

DATE BY

24.03.2020 TM

**PROJECT** CLIENT WARRIEWOOD RESIDENTIAL KNOWLES GROUP **DRAWING TITLE** PROPOSED SITE PLAN 25 - 27 WARRIEWOOD ROAD, NSW 2102 SCALE (@A1) PROJECT No. / DRAWING No. / DA - 020

**LEGEND** 

COUNCIL RECLAIMED CREEK CORRIDOR ZONE

25 METRE LANDSCAPED BUFFER ZONE

PROPOSED BUILDINGS -SUBJECT SITE

EXISTING NEIGHBOURING BUILDINGS

THIS PLAN IS TO BE READ IN CONJUNCTION WITH DEFERRED COMMENCEMENT CONSEN

DA NUMBER: DA2020/0579

(Activation of consent must be obtained from Northern Beaches Council)

THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE

PREPARED FOR APPROVED DEVELOPMENT CONSENT N0611/16 RELATING TO THE DEVELOPMENT OF THE

RESIDUAL SUPER LOT (LOT 2).

'DRAFT PLAN OF SUBDIVISION SUBJECT TO FINAL SURVEY'

**V** / **A ARCHITECTS** 

LEVEL 3, 377 LONSDALE STREET MELBOURNE VIC 3000

+61 3 8678 3300 / viaarchitects.com.au

DRAFT ISSUE FOR DEVELOPMENT APPLICATION 20.04.2020 MH DRAFT ISSUE FOR DEVELOPMENT APPLICATION 06.05.2020 TM ISSUE FOR DEVELOPMENT APPLICATION 28.05.2020 MH PROJECT REF C:\Users\MHondrogiannis\Documents\1510121 - ARCARE - WARRIEWOOD APT - DA PACKAGE\_CENTRAL\_19\_MHondrogiannis.rvt © COPYRIGHT 2019 VIA ARCHITECTS PTY LTD TIMESTAMP: 28/05/2020 11:45:42 AM

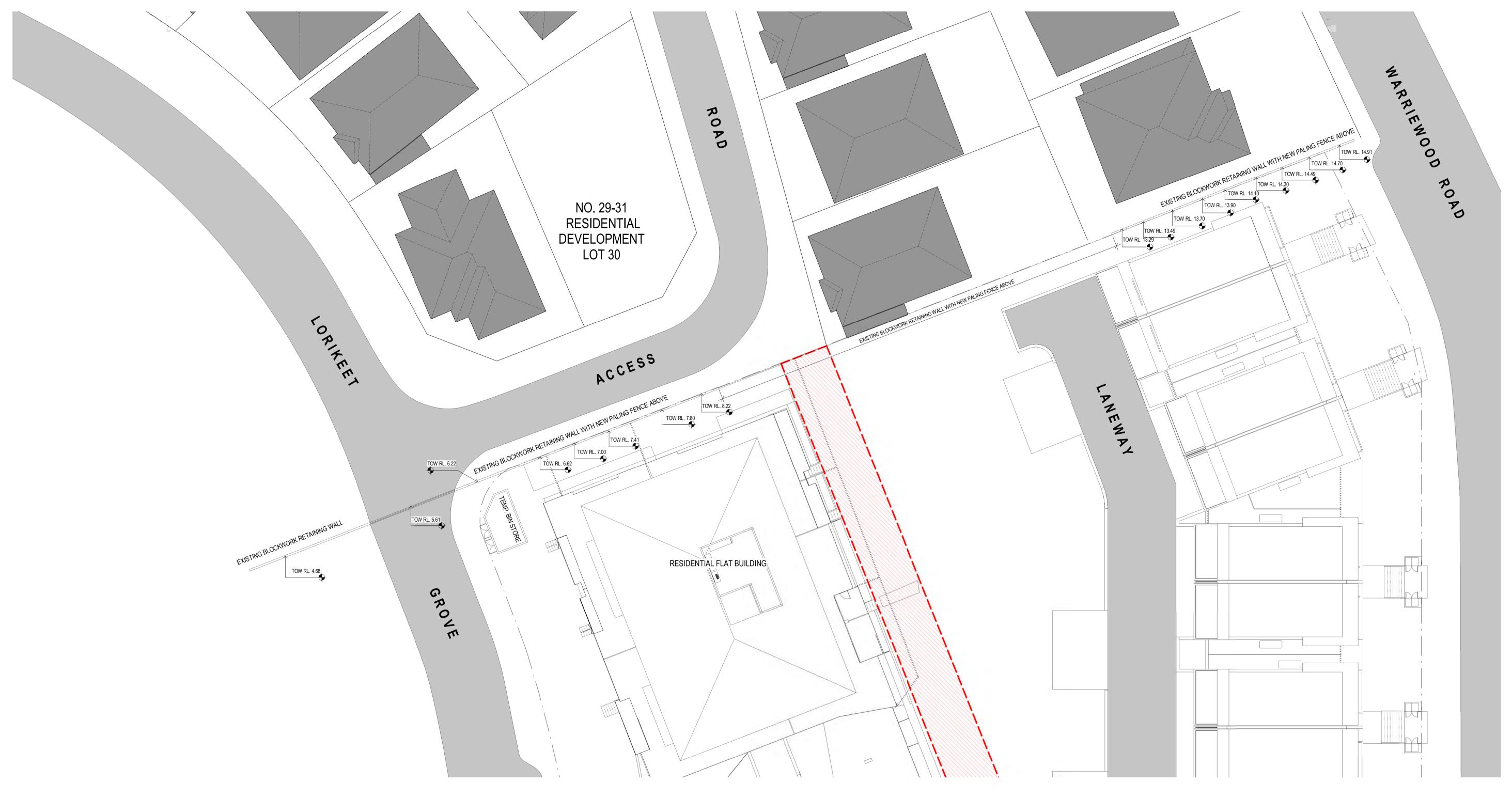
DESCRIPTION

DEVELOPMENT APPROVAL DRAFT

**DEVELOPMENT APPLICATION** NORTH POINT THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCING ANY WORK OR MAKING OF ANY SHOP DRAWINGS. FIGURED DIMENSIONS MUST BE USED IN PREFERENCE TO SCALING. SCALED DIMENSIONS MUST BE VERIFIED ON SITE. SHEET TO BE PRINTED IN COLOUR. THIS DRAWING IS COPYRIGHT AND REMAINS THE PROPERTY OF THE ARCHITECT.

DEVELOPMENT







LEVEL 3, 377 LONSDALE STREET MELBOURNE VIC 3000 +61 3 8678 3300 / viaarchitects.com.au

DESCRIPTION
DEVELOPMENT APPROVAL DRAFT DATE BY 24.03.2020 TM DRAFT ISSUE FOR DEVELOPMENT APPLICATION 20.04.2020 MH DRAFT ISSUE FOR DEVELOPMENT APPLICATION 06.05.2020 TM ISSUE FOR DEVELOPMENT APPLICATION 28.05.2020 MH PROJECT REF C:\Users\MHondrogiannis\Documents\1510121 - ARCARE - WARRIEWOOD APT - DA PACKAGE\_CENTRAL\_19\_MHondrogiannis.rvt

**DEVELOPMENT APPLICATION** NORTH POINT THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCING ANY WORK OR MAKING OF ANY SHOP DRAWINGS. FIGURED DIMENSIONS MUST BE USED IN PREFERENCE TO SCALING. SCALED DIMENSIONS MUST BE VERIFIED ON SITE. SHEET TO BE PRINTED IN COLOUR. THIS DRAWING IS COPYRIGHT AND REMAINS THE PROPERTY OF THE ARCHITECT.

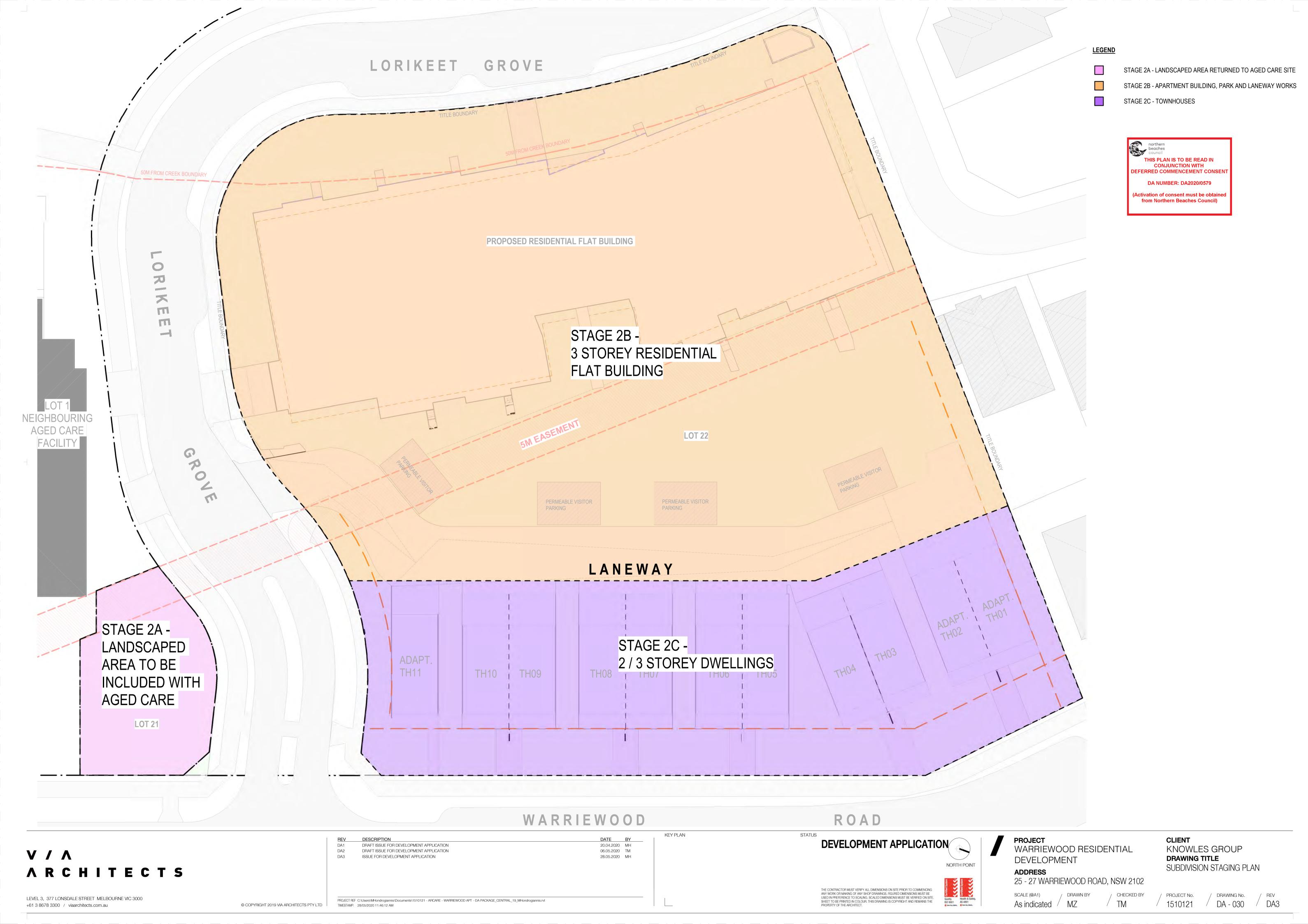
**PROJECT** WARRIEWOOD RESIDENTIAL DEVELOPMENT 25 - 27 WARRIEWOOD ROAD, NSW 2102

