022 011 LAHC SL...
2-10 Birch St North St Marys\3_Design\3_2 DA
\2022 011 LAHC 2-10 Birch Street North St...
DA02.dwg

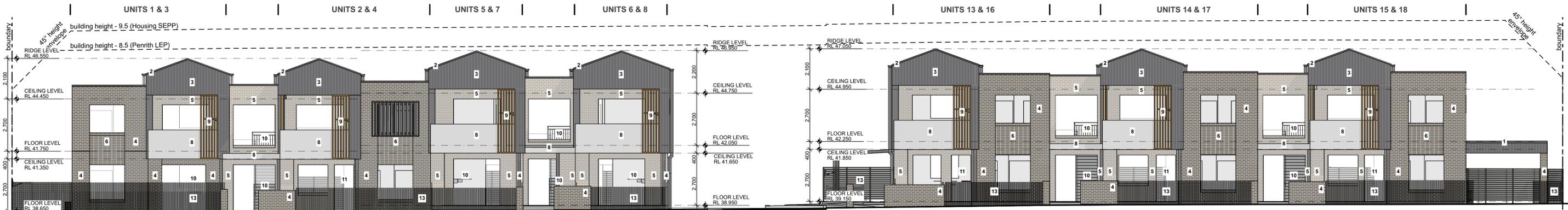
PLOTTED: 15/11/2023
2:48 PM

STATUS:	DATE:	SCALE:	PROJ:	JOB:
DA ISSUE	15/11/2023	As shown @ A1	BGYVZ	2022.011
STAGE:	DRAWN:	CHECKED:	CERTIFIER:	REV:
C	SD	DD	DD	
TYPE:	SHEET:			
A	10 of 22	C		

0 5 10 20 40MM

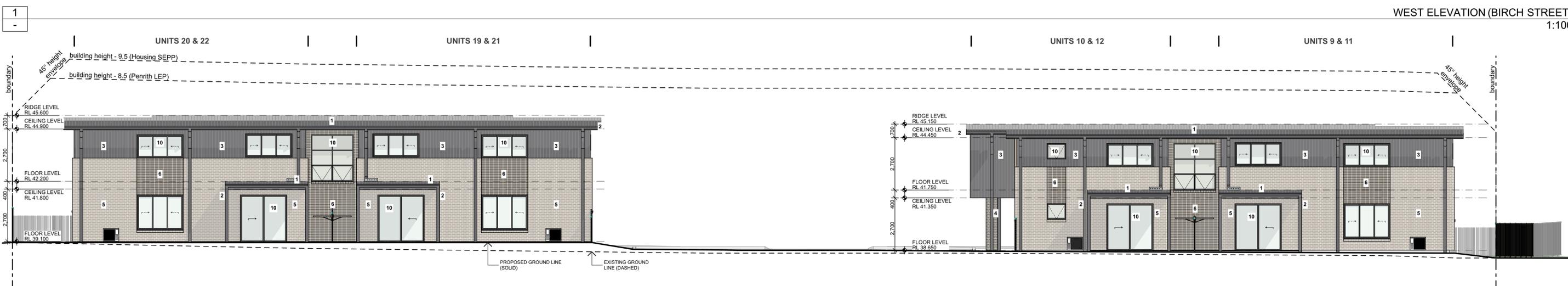
SCALE FOR PRINTING

- PURPOSE ONLY
- DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
 - BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
 - IT IS THE OWNER'S 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 DTA ARCHITECTS.



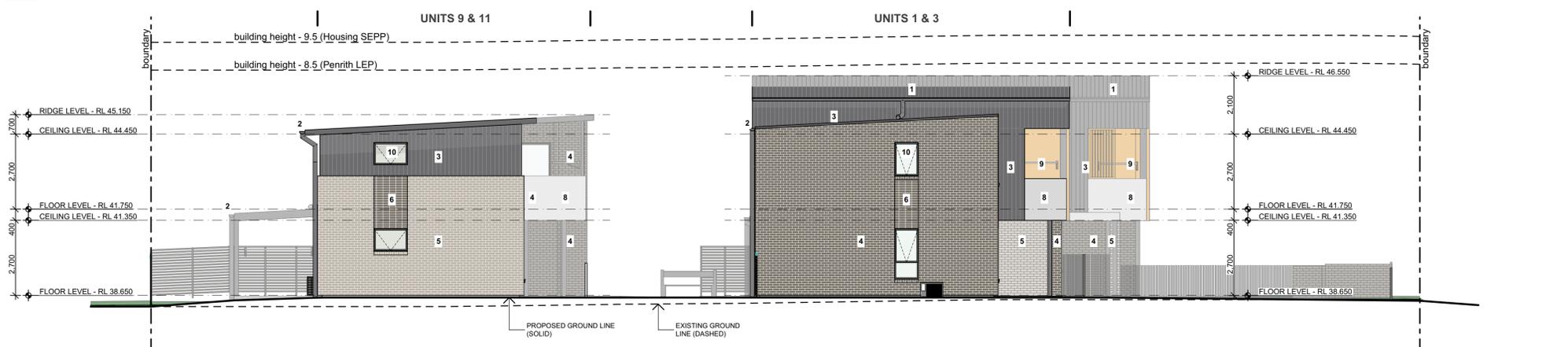
WEST ELEVATION (BIRCH STREET)

1:100



EAST ELEVATION

1:100



NORTH ELEVATION

1:100

EXTERNAL FINISHES SCHEDULE

1	SHEET METAL ROOF (SMR) Kliplock 700 High Strength - Basalt Matt	8	ENTRY AWNING / BALCONY SLAB EDGE / BALCONY BALUSTRADE Concrete - Rockcote Finish
2	GUTTER & DOWNPIPE / BARGE BOARD & FASCIA / PATIO AWNING POST & STRUCTURE Colorbond, Basalt	9	BALCONY SOFFIT & FEATURE WALL / BALCONY PRIVACY SCREEN Decowood - Aluminium Colour - Kwila
3	WALL CLADDING (MC1) - Colorbond Metal Wall Cladding Lysalt Enseam 465 - Basalt Matt	10	WINDOW & DOOR FRAMES Aluminium Powdercoat - Basalt
4	WALL / LB & WASTE ENCLOSURE Face Brick Type 1 (FBK1) PGH: Range - Velour, Name - Volcanic Stretchers Bond	11	FRONT DOOR LEAF Paint Finish - Shale Grey
5	WALL Face Brick Type 2 (FBK2) PGH: Range - Velour, Name - Crushed Grey Stretchers Bond	12	GLASS BALCONY BALUSTRADE Balustrade - Obscure glass Frame - Aluminium Powdercoat, Shale Grey
6	WALL Face Brick Type 3 (FBK3) PGH: Range - Velour, Name - Volcanic Stacked Bond	13	FRONT METAL FENCE Vertical Bars - Steel Powdercoat, Woodland Grey SIDE, REAR & POS FENCE Colorbond, Woodland Grey
7	WALL Face Brick Type 4 (FBK4) PGH: Range - Velour, Name - Crushed Grey Stacked Bond		

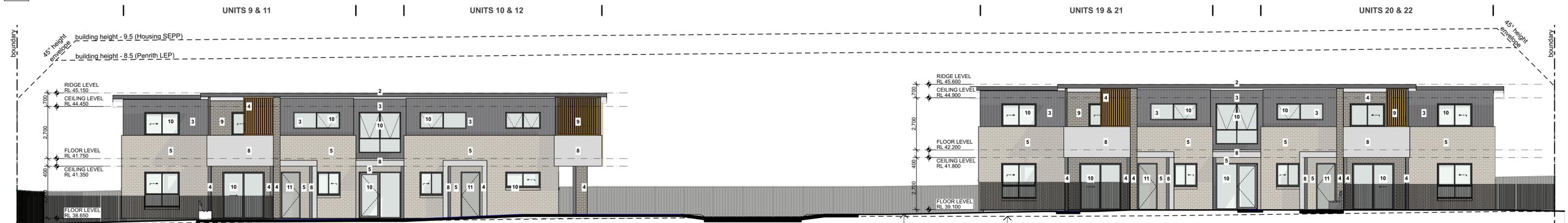
3

SCALE FOR PRINTING
 PURPOSE ONLY
 1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
 2. BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
 3. IT IS THE OWNER'S 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 AUTHORIZED BY DTA ARCHITECTS.

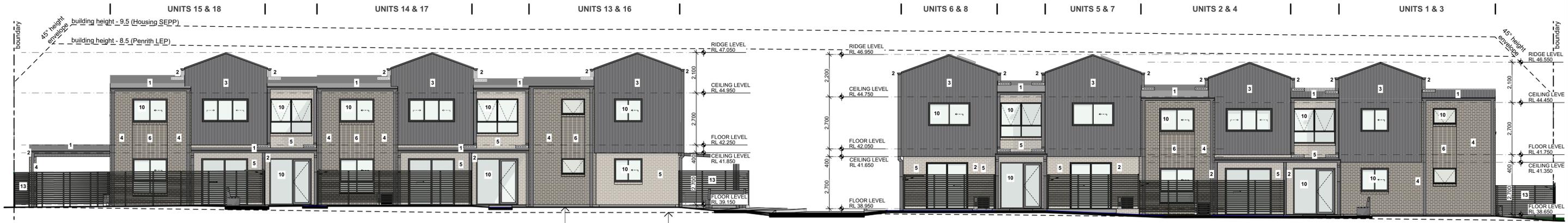


SOUTH ELEVATION 1:100

EXTERNAL FINISHES SCHEDULE	
1	SHEET METAL ROOF (SMR) Kliplock 700 High Strength - Basalt Matt
2	GUTTER & DOWNPIPE / BARGE BOARD & FASCIA / PATIO AWNING POST & STRUCTURE Colorbond, Basalt
3	WALL CLADDING (MC1) - Colorbond Metal Wall Cladding Lysalt Enseam 465 - Basalt Matt
4	WALL / LB & WASTE ENCLOSURE Face Brick Type 1 (FBK1) PGH Range - Velour, Name - Volcanic Stretcher Bond
5	WALL Face Brick Type 2 (FBK2) PGH Range - Velour, Name - Crushed Grey Stretcher Bond
6	WALL Face Brick Type 3 (FBK3) PGH Range - Velour, Name - Volcanic Stacked Bond
7	WALL Face Brick Type 4 (FBK4) PGH Range - Velour, Name - Crushed Grey Stacked Bond
8	ENTRY AWNING / BALCONY SLAB EDGE / BALCONY BALUSTRADE Concrete - Rockcote Finish
9	BALCONY SOFFIT & FEATURE WALL / BALCONY PRIVACY SCREEN Decowood - Aluminium Colour - Kwila
10	WINDOW & DOOR FRAMES Aluminium Powdercoat - Basalt
11	FRONT DOOR LEAF Paint Finish - Shale Grey
12	GLASS BALCONY BALUSTRADE Balustrade - Obsure glass Frame - Aluminium Powdercoat, Shale Grey
13	FRONT METAL FENCE Vertical Bars - Steel Powdercoat, Woodland Grey SIDE, REAR & POS FENCE Colorbond, Woodland Grey



WEST INTERNAL ELEVATION 1:100



EAST INTERNAL ELEVATION 1:100

	Planning and Environment LOCKED BAG 5022 PARRAMATTA NSW 2124 PHONE No. 1800 738 718 www.dpie.nsw.gov.au		NOMINATED ARCHITECTS: Daniel Donal NSW ARB No. 9068	ARCHITECT DTA ARCHITECTS Pty Ltd PH (02) 9601 0111 PROJECT MANAGER LAND & HOUSING CORPORATION PH (02) 9354 1880 STRUCTURAL / CIVIL MSL CONSULTING ENGINEERS Pty Ltd PH (02) 4228 5247	HYDRAULIC ABEL & BROWN Pty Ltd PH (02) 9709 8705 ELECTRICAL / BASIX CONSULTANT GREENVIEW CONSULTING Pty Ltd PH (02) 8544 1683 LANDSCAPE CONSULTANT RAY FUGGLE & ASSOCIATES Pty Ltd PH (04) 224 712	BUSINESS PARTNER: Planning and Environment Land & Housing Corporation GREATER WESTERN SYDNEY REGION	PROJECT: SENIORS HOUSING DEVELOPMENT at Lots 346-350 in DP 31990 & Lot 305 in DP 30223 2-10 Birch Street & 20 Debrincat Ave, North St Mays NSW 2760	TITLE: ELEVATION & INTERNAL ELEVATIONS	STATUS: DA ISSUE	DATE: 15/11/2023	SCALE: As shown @ A1	PROJ: BGYVZ	JOB: 2022.011
										STAGE: C	DRAWN: SD	CHECKED: DD	CERTIFIER: DD
								FILE: CAD File: S:\Data\3\2022\2022 011 LAHC SL 2-10 Birch St North St Mays\3_Design\3 DA 3022 011 LAHC 2-10 Birch Street North St DA02.dwg	PLOTTED: 15/11/2023 2:49 PM	TYPE: A	SHEET: 12 of 22	REV: C	

0 5 10 20 40MM

SCALE FOR PRINTING

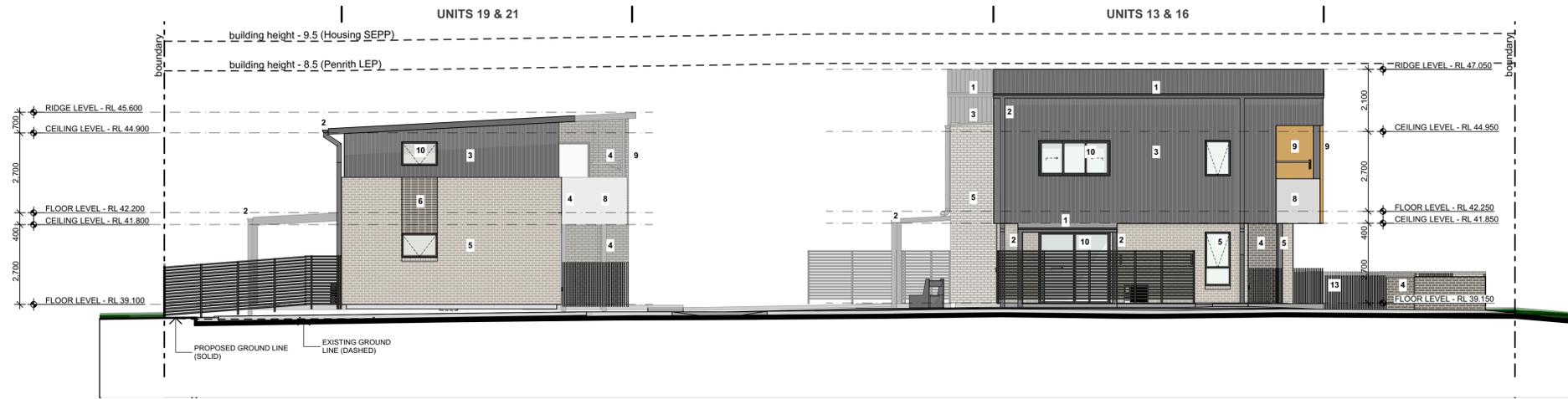
PURPOSE ONLY

- DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
- BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
- IT IS THE OWNER'S 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 AUTHORIZED BY DTA ARCHITECTS.



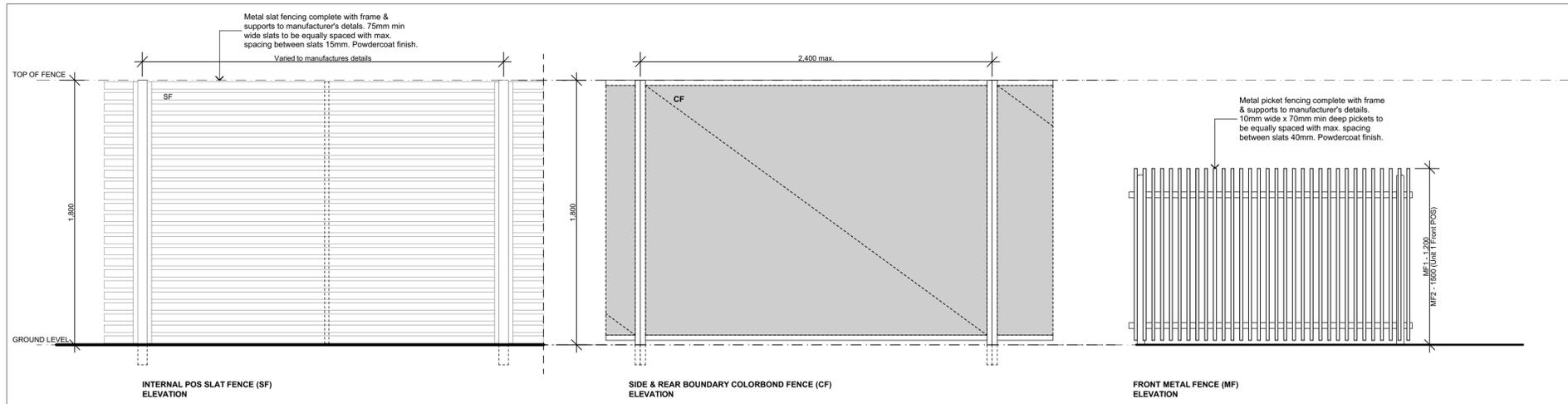
SOUTH INTERNAL ELEVATION
1:100

1
-



NORTH INTERNAL ELEVATION
1:100

2
-



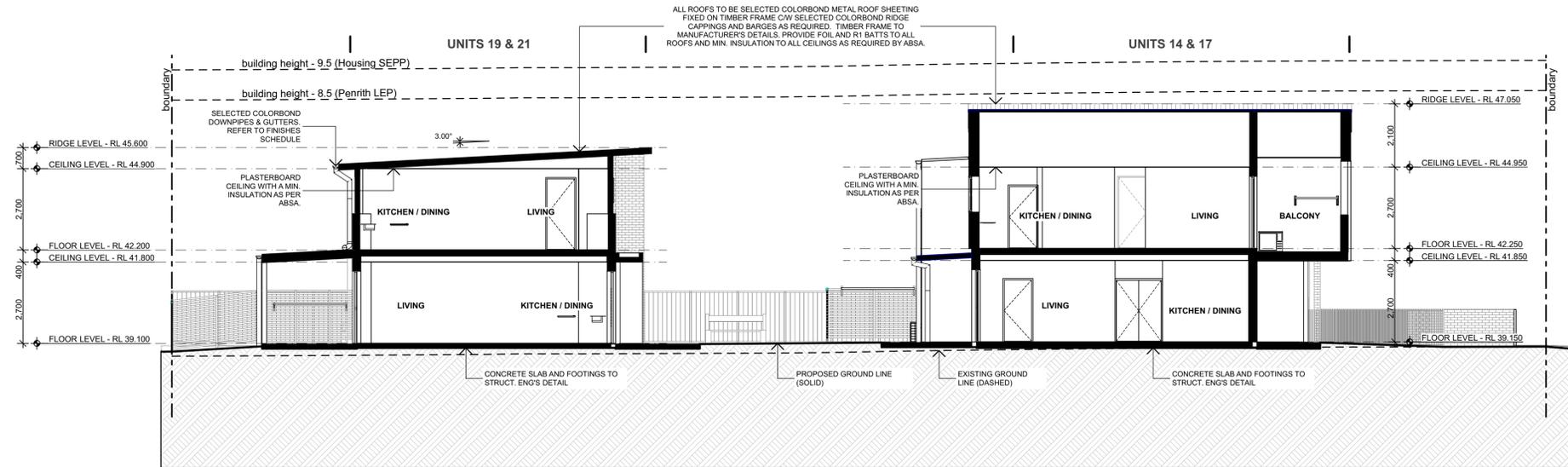
TYPICAL FENCE DETAILS
1:20

4
-

EXTERNAL FINISHES SCHEDULE

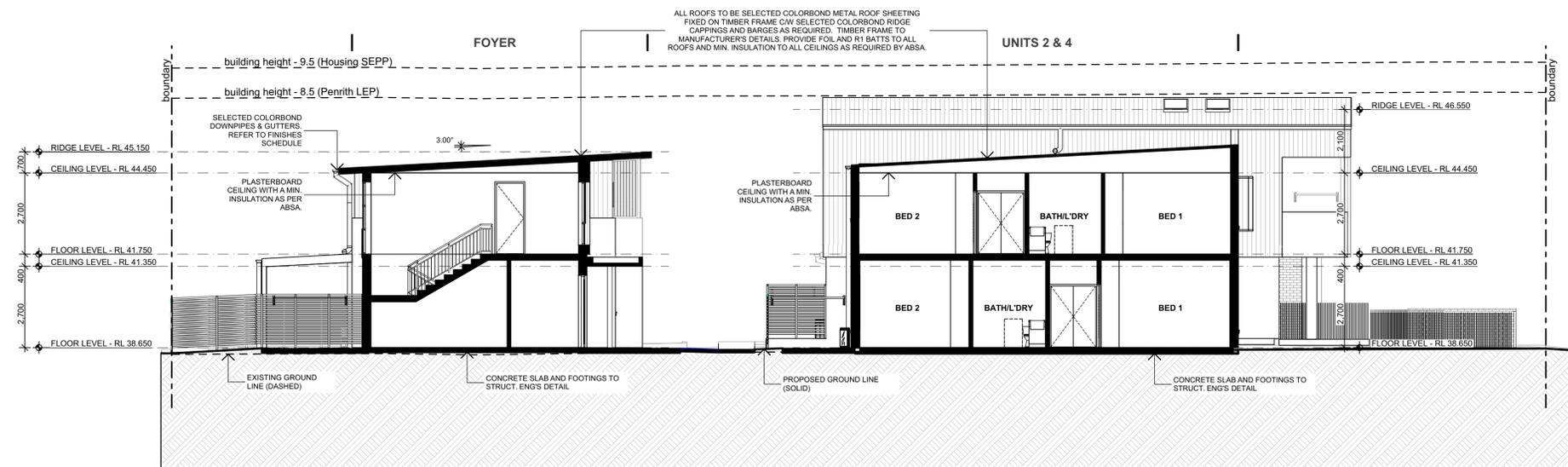
1	SHEET METAL ROOF (SMR) Kliplock 700 High Strength - Basalt Matt	8	ENTRY AWNING / BALCONY SLAB EDGE / BALCONY BALUSTRADE Concrete - Rockcote Finish
2	GUTTER & DOWNPIPE / BARGE BOARD & FASCIA / PATIO AWNING POST & STRUCTURE Colorbond, Basalt	9	BALCONY SOFFIT & FEATURE WALL / BALCONY PRIVACY SCREEN Decowood - Aluminium Colour - Kwila
3	WALL CLADDING (MC1) - Colorbond Metal Wall Cladding Lysalt Enseam 465 - Basalt Matt	10	WINDOW & DOOR FRAMES Aluminium Powdercoat - Basalt
4	WALL / LB & WASTE ENCLOSURE Face Brick Type 1 (FBK1) PGH: Range - Velour, Name - Volcanic Stretcher Bond	11	FRONT DOOR LEAF Paint Finish - Shale Grey
5	WALL Face Brick Type 2 (FBK2) PGH: Range - Velour, Name - Crushed Grey Stretcher Bond	12	GLASS BALCONY BALUSTRADE Balustrade - Obsure glass Frame - Aluminium Powdercoat - Shale Grey
6	WALL Face Brick Type 3 (FBK3) PGH: Range - Velour, Name - Volcanic Stacked Bond	13	FRONT METAL FENCE Vertical Bars - Steel Powdercoat, Woodland Grey SIDE, REAR & POS FENCE Colorbond, Woodland Grey
7	WALL Face Brick Type 4 (FBK4) PGH: Range - Velour, Name - Crushed Grey Stacked Bond		

- DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
- BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
- IT IS THE OWNER'S 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 AUTHORIZED BY DTA ARCHITECTS.



1
-

S-01 SECTION
1:100



2
-

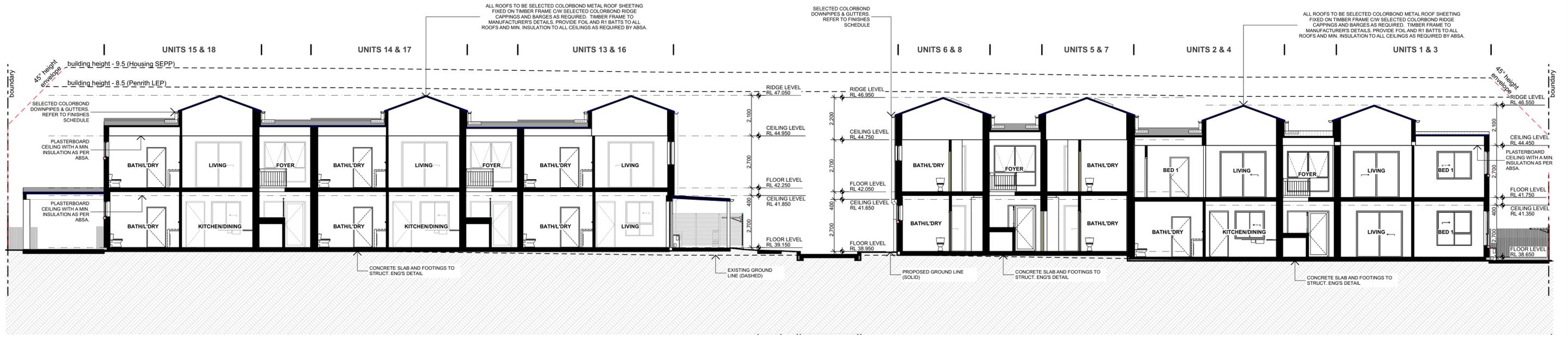
S-02 SECTION
1:100

0 5 10 20 40MM

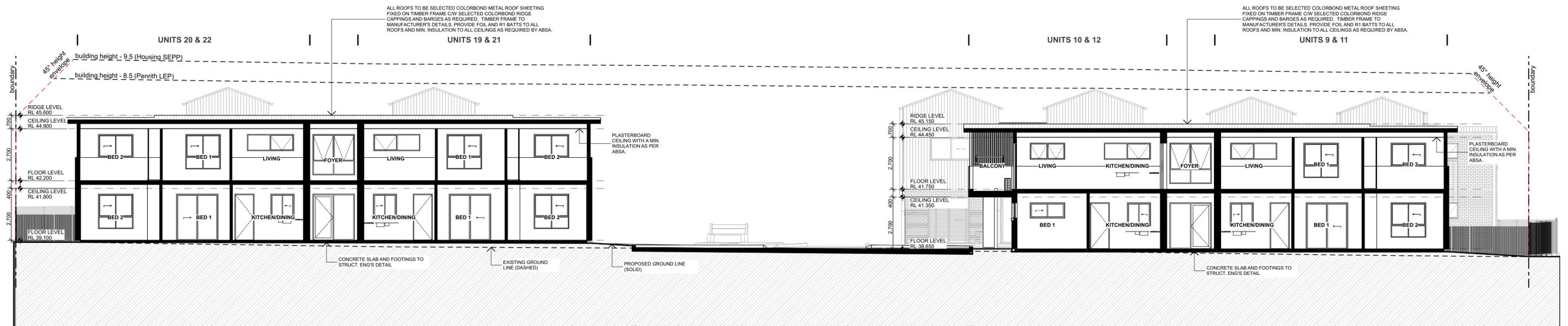
SCALE FOR PRINTING

PURPOSE ONLY

- DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
- BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
- IT IS THE OWNER'S 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 DTA ARCHITECTS.



S-03 SECTION
1:100



S-04 SECTION
1:100

Planning and Environment

LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No. 1800 738 718
www.dpie.nsw.gov.au

DTA ARCHITECTS

NOMINATED ARCHITECTS:

NAME	Daniel Donal
NSW ARB No.	No. 9068
MEMBER	Member of the Institute of Architects

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.

ARCHITECT	DTA ARCHITECTS Pty Ltd PH (02) 9601 5011
PROJECT MANAGER	LAND & HOUSING CORPORATION PH (02) 9354 1880
STRUCTURAL / CIVIL	MSL CONSULTING ENGINEERS Pty Ltd PH (02) 4228 5247
HYDRAULIC	ABEL & BROWN Pty Ltd PH (02) 9709 5705
ELECTRICAL / BASIC CONSULTANT	GREENVIEW CONSULTING Pty Ltd PH (02) 8544 1683
LANDSCAPE CONSULTANT	RAY FUGGLE & ASSOCIATES Pty Ltd PH (04) 22 294 712

Planning and Environment

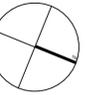
Land & Housing Corporation
GREATER WESTERN SYDNEY REGION

PROJECT: SENIORS HOUSING DEVELOPMENT
at
Lots 346-350 in DP 31990 & Lot 305 in DP 30223
2-10 Birch Street & 20 Debrincat Ave, North St
Mays NSW 2760

TITLE:	SECTIONS
DATE:	15/11/2023
SCALE:	As shown @ A1
PROJ.:	BGVYZ
JOB:	2022.011
STAGE:	C
DRAWN:	SD
CHECKED:	DD
CERTIFIER:	DD
FILE:	CAD File: S:\Data\3022\2022\011 LAHC_SL_2-10 Birch St North St Mays\3_Design\3_2 DA_3022\011 LAHC_2-10 Birch Street North St_DA022.dwg
PLOTTED:	15/11/2023 2:49 PM

STATUS:	DA ISSUE
SCALE:	As shown @ A1
PROJ.:	BGVYZ
JOB:	2022.011
STAGE:	C
DRAWN:	SD
CHECKED:	DD
CERTIFIER:	DD
FILE:	CAD File: S:\Data\3022\2022\011 LAHC_SL_2-10 Birch St North St Mays\3_Design\3_2 DA_3022\011 LAHC_2-10 Birch Street North St_DA022.dwg
PLOTTED:	15/11/2023 2:49 PM
TYPE:	A
SHEET:	15 of 22
REV:	C

- DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
- BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
- IT IS THE OWNER'S 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 DTA ARCHITECTS.



LEGEND

- Grey area indicates shadows cast by proposed development
- Red area indicates existing shadows cast by neighbouring properties



2
-

SHADOW DIAGRAM - 21st JUNE - 9.00 am
1:200



Planning and Environment

LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No. 1800 738 718
www.dpie.nsw.gov.au



NOMINATED ARCHITECTS:

Daniel Donal
NSW ARB No. 9068

REV	DATE	NOTATION/AMENDMENT
C	28/10/2023	UPDATED DA ISSUE
B	23/08/2023	DA ISSUE
A	16/05/2023	DA ISSUE

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE.
FIGURED DIMENSIONS TAKE PRECEDENCE.

ARCHITECT
DTA ARCHITECTS Pty Ltd
PH (02) 9601 1011

PROJECT MANAGER
LAND & HOUSING CORPORATION
PH (02) 9354 1880

STRUCTURAL / CIVIL
MSL CONSULTING ENGINEERS Pty Ltd
PH (02) 4226 5247

HYDRAULIC
ABEL & BROWN Pty Ltd
PH (02) 9709 5705

ELECTRICAL / BASIC CONSULTANT
GREENVIEW CONSULTING Pty Ltd
PH (02) 8544 1683

LANDSCAPE CONSULTANT
RAY FUGGLE & ASSOCIATES Pty Ltd
PH (04) 22 294 712



Planning and Environment
Land & Housing Corporation
GREATER WESTERN SYDNEY REGION

PROJECT:
SENIORS HOUSING DEVELOPMENT
at
Lots 346-350 in DP 31990 & Lot 305 in DP 30223
2-10 Birch Street & 20 Debrincat Ave, North St
Mays NSW 2760

TITLE:
SHADOW DIAGRAMS - 21st JUNE 9AM

FILE: CAD File: S:\Data\3\2022\2022 011 LAHC SL...
2-10 Birch St North St Mays\3_Design\3.2 DA...
3022.011 LAHC 2-10 Birch Street North St...
DA02.pjn

PLOTTED: 15/11/2023
2:49 PM

STATUS:	SCALE:	PROJ:	JOB:
DA ISSUE	As shown @ A1	BGYVZ	2022.011
DATE:	DRAWN:	CHECKED:	CERTIFIER:
15/11/2023	SD	DD	DD
STAGE:	SHEET:	TYPE:	REV:
C	A		C

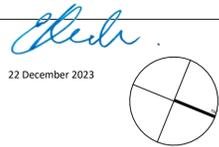
0 5 10 20 40MM

SCALE FOR PRINTING

PURPOSE ONLY

- DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
- BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
- IT IS THE OWNER'S 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 DTA ARCHITECTS

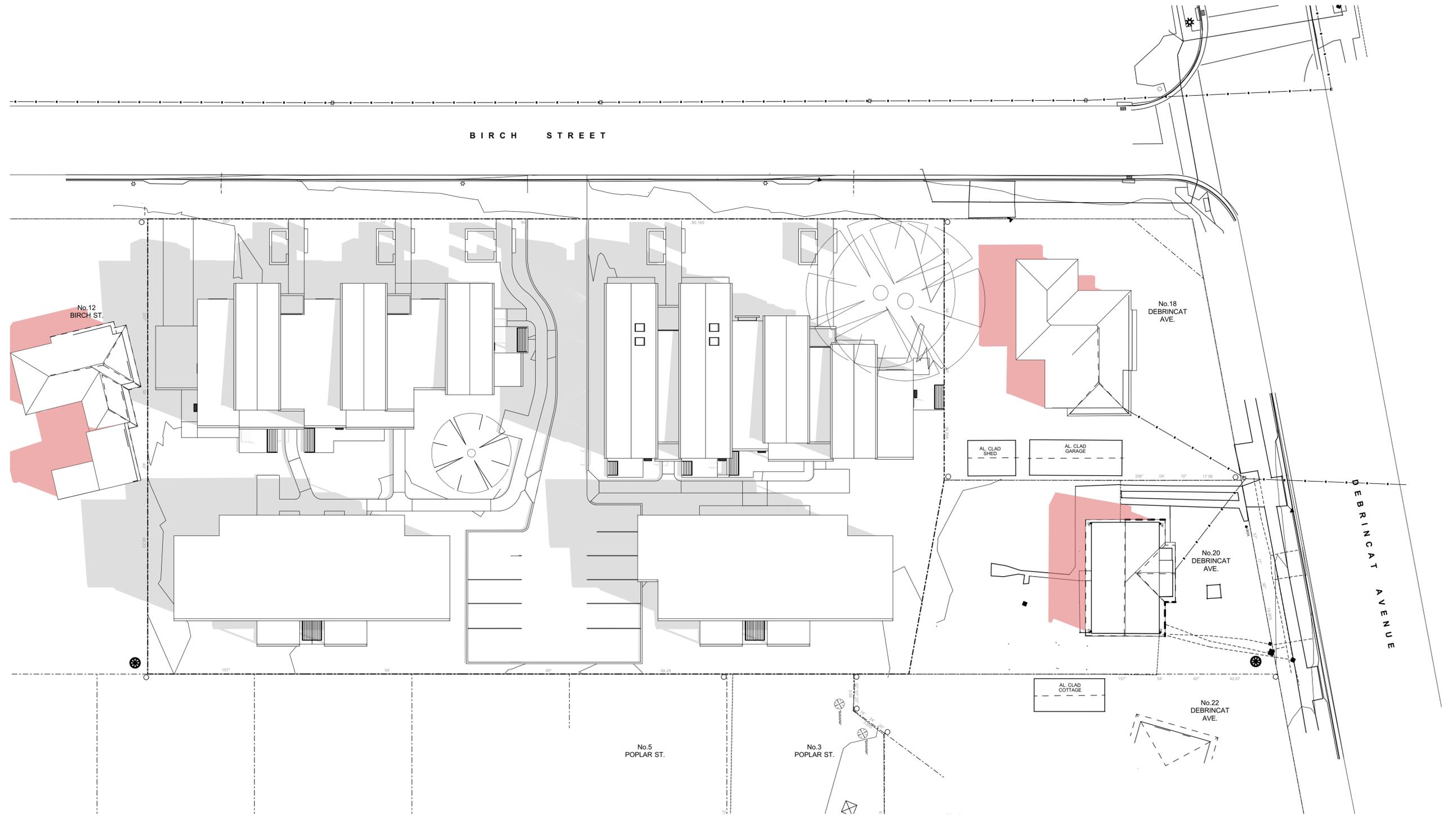
DETERMINED by the NSW Land and Housing Corporation on:



22 December 2023

LEGEND

- Grey area indicates shadows cast by proposed development
- Red area indicates existing shadows cast by neighbouring properties



SHADOW DIAGRAM - 21st JUNE - 12.00 pm
1:200

2
-



Planning and Environment

LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No. 1800 738 718
www.dpie.nsw.gov.au



NOMINATED ARCHITECTS:

Daniel Donal
NSW ARB No. 9068

REV	DATE	NOTATION/AMENDMENT
C	28/10/2023	UPDATED DA ISSUE
B	23/08/2023	DA ISSUE
A	16/05/2023	DA ISSUE

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE.
FIGURED DIMENSIONS TAKE PRECEDENCE.