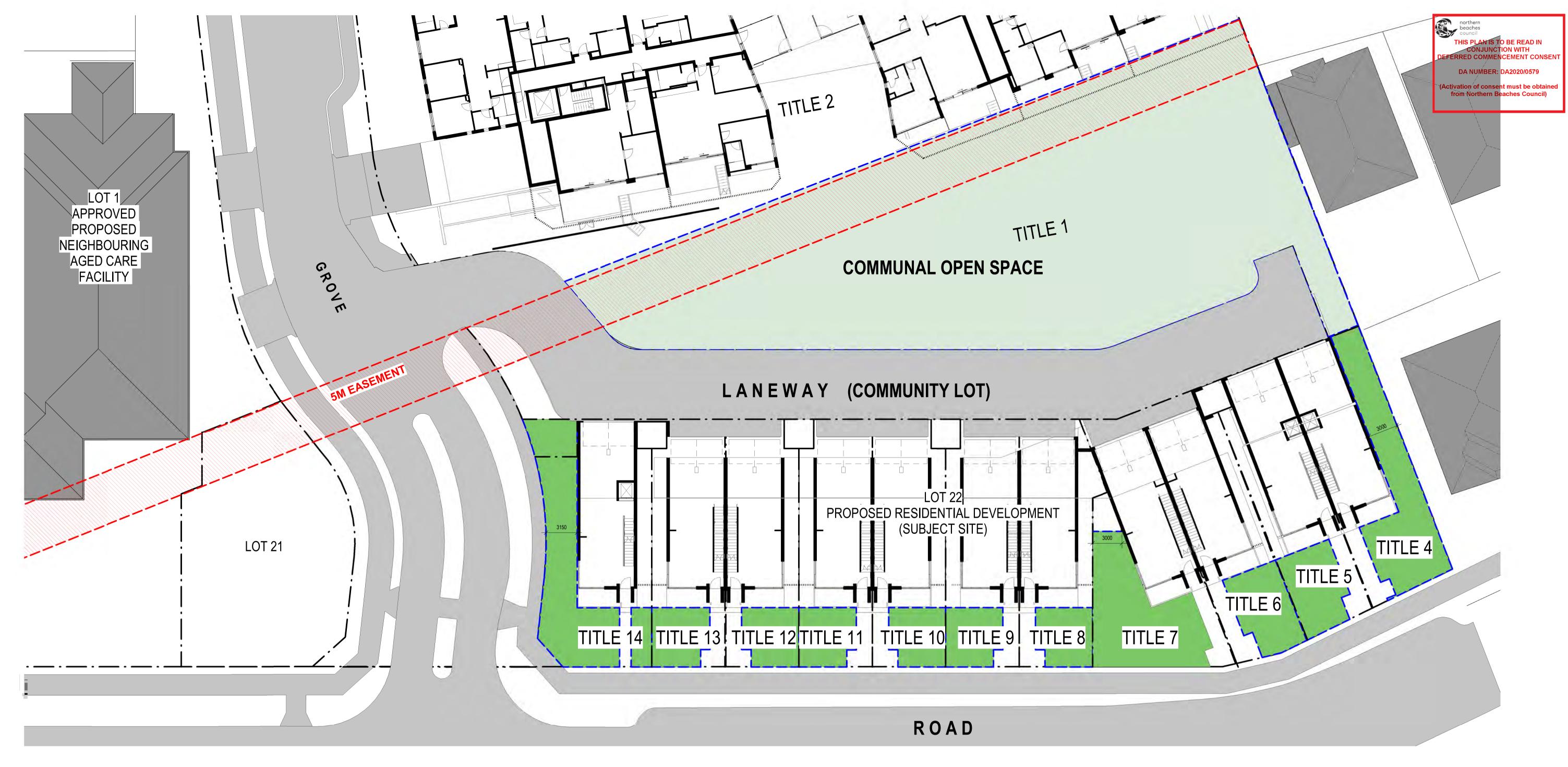
CLIENT KNOWLES GROUP **DRAWING TITLE** SITE PLAN - NORTHERN BOUNDARY

SCALE (@A1)

1510121 / DA - 021 / DA4

© COPYRIGHT 2019 VIA ARCHITECTS PTY LTD TIMESTAMP: 28/05/2020 11:45:57 AM





QA - 053 1:

LANDSCAPED AREA DIAGRAM - COMMUNITY TITLE ALLOTMENT
1: 200

# <u>LEGEND</u>



LANDSCAPED AREA OF MINIMUM DIMENSION 3-METRE WIDE (AS PER CLAUSE D16.5 OF DCP)

© COPYRIGHT 2019 VIA ARCHITECTS PTY LTD



COMMUNAL OPEN SPACE

LANDSCAPED AREA REQUIRED = 25% OF TOTAL SITE AREA

| LANDSCAPED AREA SCHEDULE - COMMUNITY TITLES |   |                            |   |  |  |  |  |
|---|---|----------------------------|---|--|--|--|--|
| TITLE NUMBER                                | TOTAL LANDSCAPED AREA PER<br>TITLE (M2) | TITLE TOTAL SITE AREA (M2) | PERCENTAGE OF LANDSCAPED<br>AREA PROVIDED (%) |  |  |  |  |
| 4   | 111                                     | 241                        | 46  |  |  |  |  |
| 5   | 47                                      | 200                        | 23.5  |  |  |  |  |
| 6   | 49                                      | 203                        | 24.1  |  |  |  |  |
| 7   | 108                                     | 246                        | 43.9  |  |  |  |  |
| 8   | 33                                      | 185                        | 17.8  |  |  |  |  |
| 9   | 33                                      | 182                        | 18.1  |  |  |  |  |
| 10  | 33                                      | 182                        | 18.1  |  |  |  |  |
| 11  | 33                                      | 182                        | 18.1  |  |  |  |  |
| 12  | 33                                      | 182                        | 18.1  |  |  |  |  |
| 13  | 33                                      | 182                        | 18.1  |  |  |  |  |
| 14  | 129                                     | 257                        | 50.1  |  |  |  |  |

KEY PLAN

NOTE:

COMMUNAL SHARED OPEN SPACE AND TOTAL LANDSCAPED AREA ACROSS ALL SITES AT 40% LANDSCAPED AREA (SEE PREVIOUS PAGE) TO BE CONSIDERED IN LIEU OF MEETING REQUIREMENT PER SITE.

V / A A R C H I T E C T S

ARCHITECTS

LEVEL 3, 377 LONSDALE STREET MELBOURNE VIC 3000

+61 3 8678 3300 / viaarchitects.com.au

REV DESCRIPTION

DATE BY

DA1 DEVELOPMENT APPROVAL DRAFT

DA2 DRAFT ISSUE FOR DEVELOPMENT APPLICATION

DA3 DRAFT ISSUE FOR DEVELOPMENT APPLICATION

DA4 ISSUE FOR DEVELOPMENT APPLICATION

28.05.2020 MH

DA5 MH

DA6 MH

DA7 MH

DA8 MH

DA8 MH

DA9 MH

DA9

 $PROJECT\ REF\ C:\ Vasers\ MHondrogiannis\ Documents\ 1510121\ -\ ARCARE\ -\ WARRIEWOOD\ APT\ -\ DA\ PACKAGE\_CENTRAL\_19\_MHondrogiannis.rvt$ 

TIMESTAMP: 28/05/2020 11:47:30 AM

DEVELOPMENT APPLICATION NORTH



PROJECT
WARRIEWOOD RESIDENTIAL
DEVELOPMENT
ADDRESS

DRAWING TITLE
SITE DIAGRAM - LANDSCAPED AREA

KNOWLES GROUP

CLIENT

25 - 27 WARRIEWOOD ROAD, NSW 2102

SCALE (@A1) / DRAWN BY / CHECKED BY / PROJECT No. / DRAWING No. As indicated / KC / TM / 1510121 / DA - 053



**V** / **A ARCHITECTS** 

LEVEL 3, 377 LONSDALE STREET MELBOURNE VIC 3000

+61 3 8678 3300 / viaarchitects.com.au

ISSUE FOR STRADA REVIEW 18.05.2020 MH ISSUE FOR DEVELOPMENT APPLICATION 28.05.2020 MH ISSUE FOR WASTE UPDATE 12.08.2020 MH PROJECT REF C:\Users\MHondrogiannis\Documents\1510121 - ARCARE - WARRIEWOOD APT - DA PACKAGE\_CENTRAL\_19\_MHondrogiannis.rvt

25 - 27 WARRIEWOOD ROAD, NSW 2102

/ CHECKED BY

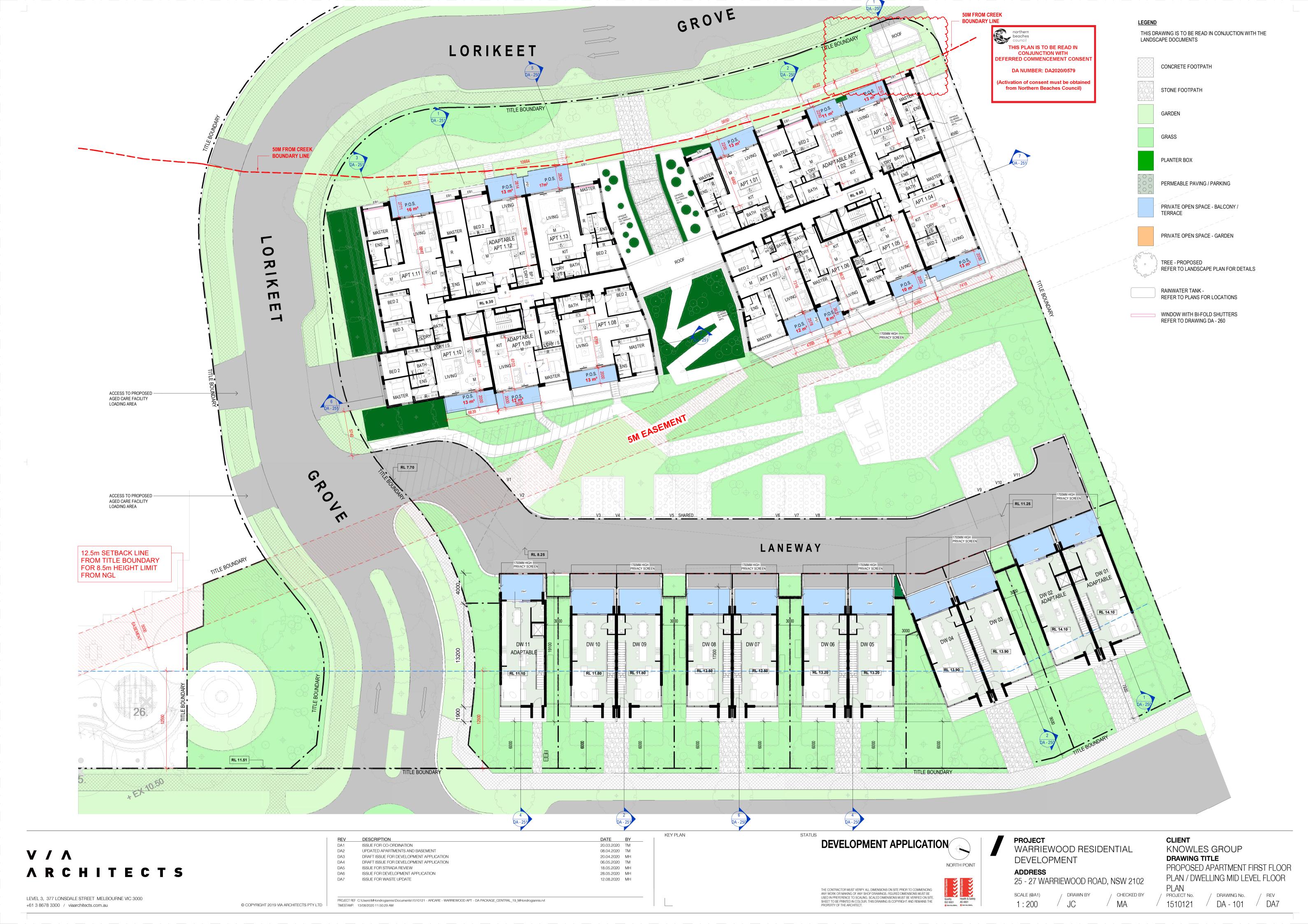
SCALE (@A1)