ARCHITECT
DTA ARCHITECTS Pty Ltd
PH (02) 9601 1011

PROJECT MANAGER
LAND & HOUSING CORPORATION
PH (02) 9354 1880

STRUCTURAL / CIVIL
MSL CONSULTING ENGINEERS Pty Ltd
PH (02) 4226 5247

HYDRAULIC
ABEL & BROWN Pty Ltd
PH (02) 9709 5705

ELECTRICAL / BASIC CONSULTANT
GREENVIEW CONSULTING Pty Ltd
PH (02) 8544 1683

LANDSCAPE CONSULTANT
RAY FUGGLE & ASSOCIATES Pty Ltd
PH (04) 22 294 712



Planning and Environment
Land & Housing Corporation
GREATER WESTERN SYDNEY REGION

PROJECT:
SENIORS HOUSING DEVELOPMENT
at
Lots 346-350 in DP 31990 & Lot 305 in DP 30223
2-10 Birch Street & 20 Debrincat Ave, North St
Mays NSW 2760

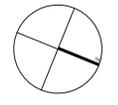
TITLE:
SHADOW DIAGRAMS - 21st JUNE
12PM

FILE: CAD File: S:\Data\3\2022\2022 011 LAHC SL...
2-10 Birch St North St Mays\3_Design\3.2 DA...
\2022.011 LAHC 2-10 Birch Street North St...
DA02.dwg

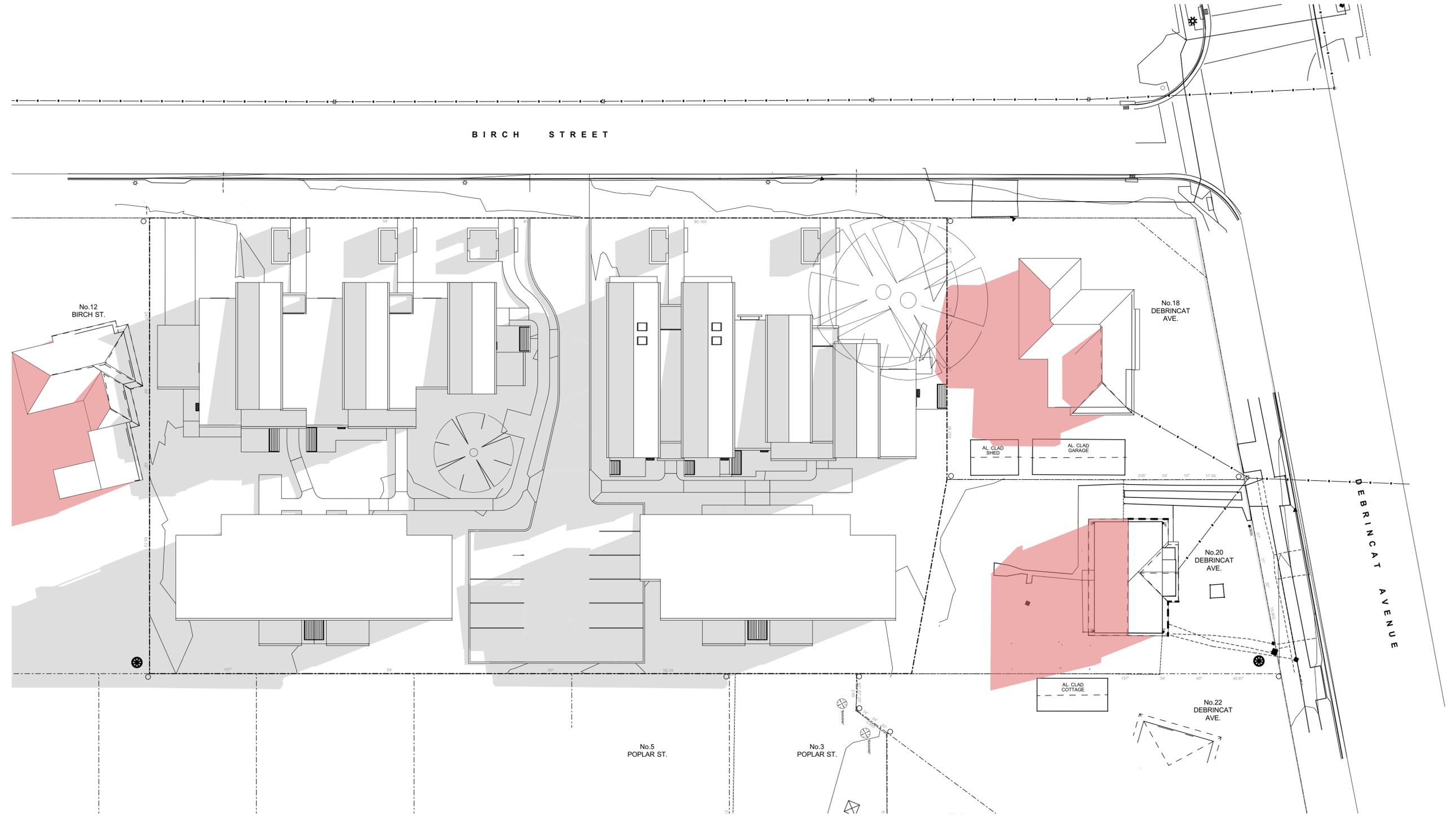
PLOTTED: 15/11/2023
2:49 PM

DATE:	SCALE:	PROJ:	JOB:
15/11/2023	As shown @ A1	BGYVZ	2022.011
STAGE:	DRAWN:	CHECKED:	CERTIFIER:
C	SD	DD	DD
TYPE:	SHEET:	REV:	
A	17 of 22	C	

0 5 10 20 40MM
 SCALE FOR PRINTING
 PURPOSE ONLY
 1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
 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 DTA ARCHITECTS



LEGEND
 Grey area indicates shadows cast by proposed development
 Red area indicates existing shadows cast by neighbouring properties



2
 - SHADOW DIAGRAM - 21st JUNE - 3.00 pm 1:200

 Planning and Environment LOCKED BAG 5022 PARRAMATTA NSW 2124 PHONE No. 1800 738 718 www.dpie.nsw.gov.au	 NOMINATED ARCHITECTS: Daniel Donal NSW ARB No. 9068 Member Institute of Architects	ARCHITECT DTA ARCHITECTS Pty Ltd PH (02) 9601 1011	HYDRAULIC ABEL & BROWN Pty Ltd PH (02) 9709 5705	BUSINESS PARTNER:  Planning and Environment Land & Housing Corporation GREATER WESTERN SYDNEY REGION	PROJECT: SENIORS HOUSING DEVELOPMENT at Lots 346-350 in DP 31990 & Lot 305 in DP 30223 2-10 Birch Street & 20 Debrincat Ave, North St Mays NSW 2760	TITLE: SHADOW DIAGRAMS - 21st JUNE 3PM CAD File: S:\Data\3\2022\2022_011 LAHC_SL_2-10 Birch St North St Mays\3_Design\3_2 DA_3022_011 LAHC_2-10 Birch Street North St_DA022.dwg PLOTTED: 15/11/2023 2:49 PM	STATUS: DA ISSUE DATE: 15/11/2023 SCALE: As shown @ A1 PROJ: BGYVZ JOB: 2022.011 STAGE: C DRAWN: SD CHECKED: DD CERTIFIER: DD
		REV A 16/05/2023 DA ISSUE REV B 23/08/2023 DA ISSUE REV C 28/10/2023 UPDATED DA ISSUE DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.	PROJECT MANAGER LAND & HOUSING CORPORATION PH (02) 9354 1880	ELECTRICAL / BASIX CONSULTANT GREENVIEW CONSULTING Pty Ltd PH (02) 8544 1683	LANDSCAPE CONSULTANT RAY FUGGLE & ASSOCIATES Pty Ltd PH (04) 22 294 712	STRUCTURAL / CIVIL MSL CONSULTING ENGINEERS Pty Ltd PH (02) 4226 5247	TYPE: A SHEET: 18 of 22 REV: C

- DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
- BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
- IT IS THE OWNER'S 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 AUTHORIZED BY DTA ARCHITECTS.



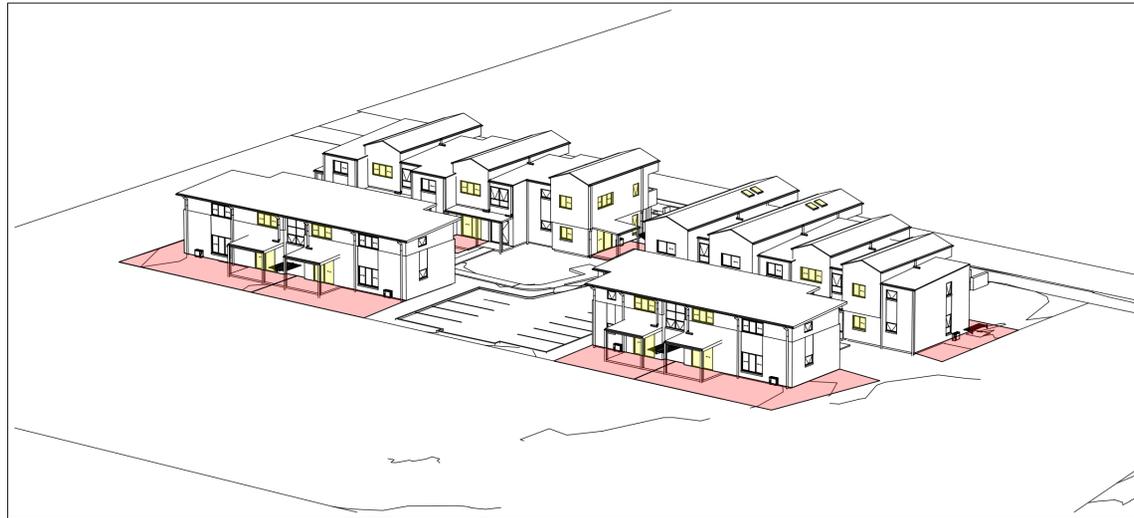
1
-

21st JUNE - 9.00 am



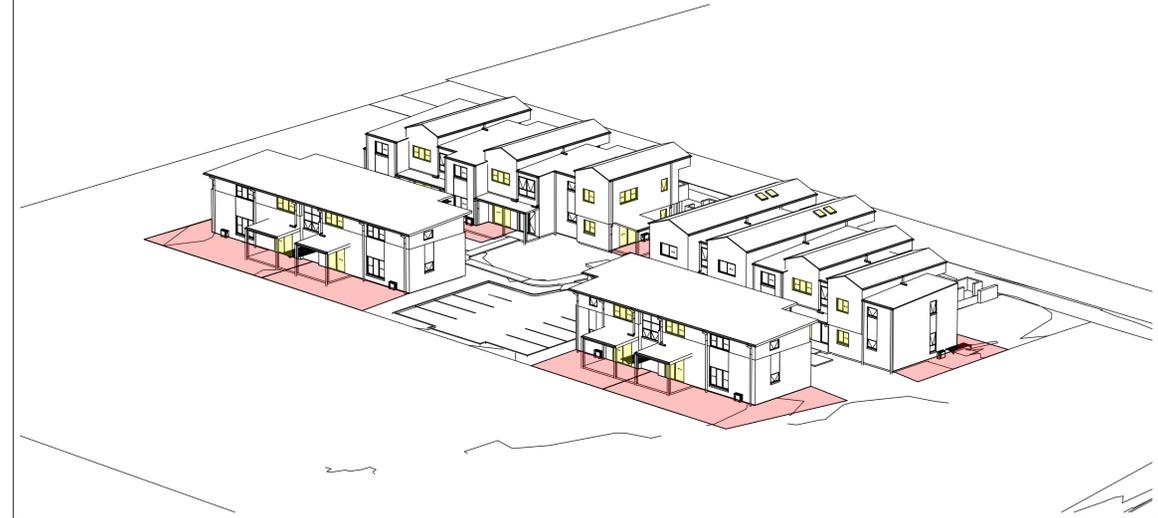
2
-

21st JUNE - 9.30 am



3
-

21st JUNE - 10.00 am



4
-

21st JUNE - 10.30 am



5
-

21st JUNE - 11.00 am



6
-

21st JUNE - 11.30 am

REV	DATE	NOTATION/AMENDMENT
C	28/10/2023	UPDATED DA ISSUE
B	23/08/2023	DA ISSUE
A	16/05/2023	DA ISSUE

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE.
FIGURED DIMENSIONS TAKE PRECEDENCE.

ARCHITECT	DTA ARCHITECTS Pty Ltd PH (02) 9601 1011
PROJECT MANAGER	LAND & HOUSING CORPORATION PH (02) 9354 1880
STRUCTURAL / CIVIL	MSL CONSULTING ENGINEERS Pty Ltd PH (02) 4226 5247

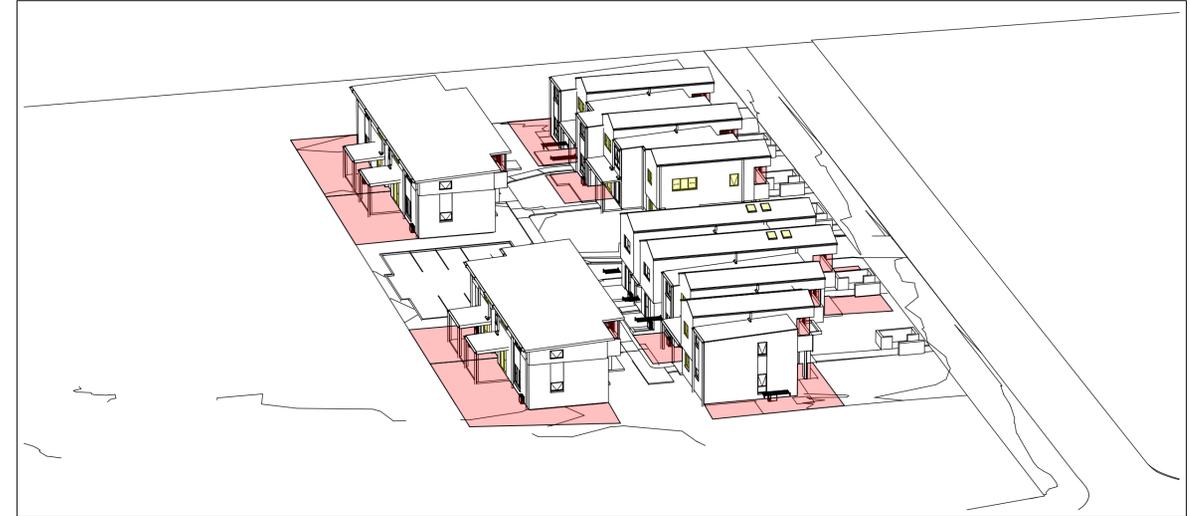
HYDRAULIC	ABEL & BROWN Pty Ltd PH (02) 9709 5705
ELECTRICAL / BASIC CONSULTANT	GREENVIEW CONSULTING Pty Ltd PH (02) 8544 1683
LANDSCAPE CONSULTANT	RAY FUGGLE & ASSOCIATES Pty Ltd PH 0412 294 712

1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
2. BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
3. IT IS THE OWNER'S 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 DTA ARCHITECTS



1
-

21st JUNE - 12.00 pm



2
-

21st JUNE - 12.30 pm



3
-

21st JUNE - 1.00 pm



4
-

21st JUNE - 1.30 pm

ARCHITECT	DTA ARCHITECTS Pty Ltd PH (02) 9601 1011
PROJECT MANAGER	LAND & HOUSING CORPORATION PH (02) 9354 1880
STRUCTURAL / CIVIL	MSL CONSULTING ENGINEERS Pty Ltd PH (02) 4228 5247
HYDRAULIC	ABEL & BROWN Pty Ltd PH (02) 9709 5705
ELECTRICAL / BASIC CONSULTANT	GREENVIEW CONSULTING Pty Ltd PH (02) 8544 1683
LANDSCAPE CONSULTANT	RAY FUGGLE & ASSOCIATES Pty Ltd PH 0412 294 712

BUSINESS PARTNER:	Planning and Environment Land & Housing Corporation GREATER WESTERN SYDNEY REGION
-------------------	--

0 5 10 20 40MM
SCALE FOR PRINTING
PURPOSE ONLY
1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
2. BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
3. IT IS THE OWNER'S 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 DTA ARCHITECTS



1
-
21st JUNE - 2.00 pm



2
-
21st JUNE - 2.30 pm



3
-
21st JUNE - 3.00 pm

Solar Access to Living Rooms & Private Open Space

		9-9.30am	9.30-10am	10-10.30am	10.30-11am	11-11.30am	11.30-12pm	12-12.30pm	12.30-1pm	1-1.30pm	1.30-2pm	2-2.30pm	2.30-3pm	Hours	Complies
Unit 1	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	5	Yes
	POS	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	6	
Unit 2	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	2.5	Yes
	POS	Yellow	Yellow	Yellow	Yellow	Red	Red	Red	Red	Red	Red	Red	Red	3	
Unit 3	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	3.5	Yes
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	2.5	
Unit 4	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	3.5	Yes
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	2.5	
Unit 5	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	1.5	
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	3	
Unit 6	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	1.0	
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	2	
Unit 7	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	6	Yes
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	2.5	
Unit 8	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	6	
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	1	
Unit 9	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	4	Yes
	POS	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	6	
Unit 10	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	4	Yes
	POS	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	5.5	
Unit 11	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	5	Yes
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	2.5	
Unit 12	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	3.5	
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	1.5	
Unit 13	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	5	Yes
	POS	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	2	
Unit 14	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	3	Yes
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	3.5	
Unit 15	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	1.5	
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	3	
Unit 16	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	6	Yes
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	3	
Unit 17	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	4	Yes
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	3	
Unit 18	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	4	Yes
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	3	
Unit 19	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	4	Yes
	POS	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	5.5	
Unit 20	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	4.5	Yes
	POS	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	5	
Unit 21	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	5	Yes
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	3	
Unit 22	Living	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	4.5	
	POS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	1	
Total														16/22 dwellings	72%

0 5 10 20 40MM

SCALE FOR PRINTING
 PURPOSE ONLY
 1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
 2. BUILDER TO CHECK & VERIFY ALL DIMENSIONS & LEVELS PRIOR TO COMMENCEMENT OF WORK.
 3. IT IS THE OWNER'S 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 AUTHORIZED BY DTA ARCHITECTS



1
-
STREET VIEW - UNITS 1-8



3
-
REAR VIEW - UNITS 1-8, 10 & 12



4
-
INTERNAL VIEW UNITS 13-18



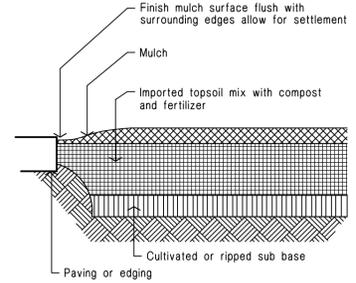
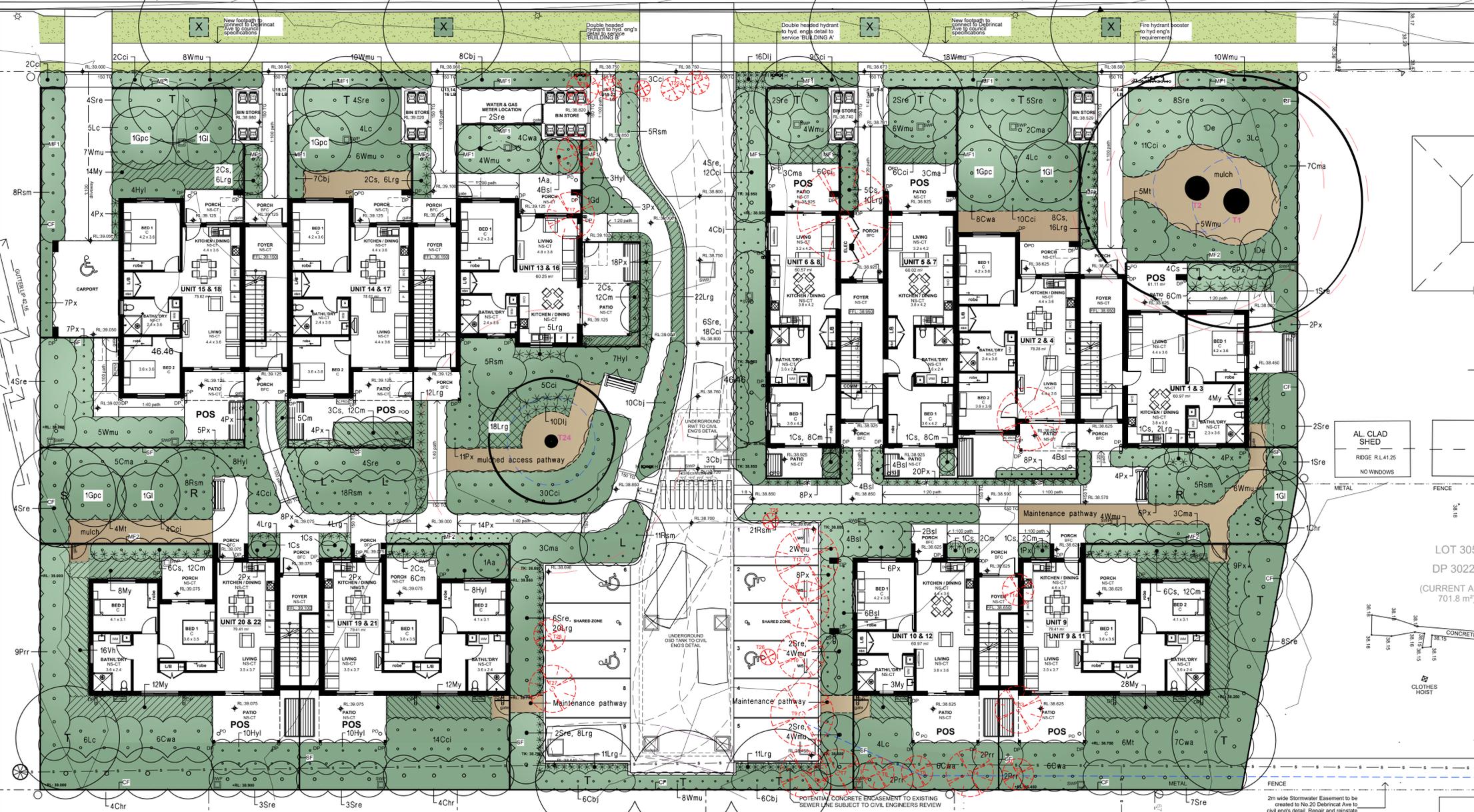
2
-
STREET VIEW - UNITS 13-18



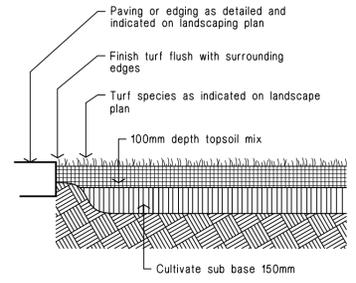
5
-
INTERNAL VIEW - UNITS 19-22

0 5 10 20 40MM SCALE FOR PRINTING PURPOSE ONLY

BIRCH STREET



Ground preparation Planting area using imported topsoil Detail. Not To Scale.



Ground preparation Grassed area: turf using imported topsoil Detail. Not To Scale.

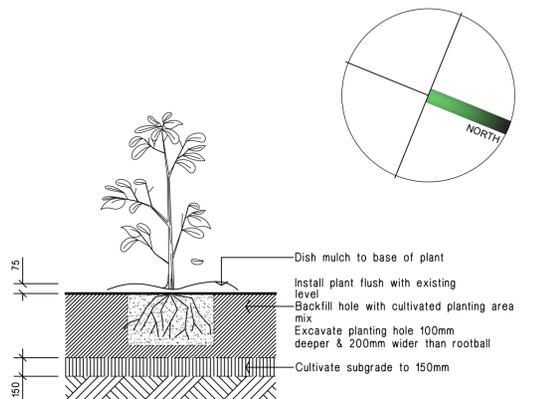
LEGEND

- turf: Excavate / grade all areas to be turfed to 120mm below required finished levels. Do not excavate within 150mm of the trunk of any existing tree to be retained. Ensure that all surface water runoff is directed towards inlet pits, kerbs etc. and away from buildings. Ensure that no ponding will occur. Rip the subgrade to 150mm. Install 100mm depth of imported topsoil. Just prior to spreading the turf, spread 'Shirley's No. 17 lawn fertilizer' over the topsoil at the recommended rate. Lay 'Kikuyu' turf rolls closely butted. Fill and small gaps with topsoil. Water thoroughly.
brick garden edging: Lay a single course of paving bricks in a mortar haunch (200mm wide and 100mm deep). The edges are to be laid in even curves and straight lines as shown on the plan. Where tight curves are shown use half bricks to show a more even curve. The top of the edges to finish flush with the adjacent turf and mulch levels.
existing trees to be retained: (Symbol)
maintenance pathway: 75mm depth selected mulch for access / maintenance only
planting areas: Ensure that the mass planting areas have been excavated to 300mm below finished levels. Rip to a further depth of 150mm. Supply and install 300mm soil mix. Soil mix to comprise of one part approved compost to three parts topsoil. Topsoil shall be either imported topsoil or stockpiled site topsoil (if suitable ie: No clay). Install 75mm depth of selected mulch.
maintenance: All landscape works are to be maintained for a period of three months from the date of practical completion. This includes all watering, weeding, spraying and re-mulching necessary to achieve vigorous growth. Any defects which arise during this period are to be rectified immediately. Any plants or areas of turf which fail during this period are to be replaced at no additional cost.
irrigation: All planting areas on the landscape plan are to be covered by a fully automatic drip irrigation system. All pipework is to be PVC to satisfy AS 1477. All installation is to satisfy the Sydney Water Code and AS 3500. The system is to be installed by a suitable licenced contractor. All equipment and workmanship is to be guaranteed for a minimum period of 12 months.
fencing: For all fencing types and materials refer to the Architects plans.

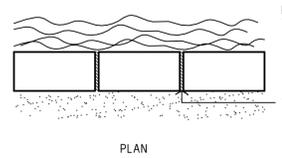
PLANT SCHEDULE

Table with columns: Code, Latin Name (Common Name - Mature Height), Qty, Size, Stake. Lists various trees, shrubs, and groundcovers with their respective quantities and specifications.

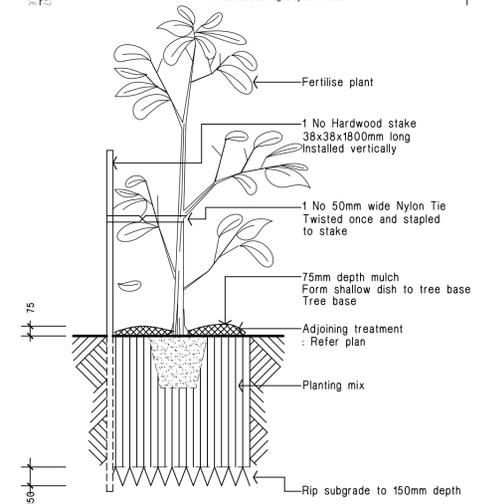
LANDSCAPE PLAN 1 : 150



Planting in garden beds Detail. Not To Scale.



Brick garden edge Detail.



15 - 45 litre Tree planting Detail. Not To Scale.

NSW Government logo and Planning and Environment logo.

DTA ARCHITECTS logo and contact information for Daniel Donal.

ARCHITECT: ABEL & BROWN Pty Ltd. PROJECT MANAGER: LAND & HOUSING CORPORATION. STRUCTURAL / CIVIL: MSL CONSULTING ENGINEERS Pty Ltd.

HYDRAULIC: ABEL & BROWN Pty Ltd. ELECTRICAL / BASIX CONSULTANT: GREENVIEW CONSULTING Pty Ltd. BUSINESS PARTNER: NSW Government logo and Planning and Environment logo.

PROJECT: SENIORS HOUSING DEVELOPMENT. TITLE: LANDSCAPE PLAN. DATE: 03/11/2023. SCALE: As shown @ A1. PROJECT: DA ISSUE. DRAWN: HK. CHECKED: DD. PLOTTED: 03/11/2023 16:15 PM. SHEET: 1 of 1.

PROJECT: SENIORS HOUSING DEVELOPMENT. TITLE: LANDSCAPE PLAN. DATE: 03/11/2023. SCALE: As shown @ A1. PROJECT: DA ISSUE. DRAWN: HK. CHECKED: DD. PLOTTED: 03/11/2023 16:15 PM. SHEET: 1 of 1.

GENERAL

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONSULTS DRAWINGS 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 PROJECT MANAGER FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
- SETTING OUT DIMENSIONS SHOWN ON THE DRAWING SHALL BE VERIFIED BY THE CONTRACTOR. ALL BENCHMARKS ARE TO BE CONFIRMED FOR LEVEL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- DURING CONSTRUCTION, THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVER-STRESSED.
- TBM'S AND LEVELS ARE SHOWN TO AHD. CONTRACTOR TO PERFORM QUALITY CONTROL SURVEY AND MAINTAIN IT DURING THE EXTENT OF THE CONSTRUCTION PERIOD.
- THE LOCATION OF ALL EXISTING SERVICES HAVE BEEN OBTAINED FROM THE AVAILABLE AUTHORITY RECORDS. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROVE ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORKS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE LOWERING AND REALIGNMENT OF MINOR DISTRIBUTION SERVICES IN CONSULTATION WITH THE RELEVANT CODE OF PRACTICE STIPULATED BY THE ASSET OWNER. ALL EXISTING STREET SIGNS TO BE REINSTATED AS REQUIRED.
- ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATIONS AND TO THE SATISFACTION OF THE SUPERINTENDENT, COUNCIL, AND THE SERVICE AUTHORITIES. THE SUPERINTENDENT SHALL CARRY OUT REGULAR SITE INSPECTIONS. THE CONTRACTOR SHALL NOTIFY COUNCIL 7 DAYS PRIOR TO COMMENCEMENT OF WORKS.
- THE CONTRACTOR IS TO SUBMIT AN ENVIRONMENTAL MANAGEMENT PLAN IDENTIFYING THE RISKS ASSOCIATED WITH THE WORKS AND CONTROL MEASURES FOR APPROVAL, PRIOR TO COMMENCING WORKS ON SITE. THE EMP MUST COMPLY WITH ALL STATUTES, BY-LAWS, STANDARDS, AND SECTION 6.3 OF URBAN STORMWATER - BEST PRACTICE ENVIRONMENTAL MANAGEMENT GUIDELINES. THE CONTRACTOR SHALL CONTROL SEDIMENTATION, EROSION, AND POLLUTION DURING CONSTRUCTION IN ACCORDANCE WITH THE 'GUIDELINES FOR ENVIRONMENTAL MANAGEMENT - DOING IT RIGHT ON SUBDIVISIONS'.
- ANY STRUCTURES, PAVEMENTS OR SURFACE DAMAGED, DIRTIED OR MADE UNSERVICEABLE DUE TO CONSTRUCTION WORK SHALL BE REINSTATED TO THE SATISFACTION OF THE SUPERINTENDENT. ALL MATERIAL ASSETS MODIFIED OR DAMAGED BY THE PROPOSED WORKS ARE TO BE REINSTATED TO THE SATISFACTION OF THE RELIANT CITY COUNCIL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES BY SETTLEMENT SUBSIDENCE OR REMOVAL SUPPORT CONSEQUENT UPON OPERATION UNDER THE CONTRACT AND SHALL MAKE GOOD ALL DAMAGES AT THEIR OWN COST.
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT LOCAL COUNCIL'S STANDARD DRAWINGS AND TO THE SATISFACTION OF THE COUNCIL SUPERVISING ENGINEER.
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS4300 AND WITH THE PLANS APPROVED BY THE LOCAL CITY COUNCIL.
- ANY VARIATION TO THE DETAILS SHOWN ON THE DRAWINGS MUST BE AUTHORISED BY THE SUPERINTENDENT PRIOR TO FABRICATION AND/OR CONSTRUCTION
- ALL CONSTRUCTION WORKS SHALL BE RESTRICTED TO THE HOURS AS ADVISED BY THE SUPERINTENDENT
- THE CONTRACTOR SHALL NOT ENTER OR WORK IN ADJOINING PROPERTIES WITHOUT WRITTEN PERMISSION FROM THE PROPERTY OWNERS OR RESPONSIBLE AUTHORITIES.
- ALL NEW WORKS TO HAVE A SMOOTH JUNCTION WITH EXISTING WORK
- ALL PROPERTY ITEMS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURES SPECIFICATIONS. ANY ALTERNATIVE PRODUCTS ARE TO BE APPROVED BY THE SUPERINTENDENT PRIOR TO INSTALLATION.
- THE CONTRACTOR IS RESPONSIBLE TO CARRY OUT ALL WORKS WITH ADEQUATELY SKILLED, TRAINED, AND QUALIFIED TRADE WORKERS.
- IT IS THE MAIN CONTRACTORS RESPONSIBILITY TO SUPPLY THE RELEVANT NOTES, SPECIFICATIONS, AND DRAWINGS TO ALL SUB-CONTRACTORS.
- TRAFFIC CONTROL MEASURES ARE TO BE IMPLEMENTED AT ALL TIMES IN ACCORDANCE WITH AS2543. A SITE SAFETY PLAN IS TO BE PREPARED BY THE CONTRACTOR IN ACCORDANCE WITH THE RELEVANT STANDARDS.
- THE CONTRACTOR IS TO ENSURE THE SITE IS KEPT AT CONSISTENTLY CLEARED OF RUBBISH AND IS MAINTAINED IN A SAFE AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT.
- THE CONTRACTOR IS TO COMPLY WITH THE REQUIREMENTS OF THE LATEST OCCUPATIONAL HEALTH AND SAFETY ACT.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY FENCING TO THE SATISFACTION OF THE SUPERINTENDENT DURING THE CONTRACT TO PREVENT UNAUTHORISED ENTRY INTO THE SITE. WITH CONTRACTOR SHALL ALSO REMOVE TEMPORARY FENCING ON COMPLETION OF THE WORK.
- ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING CONDITIONS.
- ROADS ADJOINING THE SITE MUST BE KEPT CLEAN AND FREE OF ALL EXCAVATED/TRANSPORTED SPOIL MATERIAL.