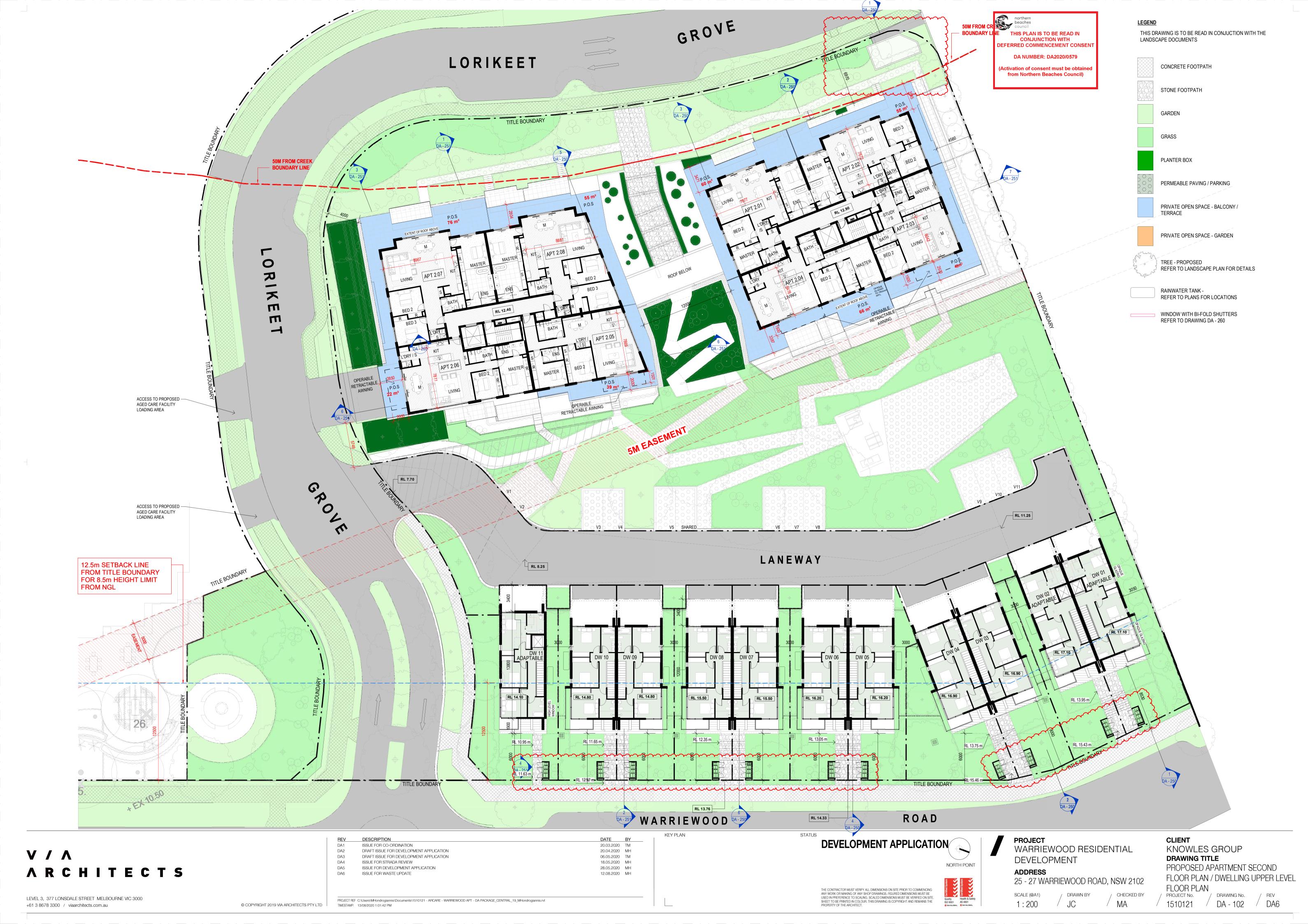
1:200

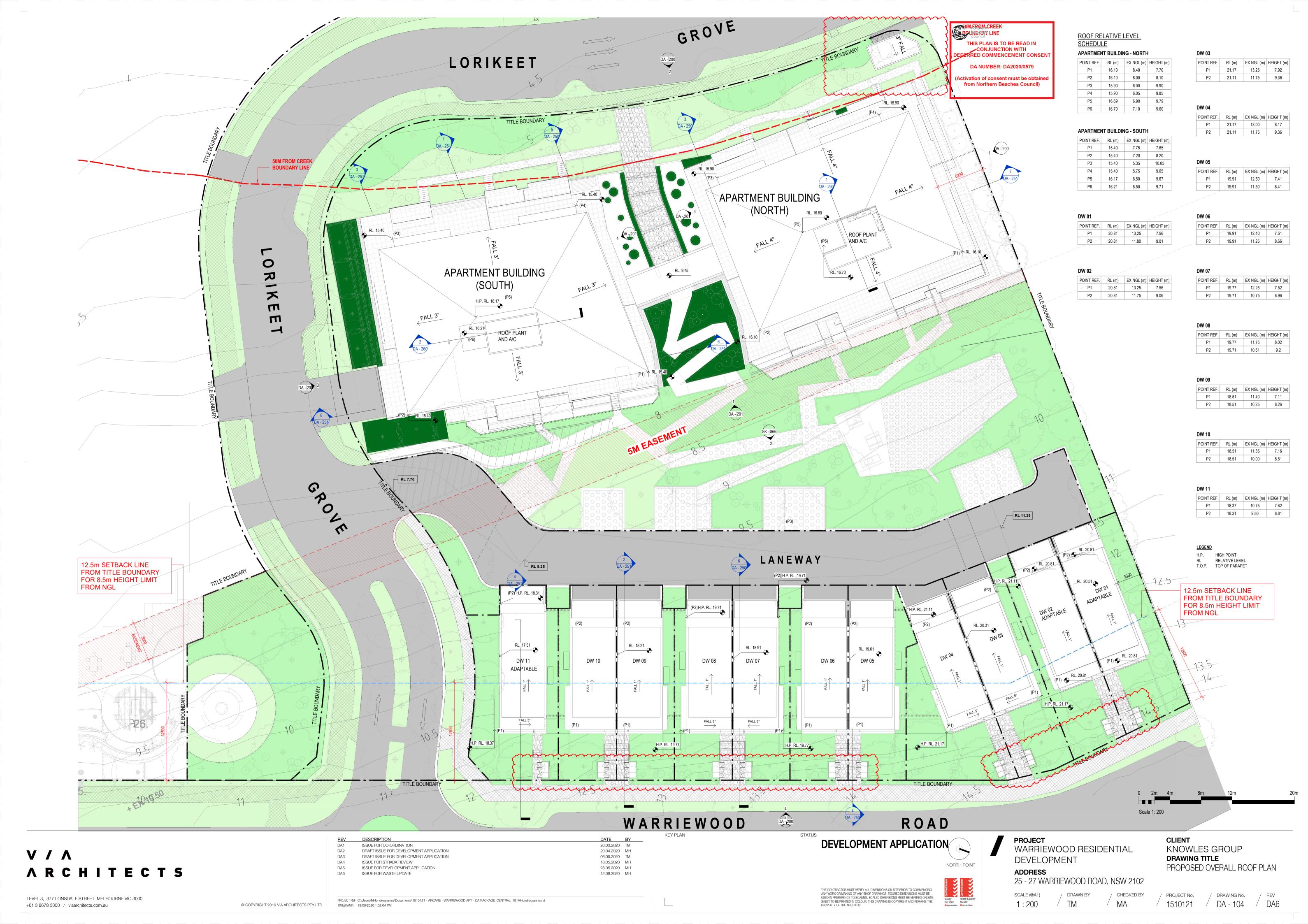
PROPOSED APARTMENT GROUND FLOOR PLAN / DWELLING LOWER LEVEL FLOOR PLAN PROJECT No. / DRAWING No. / DA - 100 / DA7

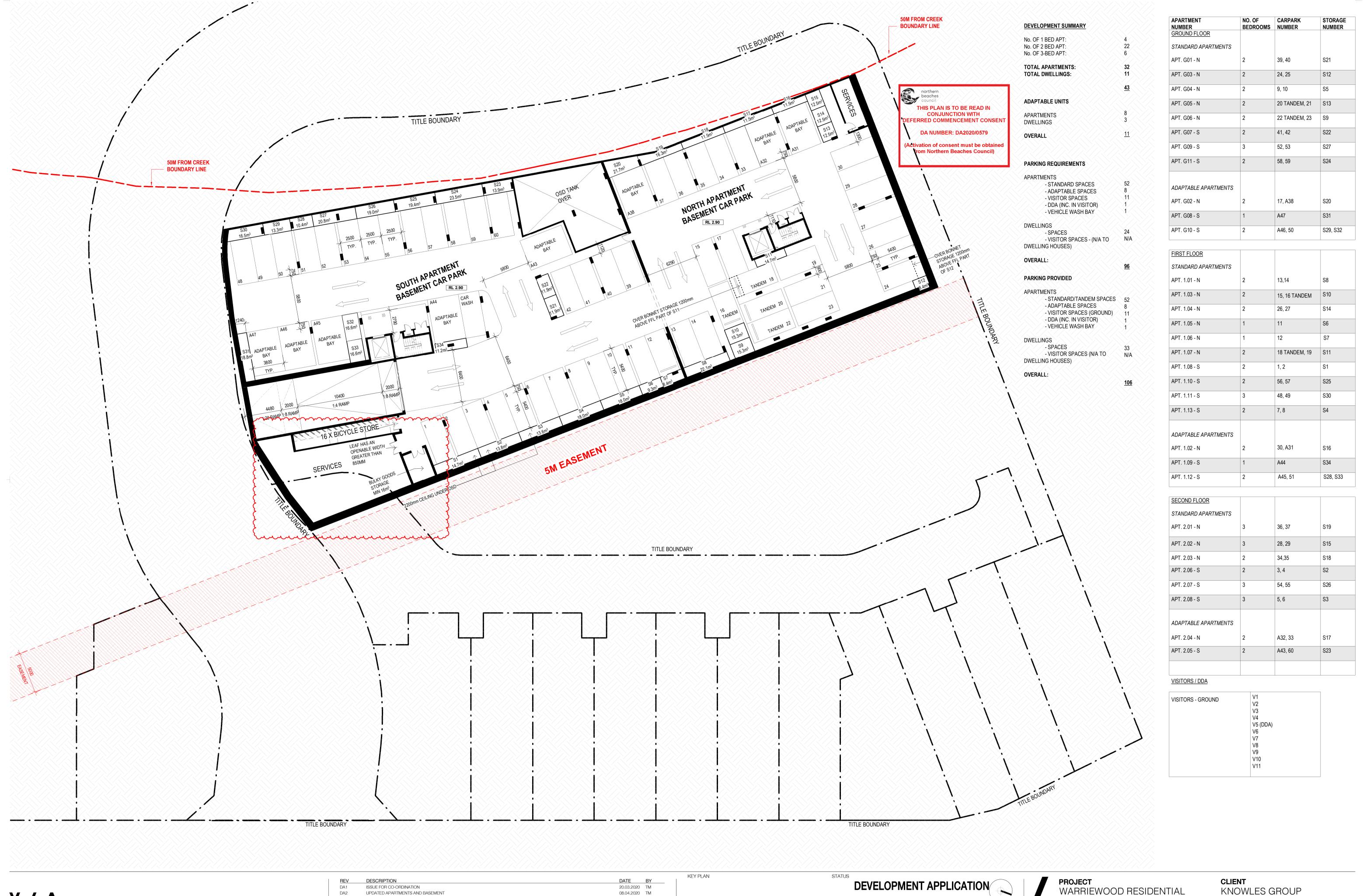
© COPYRIGHT 2019 VIA ARCHITECTS PTY LTD TIMESTAMP: 13/08/2020 11:50:11 AM

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCING ANY WORK OR MAKING OF ANY SHOP DRAWINGS. FIGURED DIMENSIONS MUST BE USED IN PREFERENCE TO SCALING. SCALED DIMENSIONS MUST BE VERIFIED ON SITE. SHEET TO BE PRINTED IN COLOUR. THIS DRAWING IS COPYRIGHT AND REMAINS THE PROPERTY OF THE ARCHITECT.