EARTHWORKS

- THE CONTRACTOR SHALL INSTALL EFFECTIVE EROSION AND SEDIMENTATION CONTROL MEASURES TO THE SATISFACTION OF THE SUPERINTENDANT PRIOR TO COMMENCING EARTHWORKS. THESE MEASURES SHALL BE MAINTAINED FOR THE DURATION OF THE CONTRACT.
- ADEQUATE DRAINAGE OF ALL WORKING AREAS SHALL BE MAINTAINED THROUGHOUT THE PERIOD OF CONSTRUCTION TO ENSURE RUN-OFF OF WATER WITHOUT PONDING, EXCEPT WHERE PONDING FORMS PART OF AN APPROVED EROSION AND AND SEDIMENTATION CONTROL SYSTEM.
- THE CONTRACTOR SHALL OBTAIN THE WRITTEN CONSENT OF THE SUPERINTENDANT OR THE USE OF ANY STOCKPILE WITE WHICH IS NOT SHOWN ON THE DRAWINGS. PROPOSAL IN THIS REGARD SHALL BE SUBMITTED AT LEAST THREE WORKING DAYS BEFORE STOCKPILING IS DUE TO COMMENCE AND SHALL SPECIFY THE MAXIMUM DIMENSIONS OF THE PROPOSAL.
- COMPACTION OF ALL MATERIALS INCLUDING ROAD SURFACES SHALL BE AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.

CONCRETE

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600 AND AS3610 CURRENT EDITIONS WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- ALL CONCRETE TO BE 32 MPa WITH A MAXIMUM SLUMP OF 80mm, AND MAXIMUM AGGREGATE SIZE OF 20mm UNO.
- CONCRETE SHALL BE PLACED IN A MANNER THAT AVOIDS SEGREGATION. CONCRETE SHALL NOT BE PLACED IF THE AMBIENT AIR TEMPERATURE IS LESS THAN 5 °C OR GREATER THAN 35 °C. ADDITIONAL PRECAUTIONS MAY NEED TO BE TAKEN IN WINDY CONDITIONS AND/OR TEMP. ABOVE 30°C.
- THE CONTRACTORS SHALL SUBMIT PROPOSED CURING METHODS FOR THE ENGINEERS WRITTEN APPROVAL PRIOR TO CONCRETE POUR.
- REPAIRS TO CONCRETE SHALL NOT BE ATTEMPTED WITHOUT INSPECTION & PERMISSION OF THE ENGINEER.
- CONCRETE FORMED SURFACE TO HAVE FINISHED IN ACCORDACE WITH AS 3610 OR AS SPECIFIED OTHERWISE.

STORMWATER DRAINAGE

- ALL STORMWATER WORKS ARE TO BE UNDERTAKEN GENERALLY IN ACCORDANCE WITH AS3500 (LATEST EDITION) STORMWATER DRAINAGE
- PIPES OF 300mm DIA. AND UNDER SHALL BE UPVC TO AS 1254.
- PIPES OF 375mm DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 TO AS 1342, RUBBER RING JOINTED UNO.
- 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.
- MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 450mm IN CARPARK & ROADWAY AREAS UNO.
- UNLESS NOTED OTHERWISE, ALL CONCRETE PIPE ARE TO BE CLASS 2 AND RUBBER RING JOINTED. RUBBER RINGS SHALL BE MANUFACTURED AND TESTED IN ACCORDANCE WITH AS164 (LATEST EDITION). THE EXCAVATED TRENCH WIDTH FOR PIPE LAYING MUST BE AT LEAST 400mm WIDER THAN THE OUTER DIAMETER OF THE PIPE. PIPES ARE TO BE LAID CENTRALLY WITHIN THE EXCAVATED TRENCH.
- ALL PIPEWORK SHALL BE BEDDED ON A CONTINUOUS UNDERLAY OF SAND, NOT LESS THAN 75mm THK. IN OTHER THAN ROCK AND 200mm THK. IN ROCK AFTER COMPACTION. THE SAND SHALL BE GRADED IN ACCORDANCE WITH AS3500 AND COMPACTED TO AT LEAST 90% OF THE MAXIMUM DRY DENSITY AND SHALL BE GRADED EVENLY WITH THE ADDITIONAL BEDDING.
- THE BED AND HAUNCH MATERIAL SHALL BE COMPACTED FOR THE FULL WIDTH OF THE TRENCH BY A MINIMUM OF TWO PASSES OF A VIBRATING PLATE OR HAND TAMPING METHODS TO THE SATISFACTION OF THE SUPERINTENDENT.
- CHASES SHALL BE FORMED WHERE NECESSARY TO PREVENT SOCKETS, FLANGES OR THE LIKE FROM BEARING ON THE BOTTOM OF THE TRENCH.
- THE CONTRACTOR MUST LEAVE ALL STORMWATER DRAINAGE WORKS UNCOVERED UNTIL ANY TESTING DEEMED NECESSARY BY THE SUPERINTENDENT HAS BEEN PERFORMED.
- THE CONTRACTOR SHALL ENSURE THAT ANY EXISTING STRUCTURES LOCATED ADJACENT TO EXCAVATED TRENCHES ARE SUPPORTED OR PROTECTED TO PREVENT DAMAGE TO OR MOVEMENT TO THESE STRUCTURES.
- PIPE LAYING SHALL BEGIN AT THE DOWNSTREAM END OF THE LINE WITH THE SOCKET ENDS OF THE PIPE FACING UPSTREAM. THE BARREL OF EACH PIPE SHALL BE IN CONTACT WITH THE BEDDING MATERIAL THROUGHOUT ITS FULL LENGTH.
- FOR RUBBER RING JOINTS THE PIPE ENDS SHALL BE TIGHTLY JOINED WITH THEIR INNER SURFACES AT THE MANUFACTURES NOMINATED LAYING GAP.
- LIFTING HOLES IN PIPES SHALL BE PLUGGED WITH MORTAR, PRECAST TAPERED PLUGS, OR TAPE SURROUNDINGS OR OTHER APPROVED MEANS PRIOR TO BACKFILL MATERIAL BEING PLACED.
- CUTTING OPERATIONS FOR CONCRETE PIPES SHALL PROVIDE NEAT END SURFACES. THE CUT SURFACES SHALL BE GIVEN TWO COATS OF A APPROVED EPOXY PAINT.
- COMPLETED CEMENT MORTAR JOINTS SHALL BE KEPT DAMP AND PROTECTED FROM THE DIRECT RAYS OF THE SUN UNTIL BACKFILLED.
- DRAINAGE LINES SHALL BE CONSTRUCTED TO THE TOLERANCES IN ACCORDANCE WITH THE RELIANT AUSTRALIAN STANDARDS, SUPERINTENDENTS SPECIFICATIONS AND THE MANUFACTURES SPECIFICATIONS.
- BACKFILL MATERIAL SHALL BE INSPECTED AND APPROVED BY THE SUPERINTENDENT PRIOR TO PLACING AND COMPACTION
- ALL BACKFILL FOR STORMWATER DRAINAGE WORKS IS TO BE COMPACTED IN LAYERS NOT EXCEEDING 30mm LOOSE THICKNESS AND COMPACTED WITHOUT DAMAGING OR DISPLACING THE PIPEWORK.
- STEP IRONS AT SPACINGS OF 300m ARE TO BE PROVIDED IN DRAINAGE PITS MORE THAN 1.2m DEEP.
- PROVIDE 3.0m LENGTH OF ø100 SUBSOIL DRAINAGE PIPE WRAPPED IN FABRIC SOCK AT UPSTREAM END F EACH PIT.
- UNLESS OTHERWISE SPECIFIED, ALL DRAINAGE GRATES TO BE CLASS "C" GALVANISED MILD STEEL TO AS 3996 (LATEST EDITION)
- uPVC PIPES SHALL BE TRANSPORTED, HANDLED, AND STORED IN ACCORDANCE WITH THE MANUFACTURES SPECIFICATIONS
- uPVC PIPE LAYING SHALL BEGIN AT THE DOWNSTREAM END OF THE LINE WITH THE SOCKET END OF THE PIPE FACING UPSTREAM. WHEN THE PIPES ARE LAID, THE BARREL OF EACH PIPE SHALL BE IN CONTACT WIT THE BEDDING MATERIAL THROUGHOUT ITS FULL LENGTH.
- THE uPVC PIPE ENDS SHALL BE THOROUGHLY CLEANED BEFORE THE JOINT IS MADE. JOINTING SHALL BE IN ACCORDANCE WIT THE MANUFACTURES SPECIFICATIONS WITH JOINTING SOLVENT AND PRIMER.

EROSION, SEDIMENT AND SITE MANAGEMENT

- ALL EROSION AND SILTATION CONTROL DEVICES ARE TO BE PLACED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORKS. THE LOCATION OF SUCH DEVICES (SHOWN ON THIS DRAWINGS) IS INDICATIVE ONLY AND FINAL POSITION SHOULD BE DETERMINED ON SITE.
- SURPLUS TOPSOIL SHALL BE STOCKPILED WHERE DIRECTED. DIVERSION BANKS ARE TO BE PLACED UPSTREAM AND SHALL DISCHARGE TO SEDIMENT BARRIERS. ALL STOCKPILES ARE TO BE VEGETATED WITHIN 14 DAYS OF FORMATION. SILT FENCES ARE TO BE PLACED ON THE DOWNSTREAM FACE.
- DURING TRENCH EXCAVATION ALL SPOIL SHALL BE MOUNDED ON THE UPHILL SIDE OF TRENCHES AND PLACEMENT IS TO COMPLY WITH THE SUPERINTENDENTS REQUIREMENTS.
- PROVIDE SEDIMENT TRAPS TO ALL INLET PITS.
- ALL TURF SODS AND SEEDED AREAS ARE TO BE WATERED AND FERTILISED AS DIRECTED.
- ALL EROSION AND SILTATION CONTROL DEVICES ARE TO BE CLEARED OF DEPOSITED SILT AND MAINTAINED TO THE SATISFACTION OF THE SUPERINTENDENT.
- GENERALLY BARRIERS SHOULD BE PLACED APPROXIMATELY 5.0 METRES OUTSIDE POTENTIAL DISTURBED AREAS.
- A LOG BOOK OR OTHER SUITABLE RECORDS MUST BE KEPT BY THE SITE SUPERVISOR IN ACCORDANCE WITH THE EPA'S REQUIREMENTS.
- CONTRACTOR TO FOLLOW THE RECOMMENDED SEQUENCE OF OPERATIONS AS SPECIFIED BY THE DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT IN THE BROCHURE "PREPARING SOIL AND WATER MANAGEMENT PLANS".
- BUILDER IS TO CONDUCT WORKS IN ACCORDANCE WITH COUNCIL'S CONDITION TO DUST SUPPRESSION AND SEDIMENT REMOVAL MEASURES.
- BUILDER TO CONFIRM LOCATION OF STOCKPILES, FENCING, STABILISED ACCESS ETC. ON COMMENCEMENT OF WORK. ENGINEER TO BE NOTIFIED.
- WASTE MATERIALS ARE TO BE STOCKPILED OR LOADED INTO SKIP-BINS LOCATED AS SHOWN ON PLAN.
- STOCKPILES OF LOOSE MATERIALS SUCH AS SAND, SOIL, GRAVEL MUST BE COVERED WITH GEOTEXTILE SILT FENCE MATERIAL. PLASTIC SHEETING OR MEMBRANE MUST NOT BE USED. SAFETY BARRICADING SHOULD BE USED TO ISOLATE STOCKPILES OF SOLID MATERIALS SUCH AS STEEL REINFORCING, FORMWORK, SCAFFOLDING
- TRUCKS REMOVING EXCAVATED / DEMOLISHED MATERIAL SHOULD TRAVEL ON STABILISED CONSTRUCTION PATHS. MATERIAL TO BE TAKEN TO THE TRUCK TO REDUCE TRUCK MOVEMENT ON SITE. TRUCKS TO BE LIMITED TO SINGLE UNIT HEAVY RIGID VEHICLES. (NO SEMITRAILERS)
- ANY SEDIMENT DEPOSITED ON THE PUBLIC WAY, INCLUDING FOOTPATH RESERVE AND ROAD SURFACE, IS TO BE REMOVED IMMEDIATELY.
- PROVIDE BARRIERS AROUND ALL CONSTRUCTION WORKS WITHIN THE FOOTPATH AREA TO PROVIDE SAFE ACCESS FOR PEDESTRIANS.
- CONCRETE PUMPS AND CRANES ARE TO OPERATE FROM WITHIN THE BALLAST ENTRY DRIVEWAY AREA AND ARE NOT TO OPERATE FROM THE PUBLIC ROADWAY UNLESS SPECIFIC COUNCIL PERMISSION IS OBTAINED.
- DELIVERY VEHICLES MUST NOT STAND WITHIN THE PUBLIC ROADWAY FOR MORE THAN 20 MINUTES AT A TIME.
- ANY EXCAVATION WORK ADJACENT TO ADJOINING PROPERTIES OR THE PUBLIC ROADWAY IS NOT TO BE COMMENCED UNTIL THE STRUCTURAL ENGINEER IS CONSULTED AND SPECIFIC INSTRUCTIONS RECEIVED FROM THE ENGINEER.
- TOLLET FACILITIES MUST BE EITHER A FLUSHING TYPE OR APPROVED PORTABLE CHEMICAL CLOSET. CHEMICAL CLOSETS ARE TO BE MAINTAINED & SERVICED ON A REGULAR BASIS SO THAT OFFENSIVE ODOUR IS NOT EMITTED.
- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE HILLS SHIRE COUNCIL'S ENVIRONMENTAL SITE MANAGEMENT DEVELOPMENT CONTROL PLAN DOCUMENTS, CURRENT EDITION.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MEASURES ARE TAKEN DURING THE COURSE OF THE CONSTRUCTION TO PREVENT SEDIMENT EROSION AND POLLUTION OF THE DOWNSTREAM SYSTEM, SUPERVISING ENGINEER SHOULD BE CONTACTED IF IN DOUBT. ALL SEDIMENT CONTROL STRUCTURES TO BE INSPECTED AFTER EACH RAINFALL EVENT FOR STRUCTURAL DAMAGE AND TRAPPED SEDIMENT TO BE REMOVED TO A NOMINATED SOIL STOCKPILE SITE.
- PROVIDE BARRIERS AROUND ALL CONSTRUCTION WORKS WITHIN THE FOOT PATH AREA TO PROVIDE SAFE ACCESS FOR PEDESTRIANS.

SEQUENCE OF OPERATIONS

- PROVIDE SHAKE DOWN PAD AT ENTRY OF SITE.
- CONSTRUCT SEDIMENT FENCING (REFER DETAILS)
- CONSTRUCT DRAINAGE & CIVIL WORKS (MODIFY SEDIMENT CONTROL DRAINS TO SUIT CONSTRUCTION.
- PITS & PIPES TO BE PROTECTED WITH FILTER BARRIERS REFER DETAILS
- AT COMPLETION OF ALL WORKS REVEGETATE BATTERS WITHIN 14 DAYS
- AFTER COMPLETION OF BUILDING WORKS, ALL CONTROL MEASURES CAN BE REMOVED.

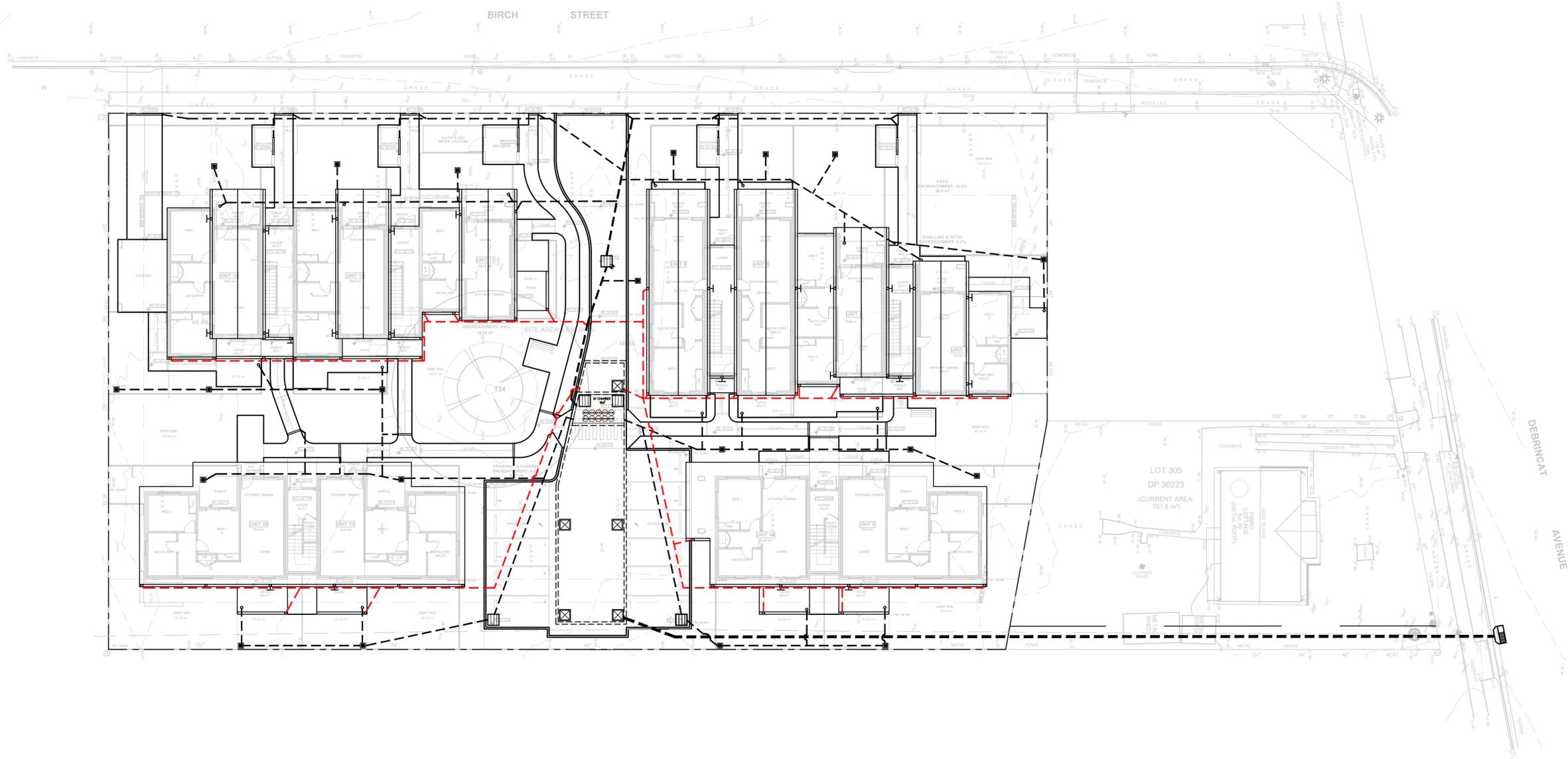
MAINTENANCE PROCEDURES DURING CONSTRUCTION

- ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED AT ALL TIMES SO THAT THOSE MEASURES ARE FULLY FUNCTIONAL/OPERATIONAL DURING THE CURRENCY OR WORKS. ALL SUCH CONTROLS MUST ALSO BE FULLY FUNCTIONAL/OPERATIONAL SHOULD WORK OPERATIONS CEASE TEMPORARILY, (e.g. WEEKENDS, ROSTERED DAYS OFF, etc.)
- RESPREAD MATERIAL GAINED DURING MAINTENANCE OPERATION OR ALTERNATIVELY PLACE ON STOCKPILES.
- NON-COMPLIANCE WITH AGREED PERFORMANCE CRITERIA WILL BE IDENTIFIED BY: VISUAL INSPECTIONS IDENTIFYING
 - BUILD-UP OF SEDIMENT OFF THE SITE
 - EXCESSIVE SEDIMENT BUILD-UP ON THE SITE
 - EXCESSIVE EROSION ON THE SITE
 - RELEASE OF CONSTRUCTION MATERIAL FROM THE SITE
 - POOR VEGETATION ESTABLISHMENT
 - POORLY MAINTAINED, DAMAGED OR FAILED ESC DEVICES.
 - DETERIORATED WATER QUALITY IDENTIFIED BY THE ENVIRONMENTAL CONSULTANT AS BEING ATTRIBUTABLE TO THE CONSTRUCTION ACTIVITIES.
- BUILD-UP OF SEDIMENT OFF THE SITE - THE MATERIAL MUST BE COLLECTED AND DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ONGOING ENVIRONMENTAL NUISANCE OR HARM, THEN ON-SITE ESC MEASURES AMENDED, WHERE APPROPRIATE, TO REDUCE THE RISK OF FURTHER EDIMENTATION
- EXCESSIVE SEDIMENT BUILD-UP ON THE SITE - COLLECT AND DISPOSE OF MATERIAL, THEN AMEND UP-SLOPE DRAINAGE AND/OR EROSION CONTROL MEASURES AS APPROPRIATE TO REDUCE FURTHER OCCURRENCE.
- SEDIMENT FENCE FAILURE - REPLACE AND MONITOR MORE FREQUENTLY. REGULAR FAILURES MAY MEAN THAT THE SEDIMENT FENCE LOCATION, ALIGNMENT OR INSTALLATION MAY NEED TO BE AMENDED.
- IF THE RELEASE OF EXCESSIVE SEDIMENT AND/OR OTHER MATERIALS OFF THE SITE OCCURS, OR WATER QUALITY MONITORING INDICATES LEVELS ARE NOT WITHIN THE WQOS, CLEAN UP DEPOSITION, AND INSPECT ALL CONTROL MEASURES.

1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
 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 MSL CONSULTING ENGINEERS

	LOCKED BAG 5022 PARAMAITA NSW 2124 PHONE NO 1800 738 718 www.dpie.nsw.gov.au/ land-and-housing-corporation	MSL Consulting Engineers Pty Limited ABN 72 923 082 591 ACN 142 291 160 Suite 102 - 62 Harbour St, Wollongong NSW PO Box 567, Dapto NSW P 02 4226 5247 e info@mslengineers.com.au w www.mslengineers.com.au	E 29/11/2023 ISSUED FOR D.A. D 19/06/2023 ISSUED FOR D.A. C 10/05/2023 ISSUED FOR D.A. B 17/04/2023 ISSUED FOR D.A. A 28/02/2023 CONCEPT PLAN REV DATE NOTATION/AMENDMENT	PROJECT MANAGER LAND & HOUSING CORPORATION PH (02) 9354 1876 ARCHITECT DTA Architects Pty Ltd PH (02) 9601 1011	BUSINESS PARTNER: 	STRUCTURAL / CIVIL / STORMWATER CONSULTANT MSL CONSULTING ENGINEERS PTY LTD PH (02) 4226 5247 HYDRAULIC CONSULTANT ABEL & BROWN PTY LTD PH (02) 9789 5705	PROJE:CT: SENIORS HOUSING DEVELOPMENT	STATUS: DA ISSUE	DATE: 29/11/23 STAGE: B TYPE: SW	SCALE: NTS @ A1 DRAWN: TP SHEET: 1 of 8	PROJ: BGVYZ CHECKED: MP REV: E	JOB: 22084 CERTIFIC: MP
			DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE. ELECTRICAL / BASIS CONSULTANT GREENVIEW CONSULTING PTY LTD PH (02) 8544 1683	LANDSCAPE CONSULTANT RAY FUGGLE & ASSOCIATED PTY LTD PH 0412 294 712	TITLE: SPECIFICATION SHEET	FILE:	PLOTTED: 29/11/2023	REV: E				

Planning & Environment
 Land & Housing Corporation
 GREATER WESTERN SYDNEY REGION



- 1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
- 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 MSL CONSULTING ENGINEERS

0 5 10 20 40MM
SCALE FOR PRINTING
PURPOSE ONLY

NSW GOVERNMENT
Planning & Environment

LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No 1800 738 718

www.dpie.nsw.gov.au/
land-and-housing-corporation

MSL Consulting Engineers Pty Limited
ABN 72 923 080 591
ACN 142 291 193
Suite 102 - 62 Harbour St. Wollongong NSW
PO Box 567 Dapto NSW
p 02 4226 5247
e info@mslengineers.com.au
w www.mslengineers.com.au

REV	DATE	NOTATION/AMENDMENT
E	29.11.2023	ISSUED FOR D.A.
D	19.06.2023	ISSUED FOR D.A.
C	10.05.2023	ISSUED FOR D.A.
B	17.04.2023	ISSUED FOR D.A.
A	28.02.2023	CONCEPT PLAN

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.

PROJECT MANAGER
LAND & HOUSING CORPORATION
PH (02) 9354 1876

ARCHITECT
DTA Architects Pty Ltd
PH (02) 9621 1511

ELECTRICAL / BASIC CONSULTANT
GREENVIEW CONSULTING PTY LTD
PH (02) 8544 1683

STRUCTURAL / CIVIL / STORMWATER CONSULTANT
MSL CONSULTING ENGINEERS PTY LTD
PH (02) 4226 5247

HYDRAULIC CONSULTANT
ABEL & BROWN PTY LTD
PH (02) 9709 5705

LANDSCAPE CONSULTANT
RAY FUGGLE & ASSOCIATED PTY LTD
PH 0412 294 712

BUSINESS PARTNER:
NSW GOVERNMENT
Planning & Environment
Land & Housing Corporation
GREATER WESTERN SYDNEY REGION

PROJECT:
SENIORS HOUSING DEVELOPMENT
at
2-10 BIRCH STREET & 20 DEBRINCAT AVENUE NORTH ST MARYS NSW 2760

TITLE:
SITE DRAINAGE PLAN

FILE:
PLOTTED: 29/11/2023

STATUS:	DA ISSUE		
DATE:	29/11/23	SCALE:	1:200 @ A1
STAGE:	B	DRAWN:	TP
CREATED:	MP	CHECKED:	MP
CERTIFIED:	MP	REV:	E
JOB:	22084	PROJ:	BGVZ
SCALE FOR PRINTING PURPOSE ONLY		TYPE: SW	
PURPOSE ONLY		SHEET: 2 of 8	

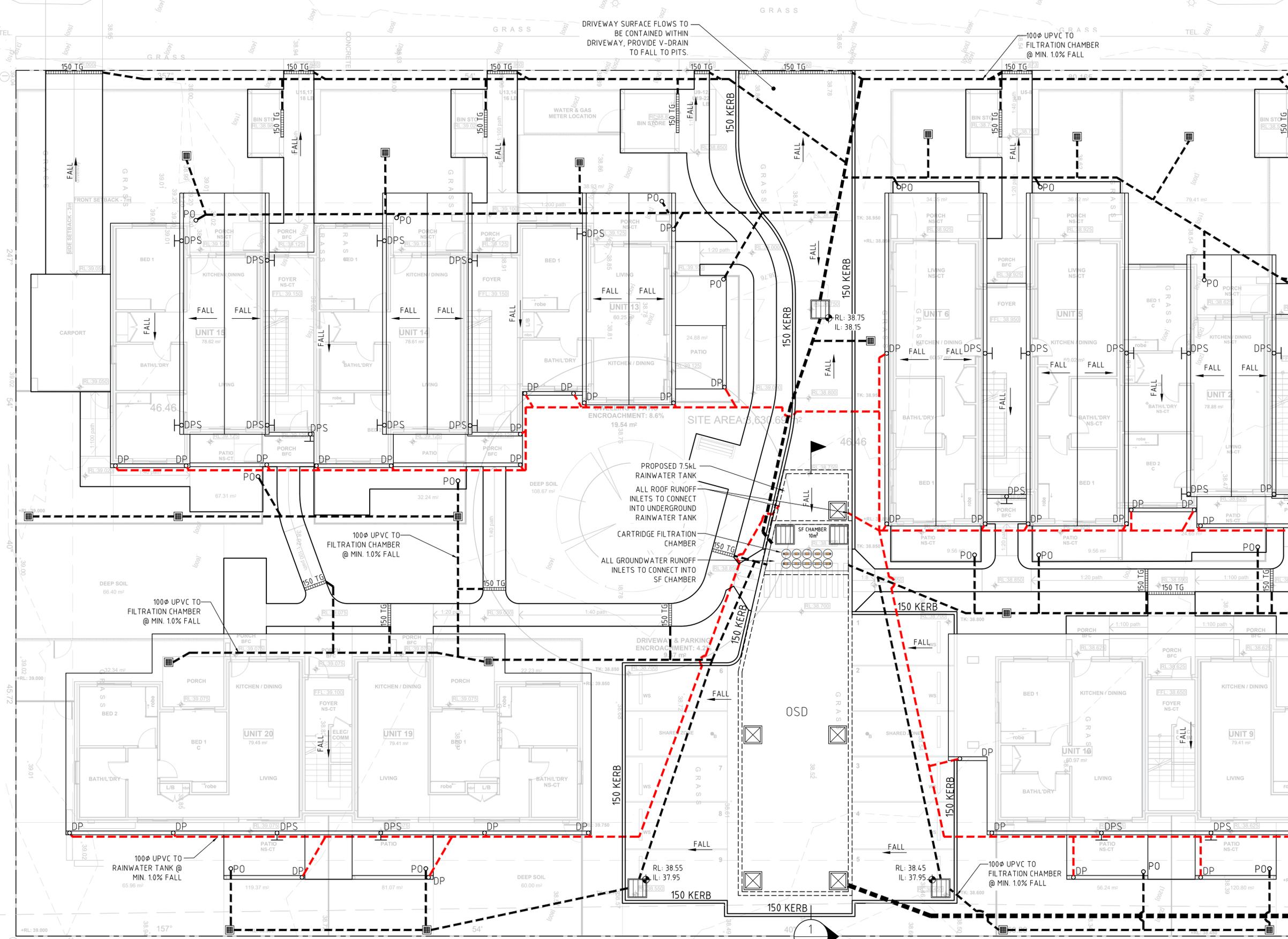


ALL EXISTING LEVELS TO BE CONFIRMED ON SITE AND ENGINEER TO BE NOTIFIED PRIOR TO COMMENCEMENT OF WORK.

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

SYMBOLS & NOTATION	
	Ø100 STORMWATER DRAINAGE LINE UNLESS NOTED OTHERWISE
	Ø100 STORMWATER DRAINAGE LINE FROM ROOF CATCHMENT TO RAINWATER TANK
	1000 SQUARE GRATED PIT FITTED WITH OCEANGUARD BASKETS
	450 SQUARE GRATED PIT
	150 WIDE TRENCH GRATE
	DOWN PIPE SPREADER
	DOWN PIPE
	PATIO OUTLET

OSD SUMMARY	
SITE AREA	= 3631m ²
STORAGE DETAILS	
STORAGE RETENTION	SSR = 0.363Ha x 240 = 87.14m ³
PERMISSIBLE SITE DISCHARGE	PSD = 0.363Ha x 120 = 43.56 L/s
ORIFICE RESTRICTION:	
Q = C A (2gh) ^{1/2}	
ORIFICE DIAMETER = Ø153 mm	
STORAGE REQUIRED	
= 87.14m ³	
STORAGE PROVIDED	
= 89.19m ³	



- 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

0 5 10 20 40MM
SCALE FOR PRINTING
PURPOSE ONLY

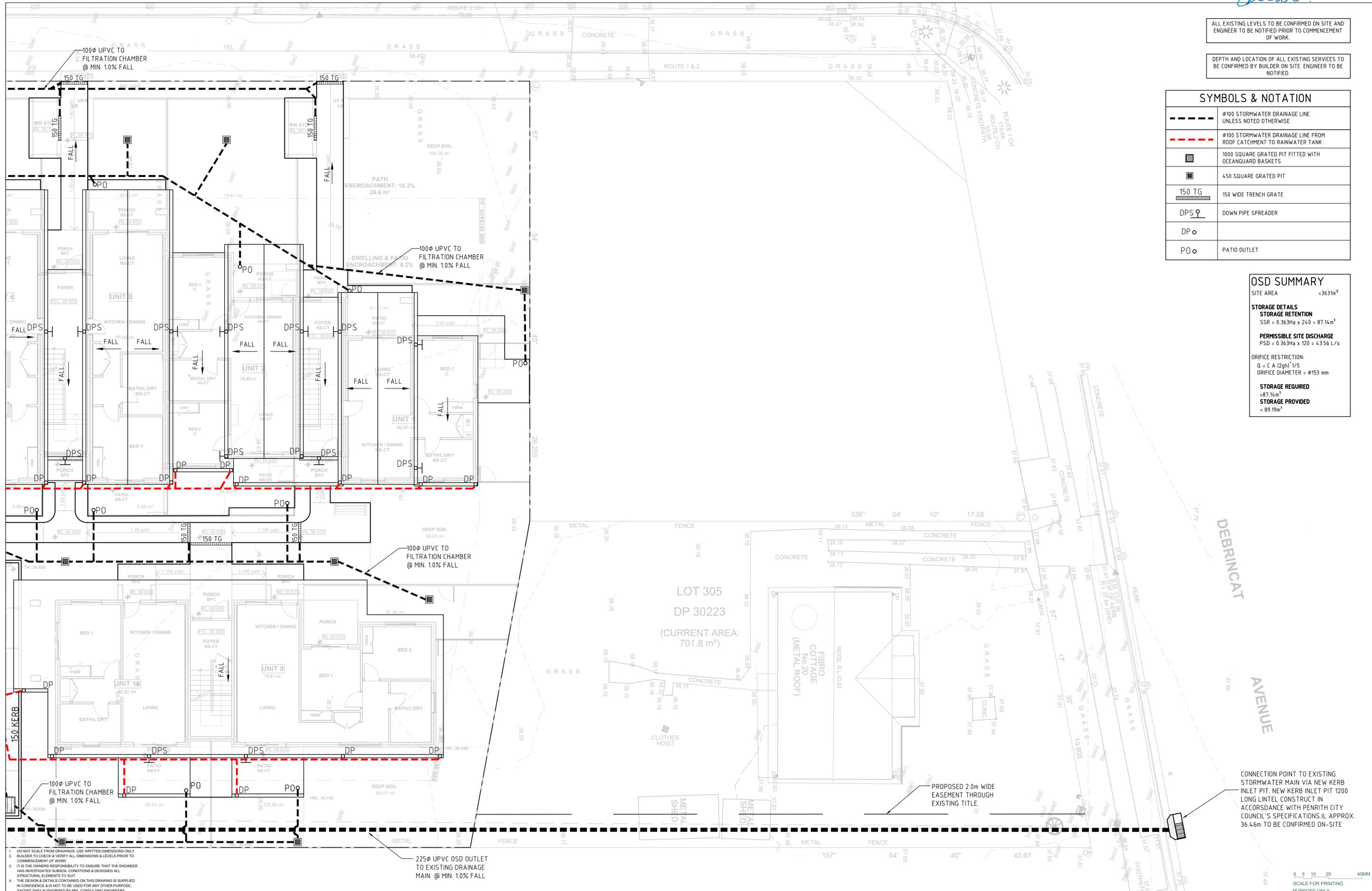
 Planning & Environment	LOCKED BAG 5022 PARRAMATTA NSW 2124 PHONE No 1800 738 718 www.dpie.nsw.gov.au/ land-and-housing-corporation	 MSL Consulting Engineers Pty Limited AIN 72 903 080 991 ACN 142 291 165 Suite 102 - 62 Harbour St, Wollongong NSW PO Box 567, Dapto NSW p 02 4201 0247 e info@mslengineers.com.au www.mslengineers.com.au	E 29.11.2023 ISSUED FOR D.A. D 19.04.2023 ISSUED FOR D.A. C 10.05.2023 ISSUED FOR D.A. B 17.04.2023 ISSUED FOR D.A. A 28.02.2023 CONCEPT PLAN REV DATE NOTATION/AMENDMENT	PROJECT MANAGER LAND & HOUSING CORPORATION PH (02) 9354 1876 ARCHITECT DTA Architects Pty Ltd Suite 102 - 62 Harbour St, Wollongong NSW PO Box 567, Dapto NSW p 02 4201 0247 e info@mslengineers.com.au www.mslengineers.com.au	STRUCTURAL / CIVIL / STORMWATER CONSULTANT MSL CONSULTING ENGINEERS PTY LTD PH (02) 4226 5247 HYDRAULIC CONSULTANT ABEL & BROWN PTY LTD PH (02) 9709 5206 LANDSCAPE CONSULTANT RAY FUGGLE & ASSOCIATED PTY LTD PH 0412 294 712	BUSINESS PARTNER Planning & Environment Land & Housing Corporation GREATER WESTERN SYDNEY REGION	PROJECT SENIORS HOUSING DEVELOPMENT at 2-10 BIRCH STREET & 20 DEBRINCAT AVENUE NORTH ST MARYS NSW 2760	TITLE DRAINAGE PLAN - SHEET 1	STATUS DA ISSUE	
			DATE 29/11/23	SCALE 1:100 @ A1	PROJ BGVVZ	JOB 22084	DRAWN TP	CHECKED MP	STATUS DA ISSUE	DATE 29/11/2023