V / A A R C H I T E C T S

© COPYRIGHT 2019 VIA ARCHITECTS PTY LTD

TIMESTAMP: 17/08/2020 5:09:35 PM

LEVEL 3, 377 LONSDALE STREET MELBOURNE VIC 3000

+61 3 8678 3300 / viaarchitects.com.au

DEVELOPMENT APPLICATION

NORTH POINT

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCING ANY WORK OR MAKING OF ANY SHOP DRAWINGS. FIGURED DIMENSIONS MUST BE USED IN PREFERENCE TO SCALING. SCALED DIMENSIONS MUST BE VERIFIED ON SITE. SHEET TO BE PRINTED IN COLOUR. THIS DRAWING IS COPYRIGHT AND REMAINS THE PROPERTY OF THE ARCHITECT.

DEVELOPMENT

ADDRESS

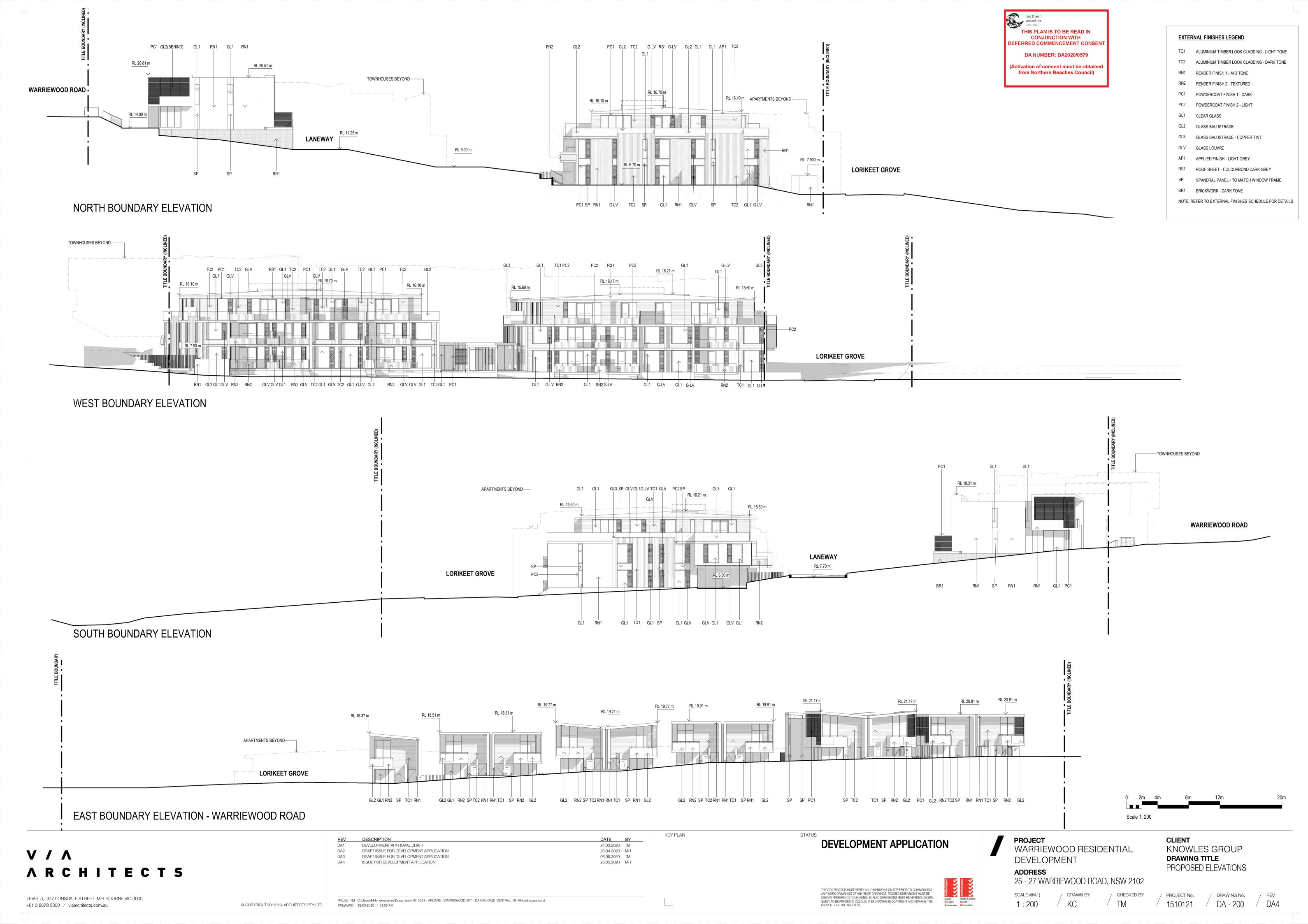
25 - 27 WARRIEWOOD ROAD, NSW 2102

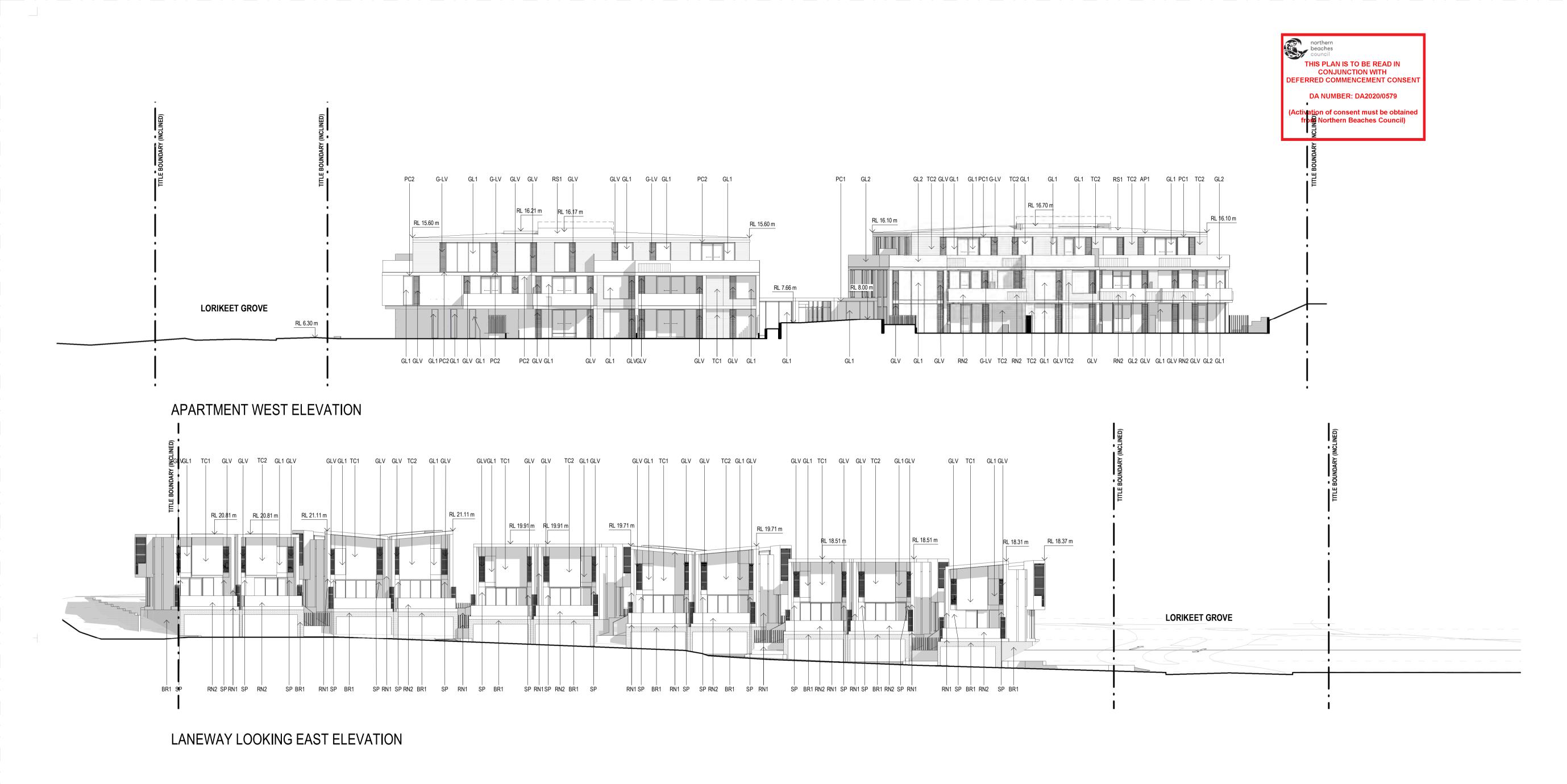
CLIENT
KNOWLES GROUP
DRAWING TITLE
OVERALL FLOOR PLAN - BASEMENT

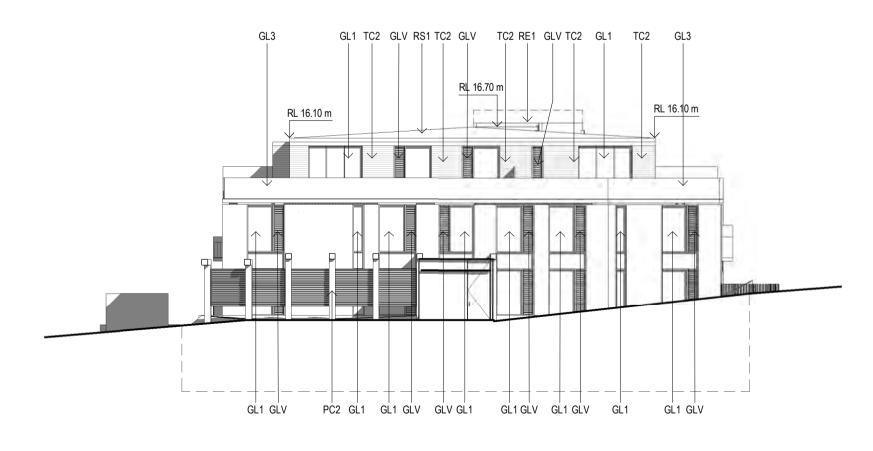
SCALE (@A1) / DRAWN BY / CHECKED BY / PROJECT N
1:200 / JC / MA / 151012

/ PROJECT No. / DRAWING No. / REV DA - 105 DA7







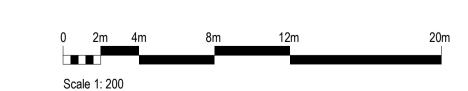


GL3 G-LV G-LV SP GL1 SP G-LV GL1 G-LV G-LV RS1 G-LV GL1 PC2 GL3

RL 15.60 m

APT ENTRY COURTYARD ELEVATION 3

APT ENTRY COURTYARD ELEVATION 4



EXTERNAL FINISHES LEGEND

RN1 RENDER FINISH 1 - MID TONE
RN2 RENDER FINISH 2 - TEXTURED

PC1 POWDERCOAT FINISH 1 - DARK
PC2 POWDERCOAT FINISH 2 - LIGHT

GL3 GLASS BALUSTRADE - COPPER TINT

RS1 ROOF SHEET - COLOURBOND DARK GREY

SP SPANDRAL PANEL - TO MATCH WINDOW FRAME