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

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

SYMBOLS & NOTATION	
	Ø100 STORMWATER DRAINAGE LINE UNLESS NOTED OTHERWISE
	Ø100 STORMWATER DRAINAGE LINE FROM ROOF CATCHMENT TO RAINWATER TANK
	1000 SQUARE GRATED PIT FITTED WITH OCEANGUARD BASKETS
	450 SQUARE GRATED PIT
	150 TG 150 WIDE TRENCH GRATE
	DPS DOWN PIPE SPREADER
	DP DOWN PIPE
	PO PATIO OUTLET

OSD SUMMARY	
SITE AREA	= 3631m ²
STORAGE DETAILS	
STORAGE RETENTION	SSR = 0.363Ha x 240 = 87.14m ³
PERMISSIBLE SITE DISCHARGE	PSD = 0.363Ha x 120 = 43.56 L/s
ORIFICE RESTRICTION:	
Q = C A (2gh) ^{1/2}	
ORIFICE DIAMETER = Ø153 mm	
STORAGE REQUIRED	= 87.14m ³
STORAGE PROVIDED	= 89.19m ³



- 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 AUTHORIZED BY MSL CONSULTING ENGINEERS



LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE NO 1800 738 718

www.dpie.nsw.gov.au/
land-and-housing-corporation

 **MSL Consulting Engineers** Pty Ltd
ABN 72 923 082 591
ACN 142 291 195
Suite 102 - 62 Harbour St, Wollongong NSW
PO Box 567, Dapto NSW
P 02 4226 5247
e info@mslengineers.com.au
w www.mslengineers.com.au

REV	DATE	NOTATION/AMENDMENT
E	29/11/2023	ISSUED FOR D.A.
D	19/06/2023	ISSUED FOR D.A.
C	10/05/2023	ISSUED FOR D.A.
B	17/04/2023	ISSUED FOR D.A.
A	28/02/2023	CONCEPT PLAN

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.

PROJECT MANAGER	STRUCTURAL / CIVIL / STORMWATER CONSULTANT	ARCHITECT	ELECTRICAL / BASIC CONSULTANT
LAND & HOUSING CORPORATION PH (02) 9354 1876	MSL CONSULTING ENGINEERS PTY LTD PH (02) 4226 5247	DTA Architects Pty Ltd PH (02) 9621 1011	GREENVIEW CONSULTING PTY LTD PH (02) 6544 1663
	HYDRAULIC CONSULTANT		
	ABEL & BROWN PTY LTD PH (02) 9759 5726		
	LANDSCAPE CONSULTANT		
	RAY FUGGLE & ASSOCIATED PTY LTD PH 0412 294 712		

 **Planning & Environment**

Land & Housing Corporation
GREATER WESTERN SYDNEY REGION

PROJECT: SENIORS HOUSING DEVELOPMENT

at
2-10 BIRCH STREET &
20 DEBRINCAT AVENUE
NORTH ST MARYS NSW 2760

TITLE: DRAINAGE PLAN - SHEET 2

FILE: [Blank]

PLOTTED: 29/11/2023

STATUS	DATE	SCALE	PROJ	JOB
DA ISSUE	29/11/23	1:100 @ A1	BGVVZ	22084
STAGE	DRAWN	CHECKED	DATE	REV
B	TP	MP		
SW			4 of 8	E

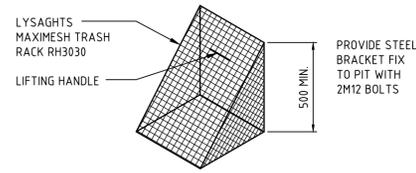
CONNECTION POINT TO EXISTING STORMWATER MAIN VIA NEW KERB INLET PIT. NEW KERB INLET PIT 1200 LONG LINTEL CONSTRUCT IN ACCORDANCE WITH PENRITH CITY COUNCIL'S SPECIFICATIONS. APPROX. 36.46m TO BE CONFIRMED ON-SITE

0 5 10 20 40MM
SCALE FOR PRINTING PURPOSE ONLY

THE ON-SITE FACILITY HAS BEEN DESIGNED TO WITHSTAND MAXIMUM LOADING (W80) WHICH IS LIKELY TO BE USED THE ACCESSWAY. THE DESIGN WAS APPLIED IN ACCORDANCE WITH AS/NZ 1170 - STRUCTURAL DESIGN ACTIONS.

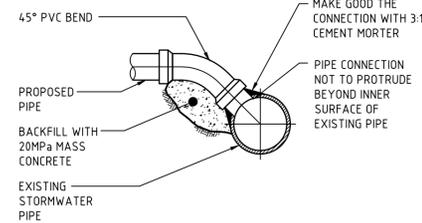
PROVIDE CORROSION RESISTANT IDENTIFICATION PLAQUE AT OSD LOCATION STATING THE FOLLOWING:

'THIS STRUCTURE IS AN OSD FACILITY, FORMING PART OF THE STORMWATER DRAINAGE NETWORK AND IS NOT TO BE TAMPERED WITH. IDENTIFICATION NUMBER: DA-2019/575 MAINTENANCE TO BE CARRIED IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE FOR THIS SITE'



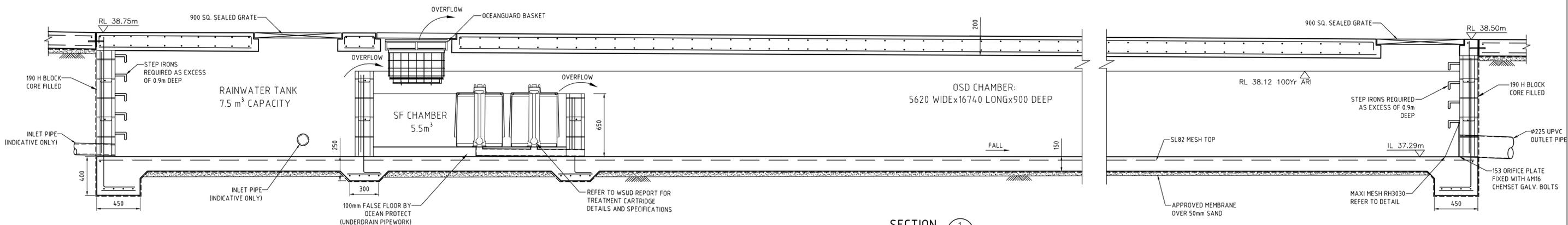
MESH SCREEN DETAIL

NOT TO SCALE
GALVANISED LYSAGHT RH3030MAXI MESH SCREEN IN GALVANISED STEEL FRAME WITH LIFTING HANDLES



CONNECTION TO EXISTING DRAINAGE LINE

NOT TO SCALE



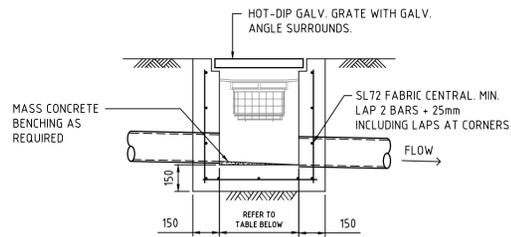
SECTION 1
SCALE 1:20

REFER TO OCEANPROTECT DESIGN FOR FULL WATER QUALITY DESIGN & DETAILS. CONTACT OCEANPROTECT FOR ANY QUESTIONS IN REGARDS TO WATER QUALITY DESIGN.

- 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

0 5 10 20 40MM
SCALE FOR PRINTING PURPOSE ONLY

<p>Planning & Environment</p>	<p>LOCKED BAG 5022 PARRAMATTA NSW 2124 PHONE No 1800 738 718</p> <p>www.dpie.nsw.gov.au/ land-and-housing-corporation</p>	<p>MSL Consulting Engineers Pty Limited ABN 72 903 080 591 ACN 142 291 165 Suite 102 - 62 Harbour St. Wollongong NSW PO Box 567 Dapto NSW p 02 4201 5247 e info@mslengineers.com.au w www.mslengineers.com.au</p>	<p>PROJECT MANAGER LAND & HOUSING CORPORATION PH (02) 9354 1876</p>	<p>STRUCTURAL / CIVIL / STORMWATER CONSULTANT MSL CONSULTING ENGINEERS PTY LTD PH (02) 4226 5247</p>	<p>BUSINESS PARTNER: Planning & Environment Land & Housing Corporation GREATER WESTERN SYDNEY REGION</p>	<p>PROJECT: SENIORS HOUSING DEVELOPMENT at 2-10 BIRCH STREET & 20 DEBRINCAT AVENUE NORTH ST MARYS NSW 2760</p>	<p>TITLE: OSD SECTION AND STORMWATER DETAILS</p>	<p>STATUS: DA ISSUE</p>
			<p>ARCHITECT DTA Architects Pty Ltd PH (02) 9601 1011</p>	<p>HYDRAULIC CONSULTANT ABEL & BROWN PTY LTD PH (02) 9709 5105</p>				

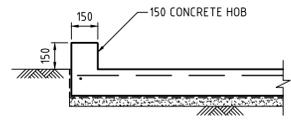


TYPICAL SURFACE INLET PIT -NATURAL SURFACE
NOT TO SCALE

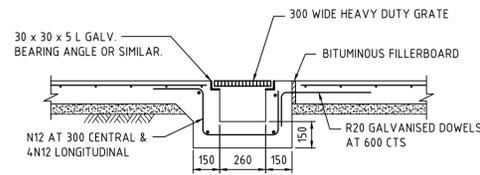
NOTES :
ALTERNATIVE PIT CONSTRUCTION MAY BE USED, SUBJECT TO THE ENGINEERS APPROVAL

Depth to Invert	Pit Internal Dimensions
<600	450x450
>600 <900	600x600
>900 <1200	600x900
>1200	900x900

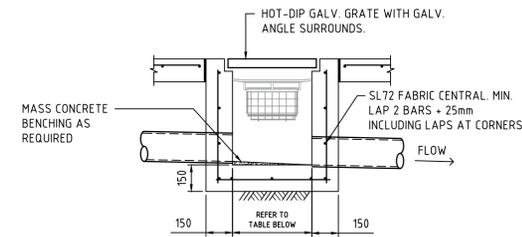
- PROVIDE STEP IRONS UNDER LID AT 300 CTS. TO COUNCIL SPECIFICATIONS WHERE PIT DEPTH IS DEEPER THAN 1000mm.
- REINFORCEMENT NOTED IS ONLY REQUIRED FOR PITS EXCEEDING 900 DEEP. SUBJECT TO COUNCIL REQUIREMENTS. PITS GREATER THAN 2500 mm DEEP WILL REQUIRE STRUCTURAL ENGINEER'S DESIGN.
- PROVIDE $\phi 90 \times 3000$ LONG SUBSOIL DRAINAGE STUB PIPE SURROUNDED WITH 100mm THICKNESS OF NOMINAL 20mm COARSE FILTER MATERIAL WRAPPED IN GEOTEXTILE FILTER FABRIC (BIDUM A24 OR APPROVED SIMILAR), TO BE PARALLEL TO UPSTREAM SIDE OF EACH INLET PIPE.
- ALTERNATIVE PIT CONSTRUCTION MAY BE USED SUBJECT TO THE ENGINEERS APPROVAL.
- CONCRETE STRENGTH $f'c = 32$ MPa



TYP DRIVEWAY 150 HOB DETAIL
SCALE 1:20



TYPICAL GRATED DRAIN DETAIL
SCALE: 1:20

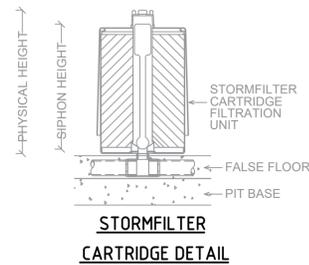


TYPICAL SURFACE INLET PIT -CONCRETE SURFACE
NOT TO SCALE

NOTES :
ALTERNATIVE PIT CONSTRUCTION MAY BE USED, SUBJECT TO THE ENGINEERS APPROVAL

Depth to Invert	Pit Internal Dimensions
<600	450x450
>600 <900	600x600
>900 <1200	600x900
>1200	900x900

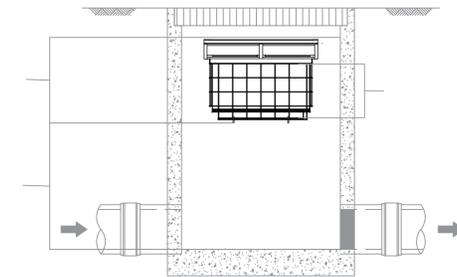
- PROVIDE STEP IRONS UNDER LID AT 300 CTS. TO COUNCIL SPECIFICATIONS WHERE PIT DEPTH IS DEEPER THAN 1000mm.
- REINFORCEMENT NOTED IS ONLY REQUIRED FOR PITS EXCEEDING 900 DEEP. SUBJECT TO COUNCIL REQUIREMENTS. PITS GREATER THAN 2500 mm DEEP WILL REQUIRE STRUCTURAL ENGINEER'S DESIGN.
- PROVIDE $\phi 90 \times 3000$ LONG SUBSOIL DRAINAGE STUB PIPE SURROUNDED WITH 100mm THICKNESS OF NOMINAL 20mm COARSE FILTER MATERIAL WRAPPED IN GEOTEXTILE FILTER FABRIC (BIDUM A24 OR APPROVED SIMILAR), TO BE PARALLEL TO UPSTREAM SIDE OF EACH INLET PIPE.
- ALTERNATIVE PIT CONSTRUCTION MAY BE USED SUBJECT TO THE ENGINEERS APPROVAL.
- CONCRETE STRENGTH $f'c = 32$ MPa