NOTE: REFER TO EXTERNAL FINISHES SCHEDULE FOR DETAILS

AP1 APPLIED FINISH - LIGHT GREY

BR1 BRICKWORK - DARK TONE

GL1 CLEAR GLASS

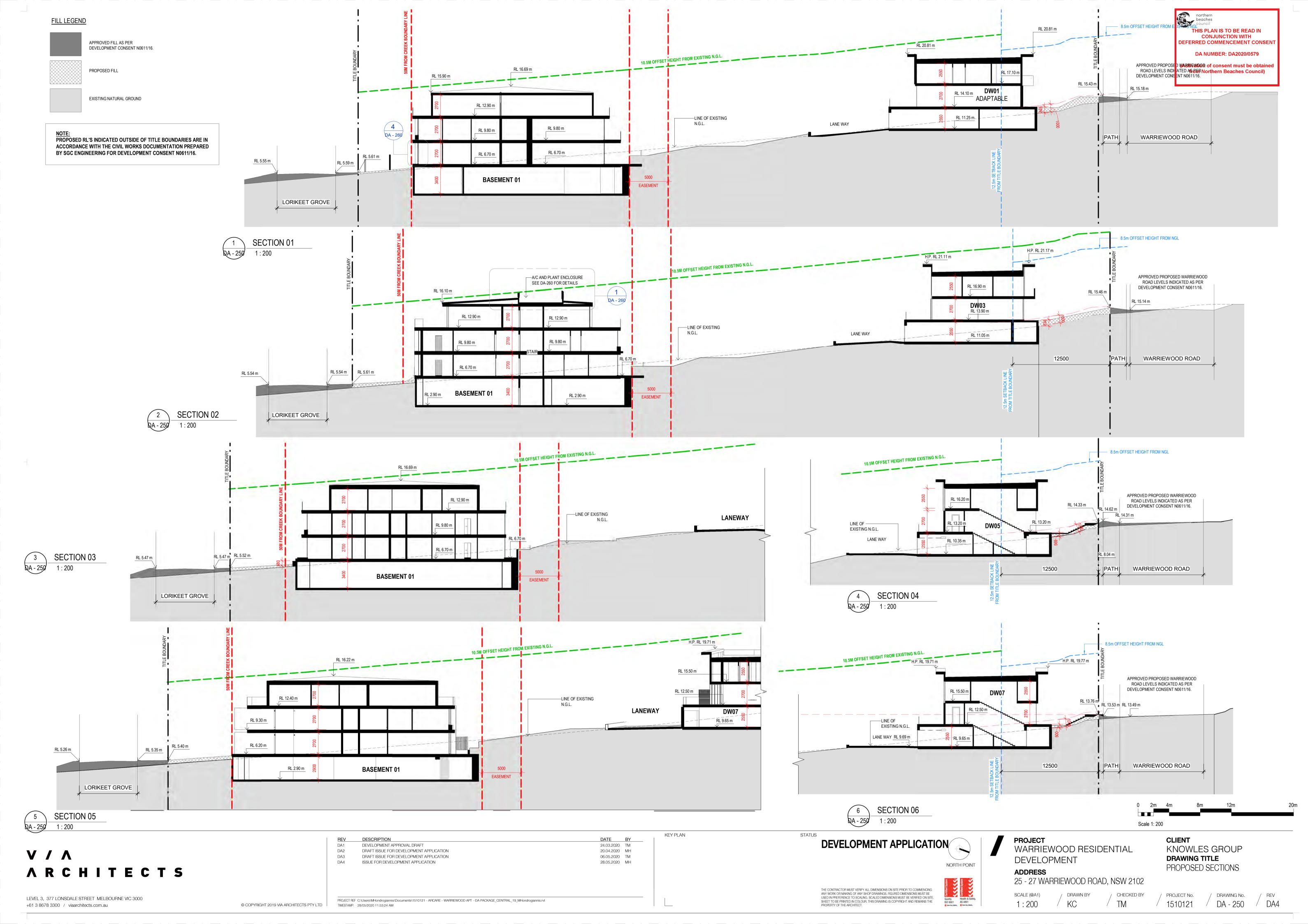
GLV GLASS LOUVRE

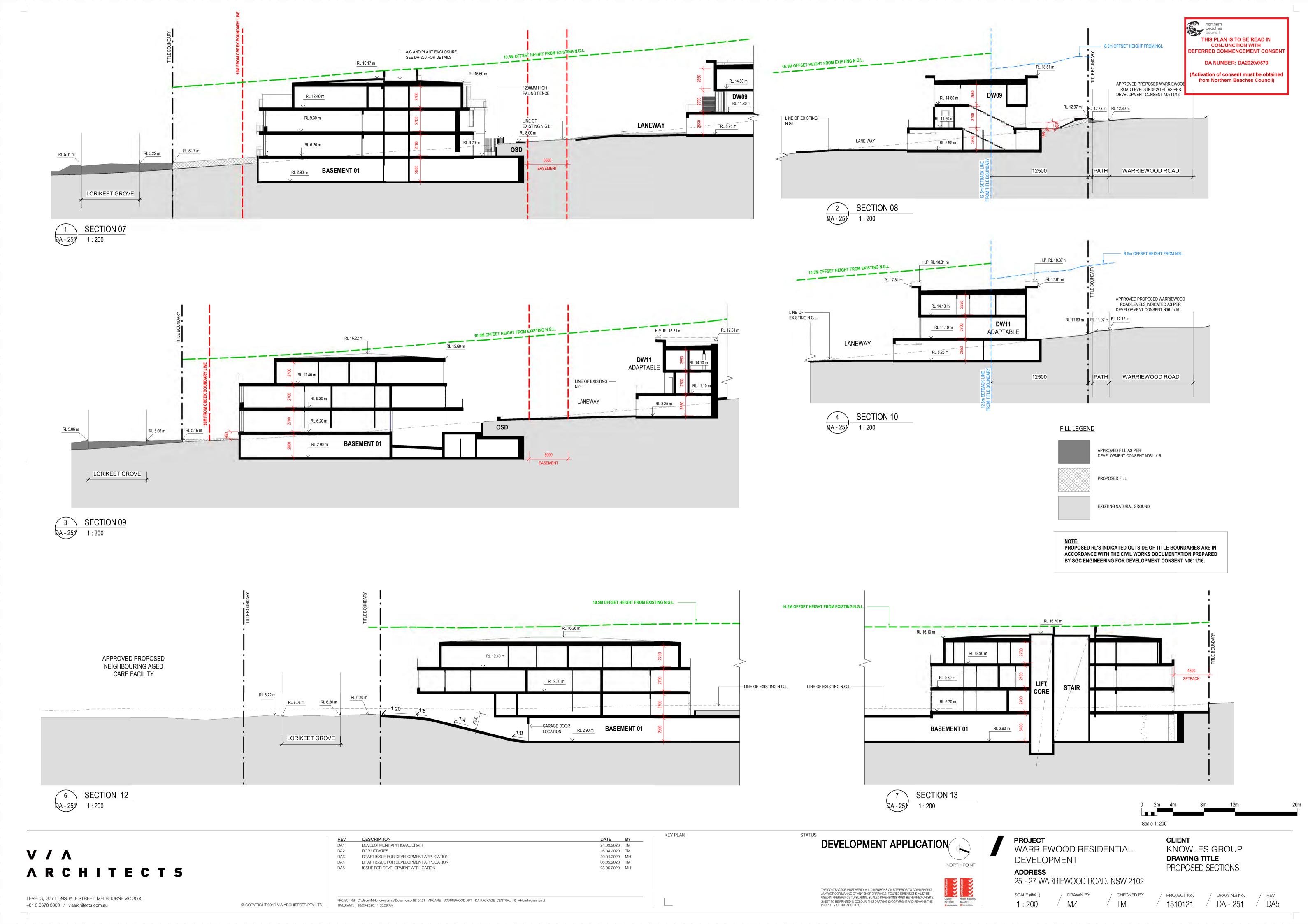
GL2 GLASS BALUSTRADE

TC1 ALUMINIUM TIMBER LOOK CLADDING - LIGHT TONE

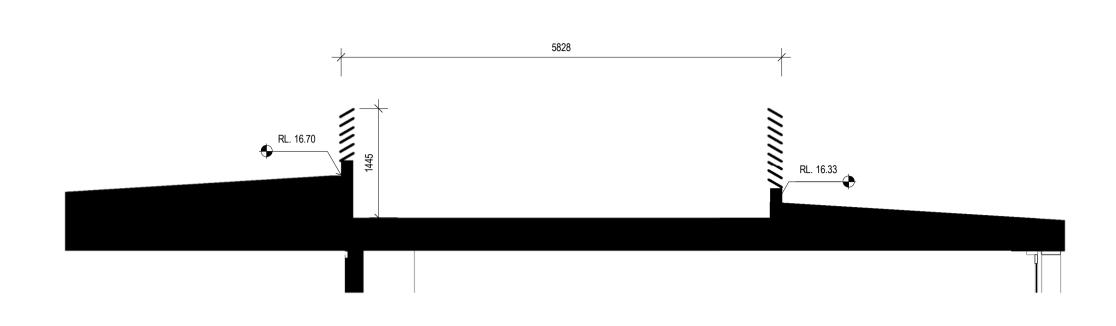
TC2 ALUMINIUM TIMBER LOOK CLADDING - DARK TONE

DATE BY **PROJECT** CLIENT **DEVELOPMENT APPLICATION** DEVELOPMENT APPROVAL DRAFT 24.03.2020 TM WARRIEWOOD RESIDENTIAL KNOWLES GROUP **V** / **A** DRAFT ISSUE FOR DEVELOPMENT APPLICATION 20.04.2020 MH DRAFT ISSUE FOR DEVELOPMENT APPLICATION 06.05.2020 TM **DRAWING TITLE** DEVELOPMENT ISSUE FOR DEVELOPMENT APPLICATION 28.05.2020 MH PROPOSED ELEVATIONS **ARCHITECTS** 25 - 27 WARRIEWOOD ROAD, NSW 2102 THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCING ANY WORK OR MAKING OF ANY SHOP DRAWINGS. FIGURED DIMENSIONS MUST BE USED IN PREFERENCE TO SCALING. SCALED DIMENSIONS MUST BE VERIFIED ON SITE. SHEET TO BE PRINTED IN COLOUR. THIS DRAWING IS COPYRIGHT AND REMAINS THE PROPERTY OF THE ARCHITECT. / DRAWING No. LEVEL 3, 377 LONSDALE STREET MELBOURNE VIC 3000 PROJECT REF C:\Users\MHondrogiannis\Documents\1510121 - ARCARE - WARRIEWOOD APT - DA PACKAGE\_CENTRAL\_19\_MHondrogiannis.rvt / DA - 201 +61 3 8678 3300 / viaarchitects.com.au © COPYRIGHT 2019 VIA ARCHITECTS PTY LTD