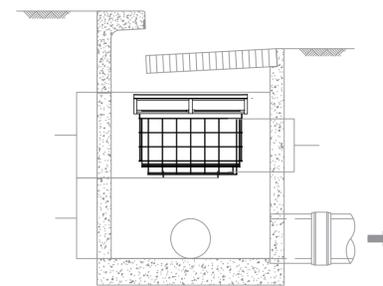
STORMFILTER CARTRIDGE DETAIL



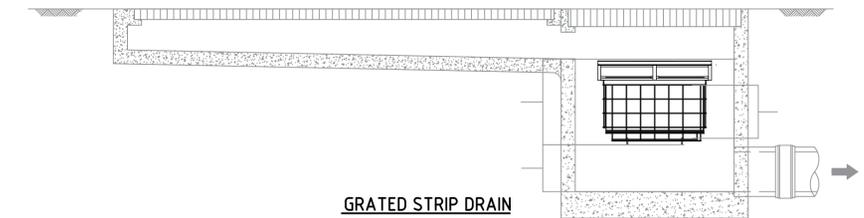
PIPE FLOW CONFIGURATION



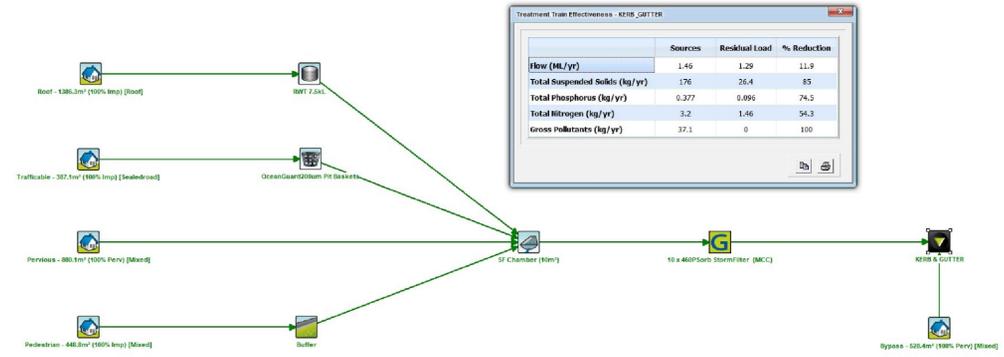
SURFACE FLOW CONFIGURATION



SURFACE FLOW CONFIGURATION

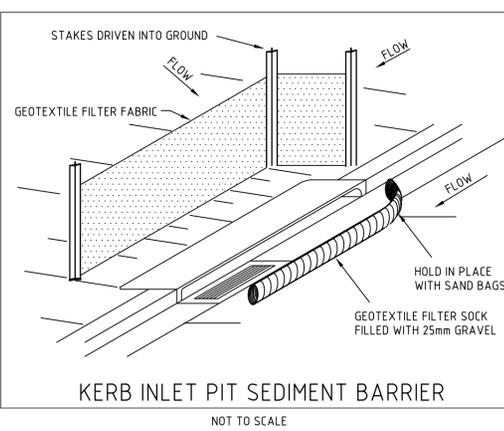
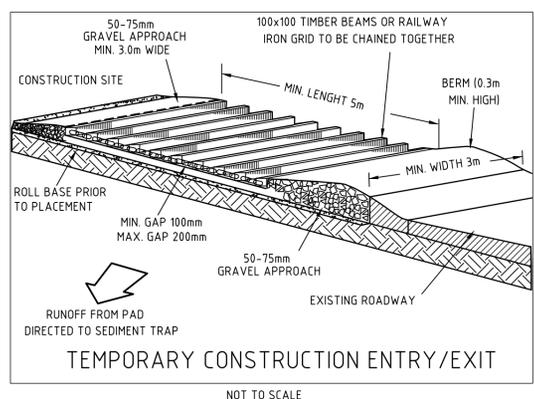
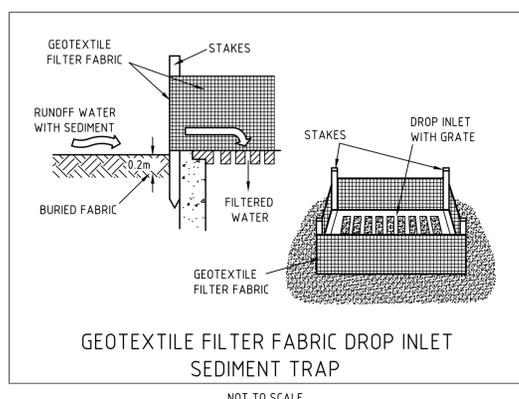


GRATED STRIP DRAIN CONFIGURATION



REFER TO OCEANPROTECT DESIGN FOR FULL WATER QUALITY DESIGN & DETAILS. CONTACT OCEANPROTECT FOR ANY QUESTIONS IN REGARDS TO WATER QUALITY DESIGN.

- 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

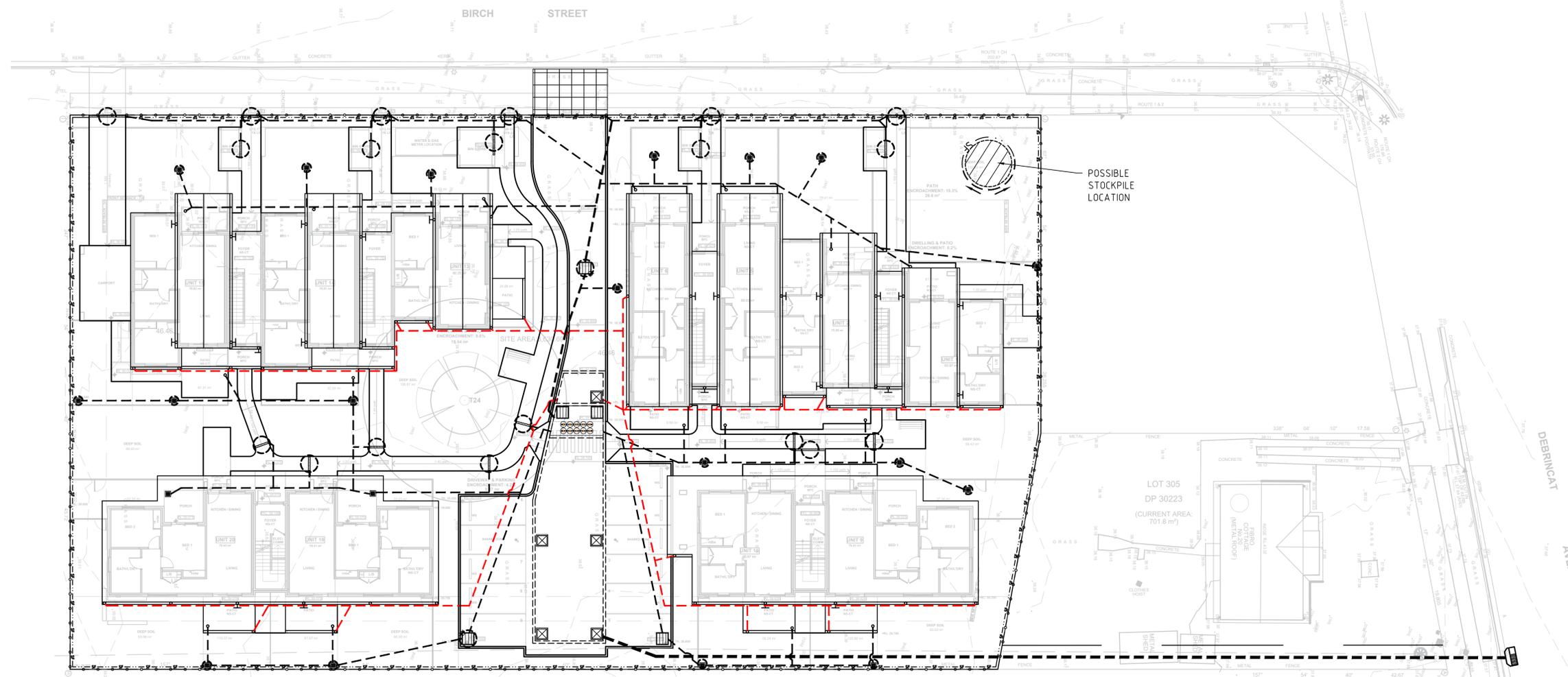
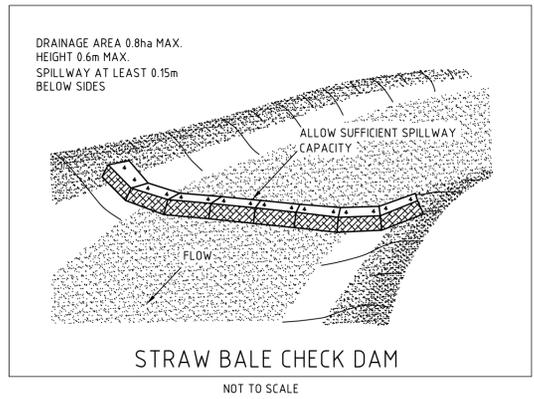
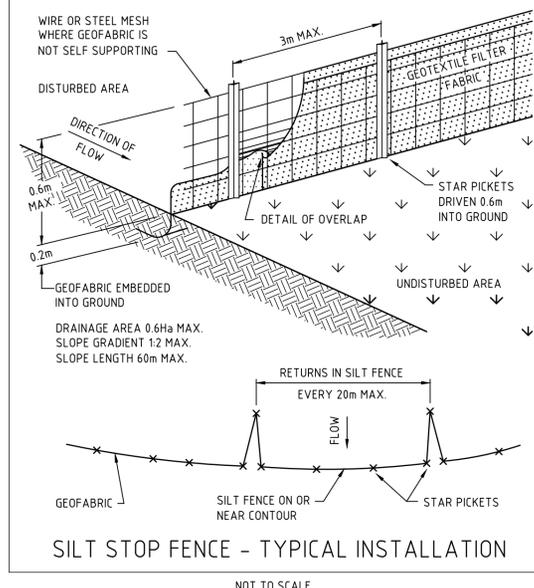


SEDIMENT LEGEND

- SITE ENTRANCE/EXIT
- SITE FENCE
- SEDIMENT FENCING
- SEDIMENT TRAP FOR KERB INLET
- GEOTEXTILE INLET FILTER
- CATCH DRAIN
- CATCH DAM



TOPSOIL STOCKPILE AREA. PROVIDE HAYBALE BARRIER ON DOWNSTREAM SIDE AND DIVERSION BANK ON UPSTREAM SIDE. IF STOCKPILE IS TO BE LEFT FOR MORE THAN 2 MONTHS, TEMPORARILY REVEGETATE FOR STABILISATION



1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
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 MSL CONSULTING ENGINEERS

0 5 10 20 40MM
SCALE FOR PRINTING PURPOSE ONLY

NSW GOVERNMENT
Planning & Environment

LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No 1800 738 718

www.dpie.nsw.gov.au/
land-and-housing-corporation

MSL Consulting Engineers Pty Limited
ABN 72 923 080 591
ACN 142 291 165
Suite 102 - 62 Harbour St. Wollongong NSW
PO Box 567, Dapto NSW
p 02 4226 5247
e info@mslengineers.com.au
w www.mslengineers.com.au

E	29.11.2023	ISSUED FOR D.A.
D	19.04.2023	ISSUED FOR D.A.
C	10.05.2023	ISSUED FOR D.A.
B	17.04.2023	ISSUED FOR D.A.
A	28.02.2023	CONCEPT PLAN
REV	DATE	NOTATION/AMENDMENT

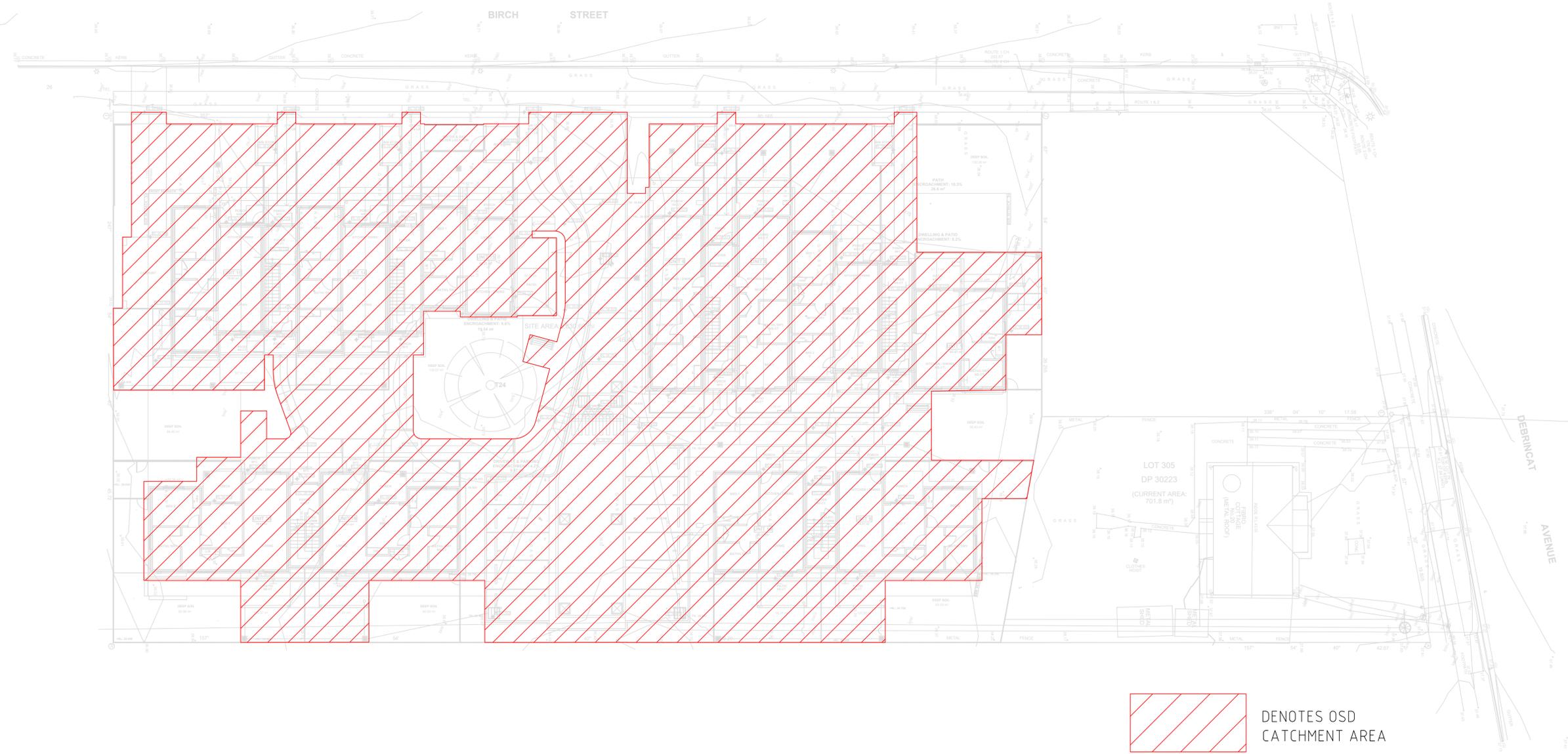
DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.

PROJECT MANAGER LAND & HOUSING CORPORATION PH (02) 9354 1876	STRUCTURAL / CIVIL / STORMWATER CONSULTANT MSL CONSULTING ENGINEERS PTY LTD PH (02) 4226 5247
ARCHITECT DTA Architects Pty Ltd Suite 102 - 62 Harbour St. Wollongong NSW PO Box 567, Dapto NSW p 02 4226 5247	HYDRAULIC CONSULTANT ABEL & BROWN PTY LTD PH (02) 9709 2105
ELECTRICAL / BASIX CONSULTANT GREENVIEW CONSULTING PTY LTD PH (02) 8544 1683	LANDSCAPE CONSULTANT RAY FUGGLO & ASSOCIATED PTY LTD PH 0412 294 712

NSW GOVERNMENT
Planning & Environment
Land & Housing Corporation
GREATER WESTERN SYDNEY REGION

PROJECT:
SENIORS HOUSING DEVELOPMENT
at
2-10 BIRCH STREET &
20 DEBRINCAT AVENUE
NORTH ST MARYS NSW 2760

TITLE: SEDIMENT CONTROL PLAN	STATUS: DA ISSUE
DATE: 29/11/23	SCALE: 1:200 @ A1
STAGE: B	PROJ: BGYZ
DRAWN: TP	JOB: 22084
CHECKED: MP	CERTIFIED: MP
FILE:	REV: E
PLOTTED: 29/11/2023	SHEET: 7 of 8



1. DO NOT SCALE FROM DRAWINGS. USE WRITTEN DIMENSIONS ONLY.
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 MSL CONSULTING ENGINEERS

0 5 10 20 40MM
SCALE FOR PRINTING
PURPOSE ONLY

Planning & Environment

LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No 1800 738 718

www.dpie.nsw.gov.au/
land-and-housing-corporation

MSL Consulting Engineers Pty Limited
ABN 72 903 080 991
ACN 142 291 160
Suite 102 - 62 Harbour St. Wollongong NSW
PO Box 567 Dapto NSW
p 02 4208 0247
e info@mslengineers.com.au
w www.mslengineers.com.au

E	29.11.2023	ISSUED FOR D.A.
D	19.04.2023	ISSUED FOR D.A.
C	10.05.2023	ISSUED FOR D.A.
B	17.04.2023	ISSUED FOR D.A.
A	28.02.2023	CONCEPT PLAN
REV	DATE	NOTATION/AMENDMENT

DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS ON SITE. FIGURED DIMENSIONS TAKE PRECEDENCE.

PROJECT MANAGER
LAND & HOUSING CORPORATION
PH (02) 9354 1876

ARCHITECT
DTA Architects Pty Ltd
PH (02) 9601 1011

ELECTRICAL / BASIX CONSULTANT
GREENVIEW CONSULTING PTY LTD
PH (02) 8544 1683

STRUCTURAL / CIVIL / STORMWATER CONSULTANT
MSL CONSULTING ENGINEERS PTY LTD
PH (02) 4226 5247

HYDRAULIC CONSULTANT
ABEL & BROWN PTY LTD
PH (02) 9799 2105

LANDSCAPE CONSULTANT
RAY FUGGLE & ASSOCIATED PTY LTD
PH 0412 294 712

Planning & Environment

Land & Housing Corporation
GREATER WESTERN SYDNEY REGION

PROJECT:
SENIORS HOUSING DEVELOPMENT

at
2-10 BIRCH STREET & 20 DEBRINCAT AVENUE
NORTH ST MARYS NSW 2760

TITLE:
OSD CATCHMENT PLAN

STATUS:
DA ISSUE

DATE:
29/11/23

SCALE:
1:200 @ A1

PROJ:
BGVZ

JOB:
22084

STAGE:
B

DRAWN:
TP

CHECKED:
MP

CERTIFIED:
MP

FILE:

PLOTTED:
29/11/2023

TYPE:
SW

SHEET:
8 of 8

REV:
E