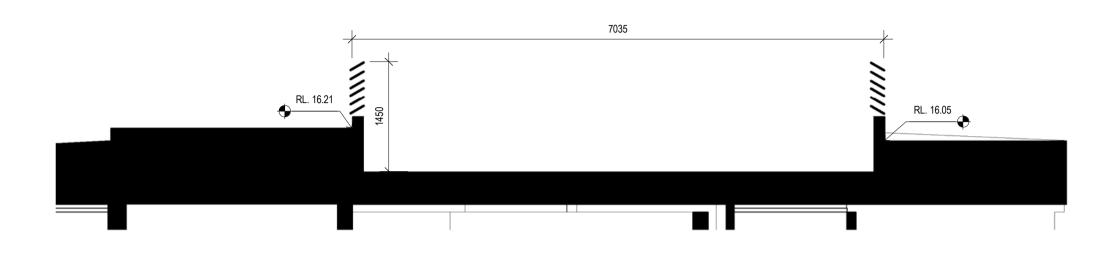












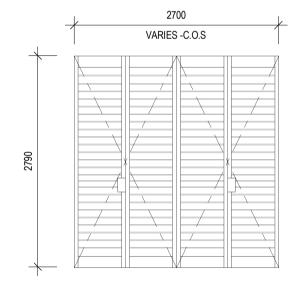
| 2        | ROOF PLANT SECTION DETAIL- SOUTH |
|----------|----------------------------------|
| QA - 260 | 1:50                             |

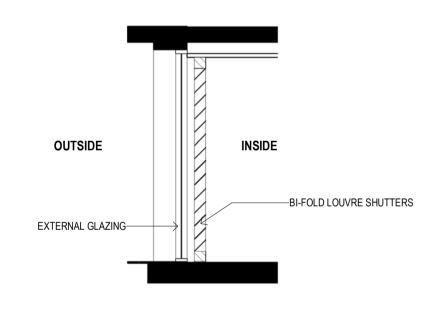
KEY PLAN

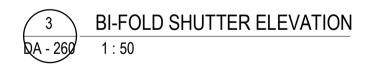
DATE BY

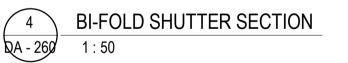
24.03.2020 TM

06.05.2020 TM









DESCRIPTION
DEVELOPMENT APPROVAL DRAFT

DRAFT ISSUE FOR DEVELOPMENT APPLICATION

**V** / **A ARCHITECTS** 

ISSUE FOR DEVELOPMENT APPLICATION 28.05.2020 MH PROJECT REF C:\Users\MHondrogiannis\Documents\1510121 - ARCARE - WARRIEWOOD APT - DA PACKAGE\_CENTRAL\_19\_MHondrogiannis.rvt © COPYRIGHT 2019 VIA ARCHITECTS PTY LTD TIMESTAMP: 28/05/2020 11:53:51 AM

**DEVELOPMENT APPLICATION** 

THE CONTRACTOR MUST VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCING ANY WORK OR MAKING OF ANY SHOP DRAWINGS, FIGURED DIMENSIONS MUST BE USED IN PREFERENCE TO SCALING. SCALED DIMENSIONS MUST BE VERIFIED ON SITE. SHEET TO BE PRINTED IN COLOUR. THIS DRAWING IS COPYRIGHT AND REMAINS THE PROPERTY OF THE ARCHITECT.

25 - 27 WARRIEWOOD ROAD, NSW 2102 SCALE (@A1)

**PROJECT** WARRIEWOOD RESIDENTIAL DEVELOPMENT

/ Author

/ CHECKED BY

/ Checker

CLIENT KNOWLES GROUP **DRAWING TITLE** SECTION DETAILS- ROOF PLANT & BI-FOLD SHUTTER

/ DRAWING No.

/ DA - 260 / DA3

## 6.0 MATERIALS

#### 6.01 Material Pallette



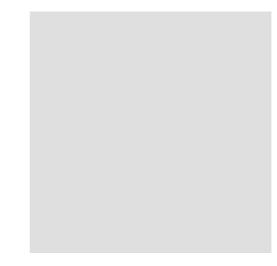
GL2- Glass Balustrade



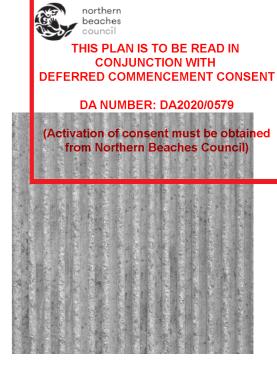
GL1 - Clear Glazing



GLV - Black Metal Louvre



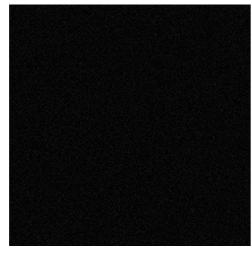
AP1 - Applied Finish - Light Grey



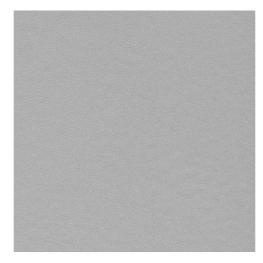
RN2 - Render Finish 2 - Textured (equal to or darker than Colorbond 'Windspray')



SP- Spandrel Panel - To Match Window Frame



PC1 - Powdercoat Finish 1 - Dark (Window Frames)



PC2 - Powdercoat Finish 2 - Light



RS1 - Roof Sheet - Colorbond Dark Grey (equal to or darker than Colorbond 'Monument')



TC2 - Aluminium Timber Look Cladding- Dark Tone



RN1- Render Finish 1 - Mid Tone (equal to or darker than Colorbond 'Windspray')



TC1 - Aluminium Timber Look Cladding - Light Tone



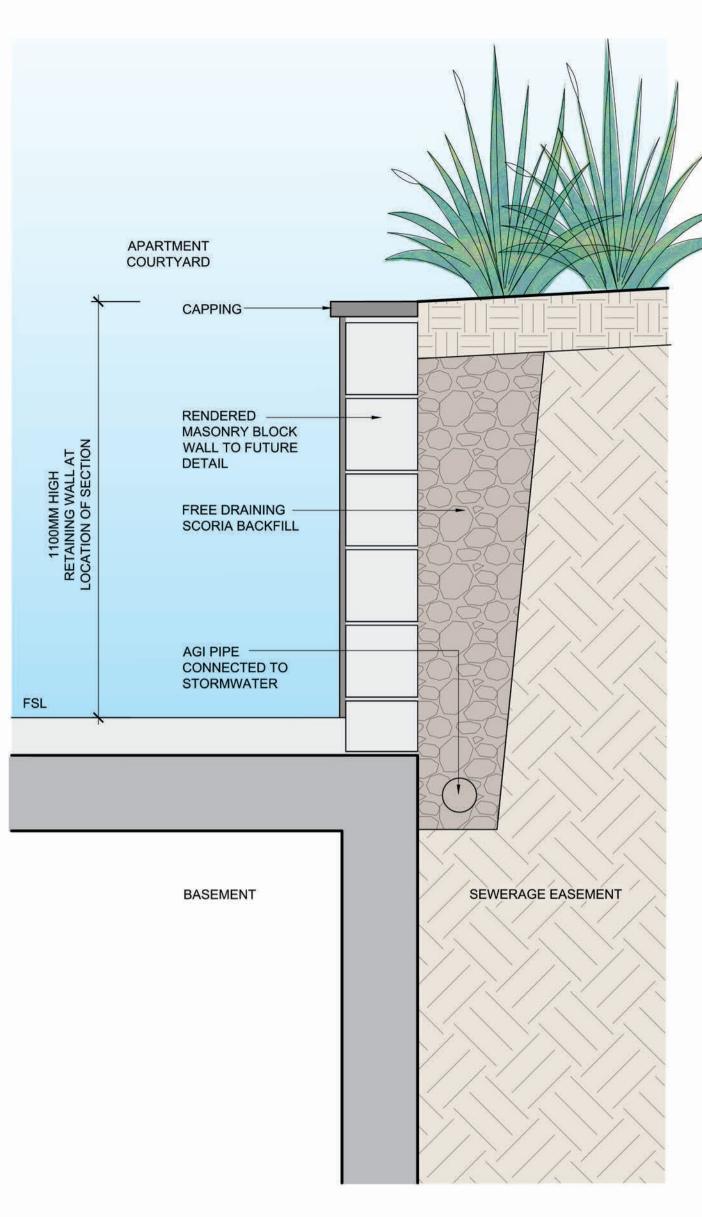
GL3- Glass Balustrade (copper tint)



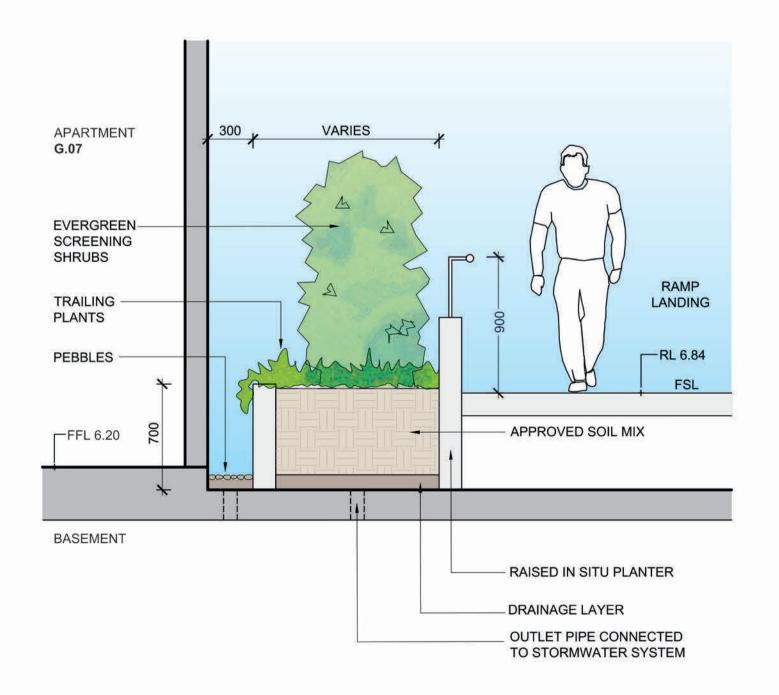
Rev: DA

BR1- Brickwork - Dark Tone

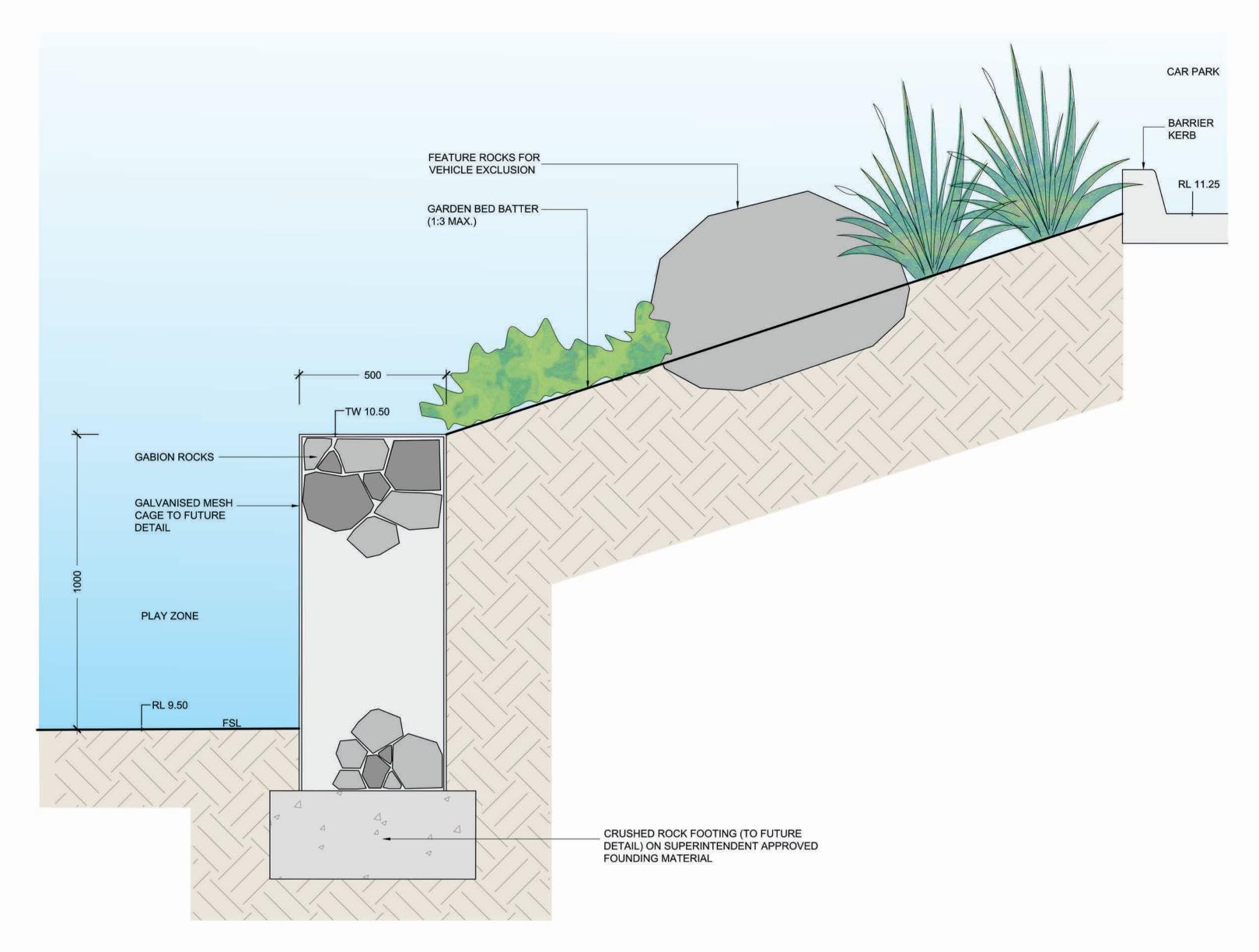




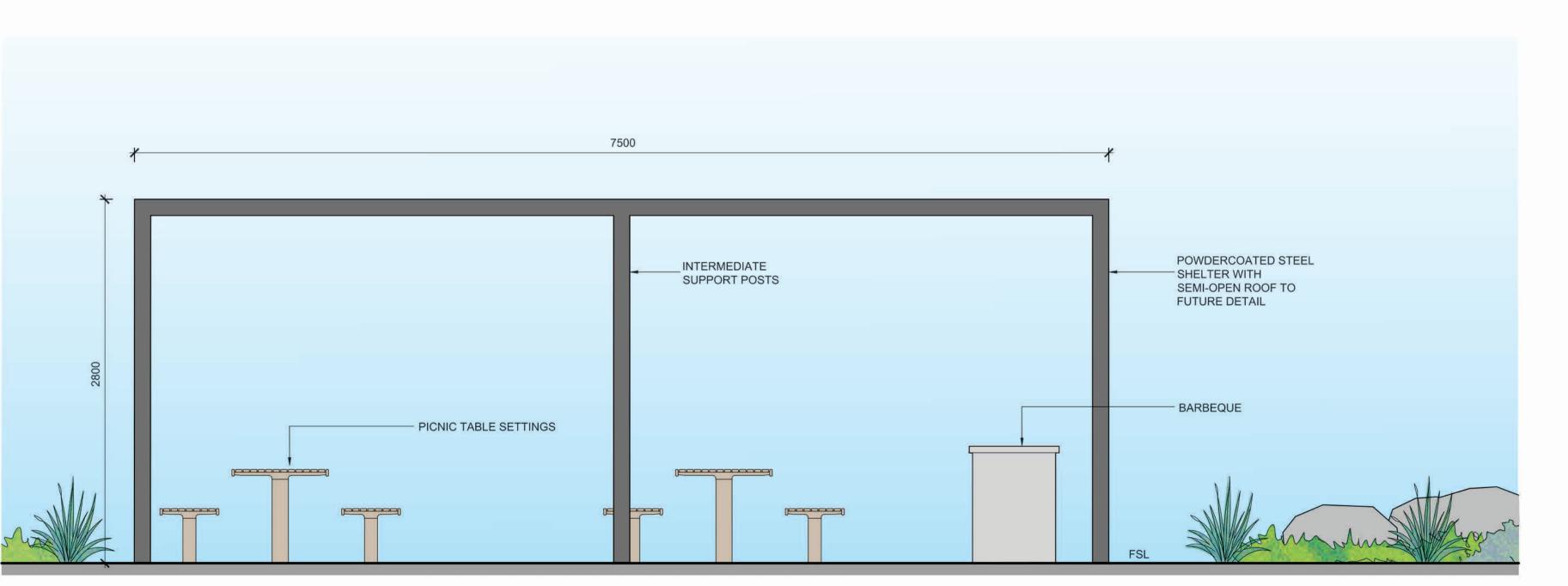
TYPICAL RETAINING WALL
SECTION A-A
1:10 @ A1



CENTRAL EASTERN COURTYARD PLANTER
SECTION C-C
1:25 @ A1



TYPICAL GABION WALL
SECTION B-B
1:10 @ A1



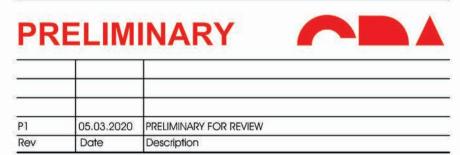
BBQ SHELTER
ELEVATION D-D
1:25 @ A1



THIS PLAN IS TO BE READ IN
CONJUNCTION WITH
DEFERRED COMMENCEMENT CONSENT

DA NUMBER: DA2020/0579

(Activation of consent must be obtained from Northern Beaches Council)

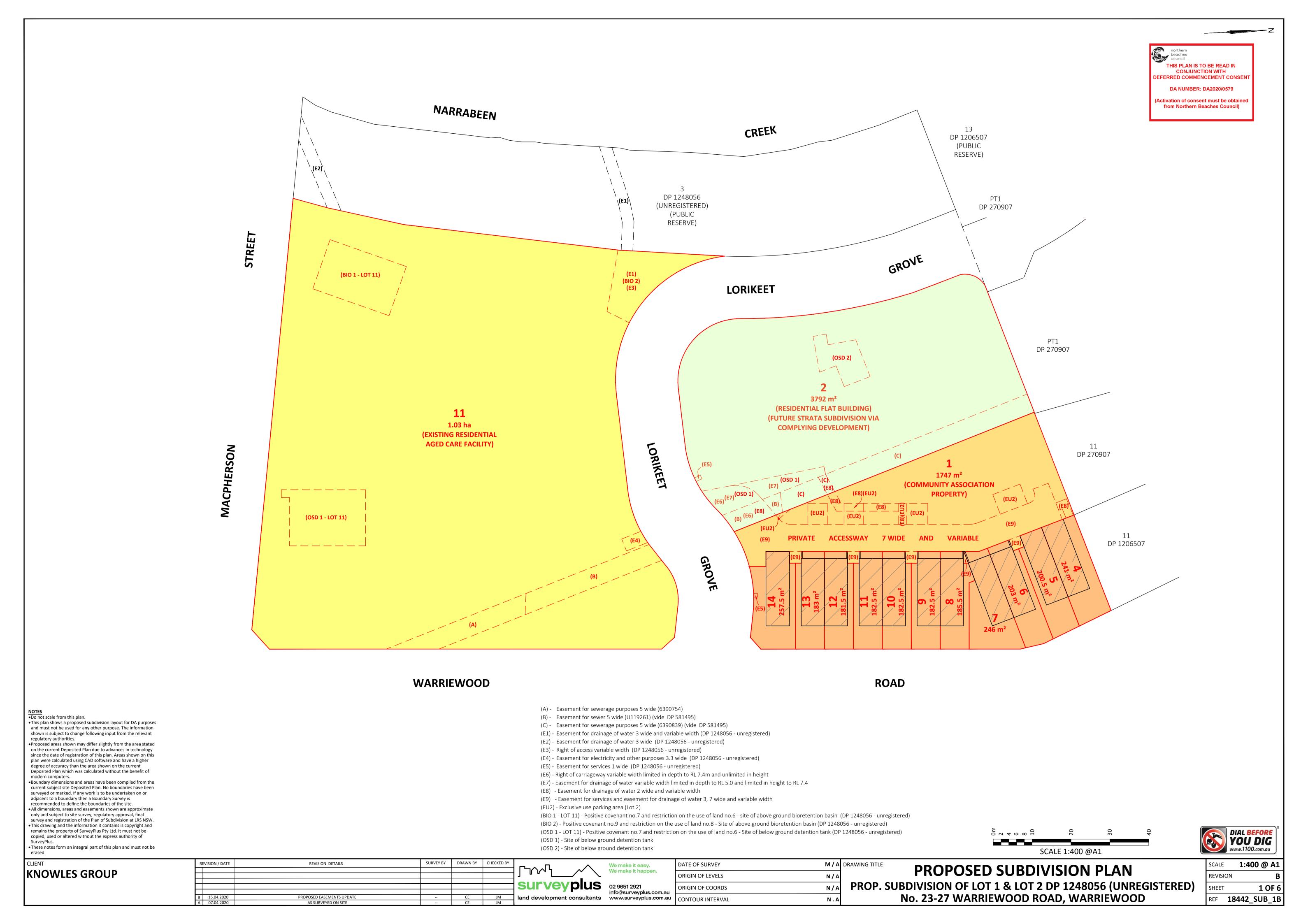


KNOWLES GROUP

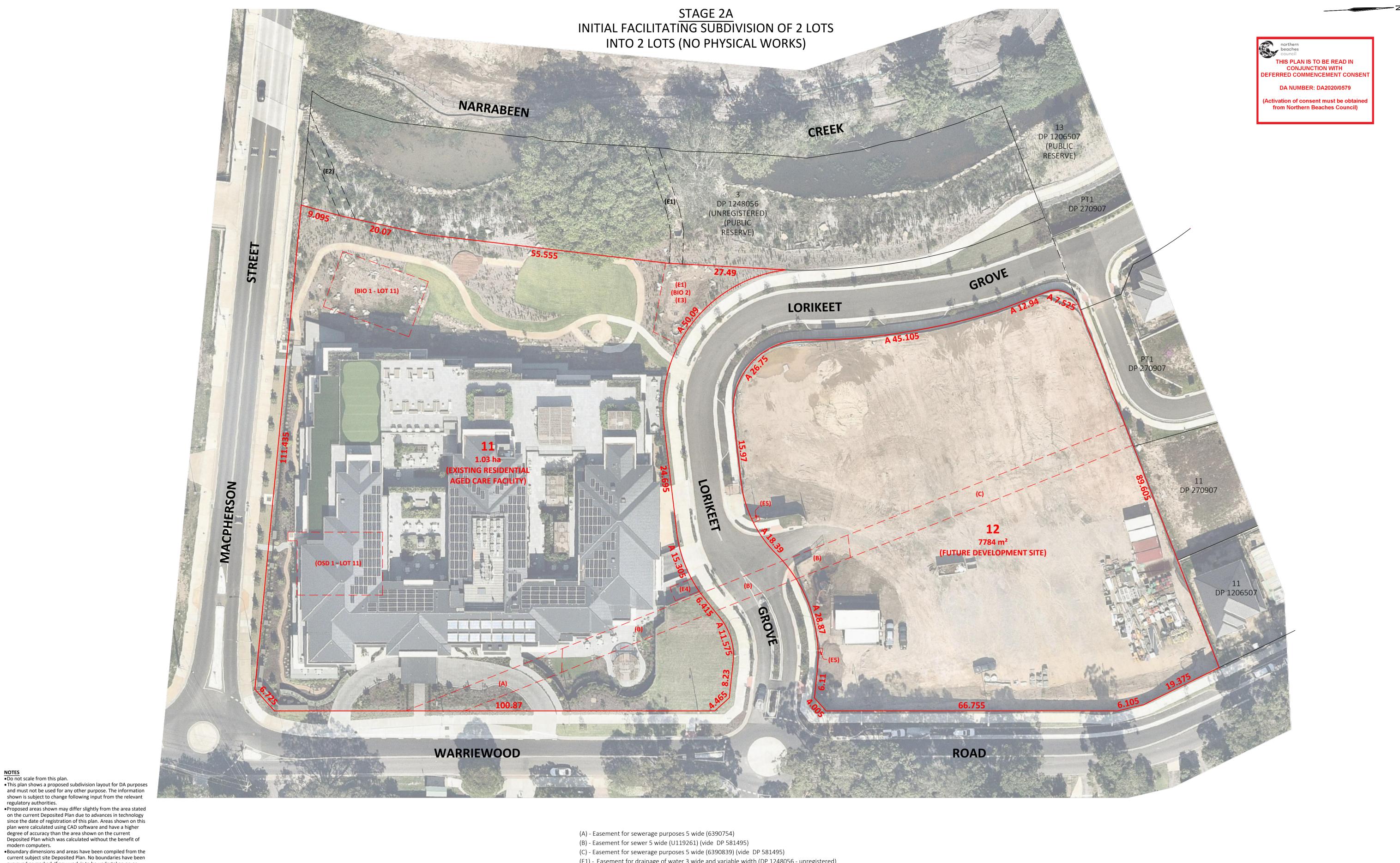
23-27 WARRIEWOOD ROAD - WARRIEWOOD

LANDSCAPE DETAILS





#### STAGE 2A INITIAL FACILITATING SUBDIVISION OF 2 LOTS INTO 2 LOTS (NO PHYSICAL WORKS) THIS PLAN IS TO BE READ IN CONJUNCTION WITH DEFERRED COMMENCEMENT CONSENT NARRABEEN DA NUMBER: DA2020/0579 (Activation of consent must be obtaine from Northern Beaches Council) **CREEK** 13 DP 1206507 (PUBLIC RESERVE) DP 1248056 PT1 DP 270907 (UNREGISTERED) (PUBLIC RESERVE) STREET 55.555 27.49 (E1) (BIO 2) (E3) (BIO 1 - LOT 11) LORIKEET A 45.105 PT1 DP 270907 11 1.03 ha (EXISTING RESIDENTIAL LORIKEET AGED CARE FACILITY) HERSON 11 DP 270907 7784 m² (FUTURE DEVELOPMENT SITE) (OSD 1 - LOT 11) 11 DP 1206507 GROVE 66.755 **ROAD** WARRIEWOOD • This plan shows a proposed subdivision layout for DA purposes and must not be used for any other purpose. The information shown is subject to change following input from the relevant regulatory authorities. Proposed areas shown may differ slightly from the area stated on the current Deposited Plan due to advances in technology since the date of registration of this plan. Areas shown on this plan were calculated using CAD software and have a higher degree of accuracy than the area shown on the current (A) - Easement for sewerage purposes 5 wide (6390754) Deposited Plan which was calculated without the benefit of (B) - Easement for sewer 5 wide (U119261) (vide DP 581495) •Boundary dimensions and areas have been compiled from the (C) - Easement for sewerage purposes 5 wide (6390839) (vide DP 581495) current subject site Deposited Plan. No boundaries have been (E1) - Easement for drainage of water 3 wide and variable width (DP 1248056 - unregistered) surveyed or marked. If any work is to be undertaken on or adjacent to a boundary then a Boundary Survey is (E2) - Easement for drainage of water 3 wide (DP 1248056 - unregistered) recommended to define the boundaries of the site. (E3) - Right of access variable width (DP 1248056 - unregistered) • All dimensions, areas and easements shown are approximate only and subject to site survey, regulatory approval, final (E4) - Easement for electricity and other purposes 3.3 wide (DP 1248056 - unregistered) survey and registration of the Plan of Subdivision at LRS NSW. (E5) - Easement for services 1 wide (DP 1248056 - unregistered) • This drawing and the information it contains is copyright and remains the property of SurveyPlus Pty Ltd. It must not be (BIO 1 - LOT 11) - Positive covenant no.7 and restriction on the use of land no.6 - site of above ground bioretention basin (DP 1248056 - unregi copied, used or altered without the express authority of YOU DIG (BIO 2) - Positive covenant no.9 and restriction on the use of land no.8 - Site of above ground bioretention basin (DP 1248056 - unregistered) • These notes form an integral part of this plan and must not be (OSD 1 - LOT 11) - Positive covenant no.7 and restriction on the use of land no.6 - Site of below ground detention tank (DP 1248056 - unregister SCALE 1:400 @A1 N/A DRAWING TITLE STAGE 2A - FACILITATING SUBDIVISION REVISION DETAILS SURVEY BY DRAWN BY CHECKED BY SCALE **1:400 @ A1** REVISION / DATE DATE OF SURVEY **KNOWLES GROUP** We make it happen. REVISION ORIGIN OF LEVELS PROP. SUBDIVISION OF LOT 1 & LOT 2 DP 1248056 (UNREGISTERED) 02 9651 2921 2 OF 6 ORIGIN OF COORDS info@surveyplus.com.au No. 23-27 WARRIEWOOD ROAD, WARRIEWOOD PROPOSED EASEMENTS UPDATE REF 18442\_SUB\_1B **CONTOUR INTERVAL** N.A



surveyed or marked. If any work is to be undertaken on or adjacent to a boundary then a Boundary Survey is recommended to define the boundaries of the site.

• All dimensions, areas and easements shown are approximate only and subject to site survey, regulatory approval, final survey and registration of the Plan of Subdivision at LRS NSW. • This drawing and the information it contains is copyright and remains the property of SurveyPlus Pty Ltd. It must not be copied, used or altered without the express authority of

• These notes form an integral part of this plan and must not be

- (E1) Easement for drainage of water 3 wide and variable width (DP 1248056 unregistered) (E2) - Easement for drainage of water 3 wide (DP 1248056 - unregistered)
- (E3) Right of access variable width (DP 1248056 unregistered)
- (E4) Easement for electricity and other purposes 3.3 wide (DP 1248056 unregistered)
- (E5) Easement for services 1 wide (DP 1248056 unregistered)
- (BIO 1 LOT 11) Positive covenant no.7 and restriction on the use of land no.6 site of above ground bioretention basin (DP 1248056 unregi

(BIO 2) - Positive covenant no.9 and restriction on the use of land no.8 - Site of above ground bioretention basin (DP 1248056 - unregistered) (OSD 1 - LOT 11) - Positive covenant no.7 and restriction on the use of land no.6 - Site of below ground detention tank (DP 1248056 - unregister





KNOWLES GROUP

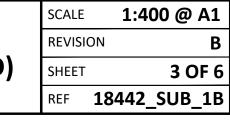
| RE | EVISION / DATE | REVISION DETAILS          | SURVEY BY | DRAWN BY | CHECKED BY | Π_ |
|----|----------------|---------------------------|-----------|----------|------------|----|
|    |                |                           |           |          |            |    |
|    |                |                           |           |          |            | J  |
|    |                |                           |           |          |            |    |
|    |                |                           |           |          |            |    |
|    |                |                           |           |          |            |    |
| В  | 15.04.2020     | PROPOSED EASEMENTS UPDATE |           | CE       | JM         | la |
| Δ  | 07 04 2020     | AS SURVEYED ON SITE       |           | CF       | IM         | 1  |

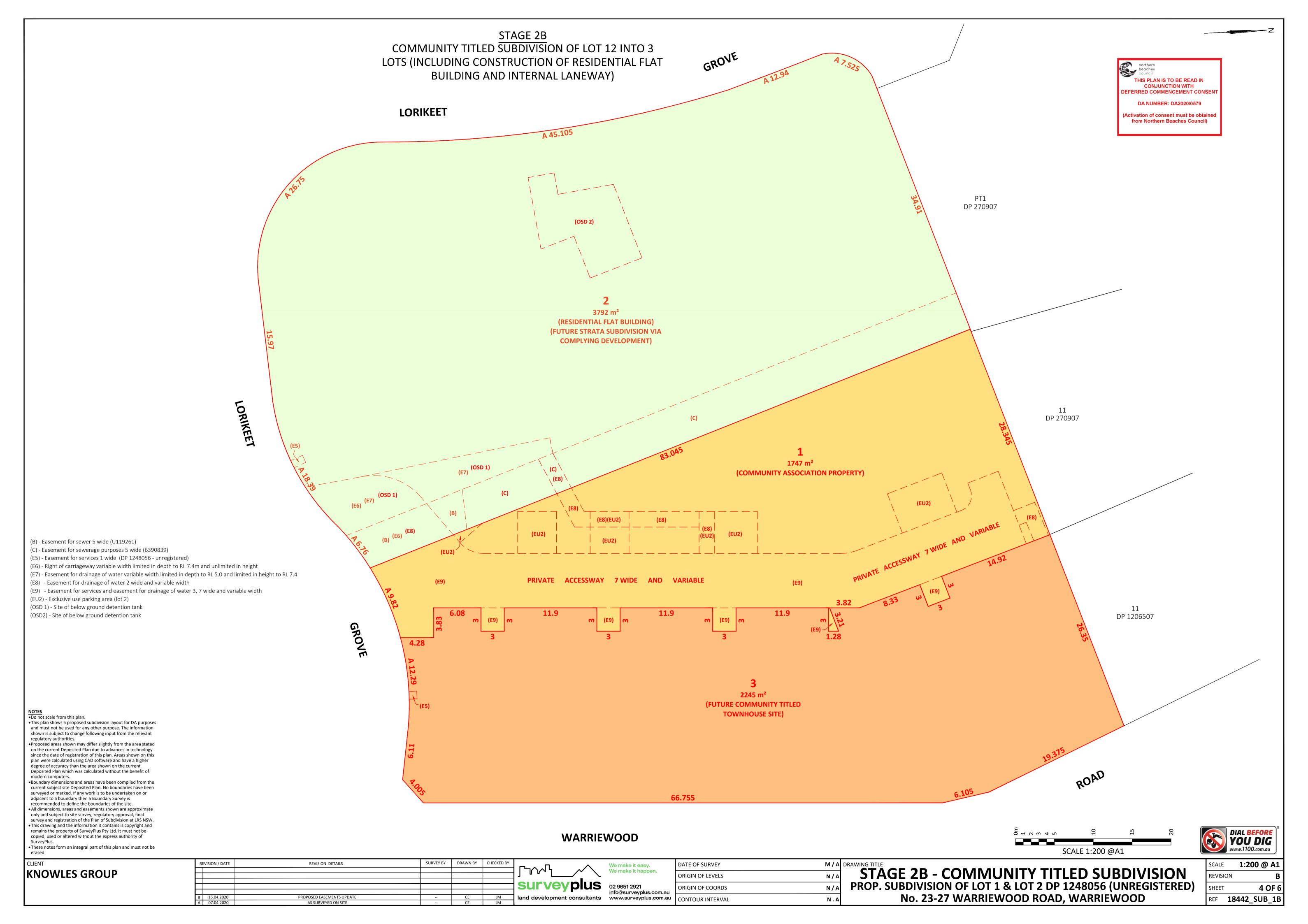


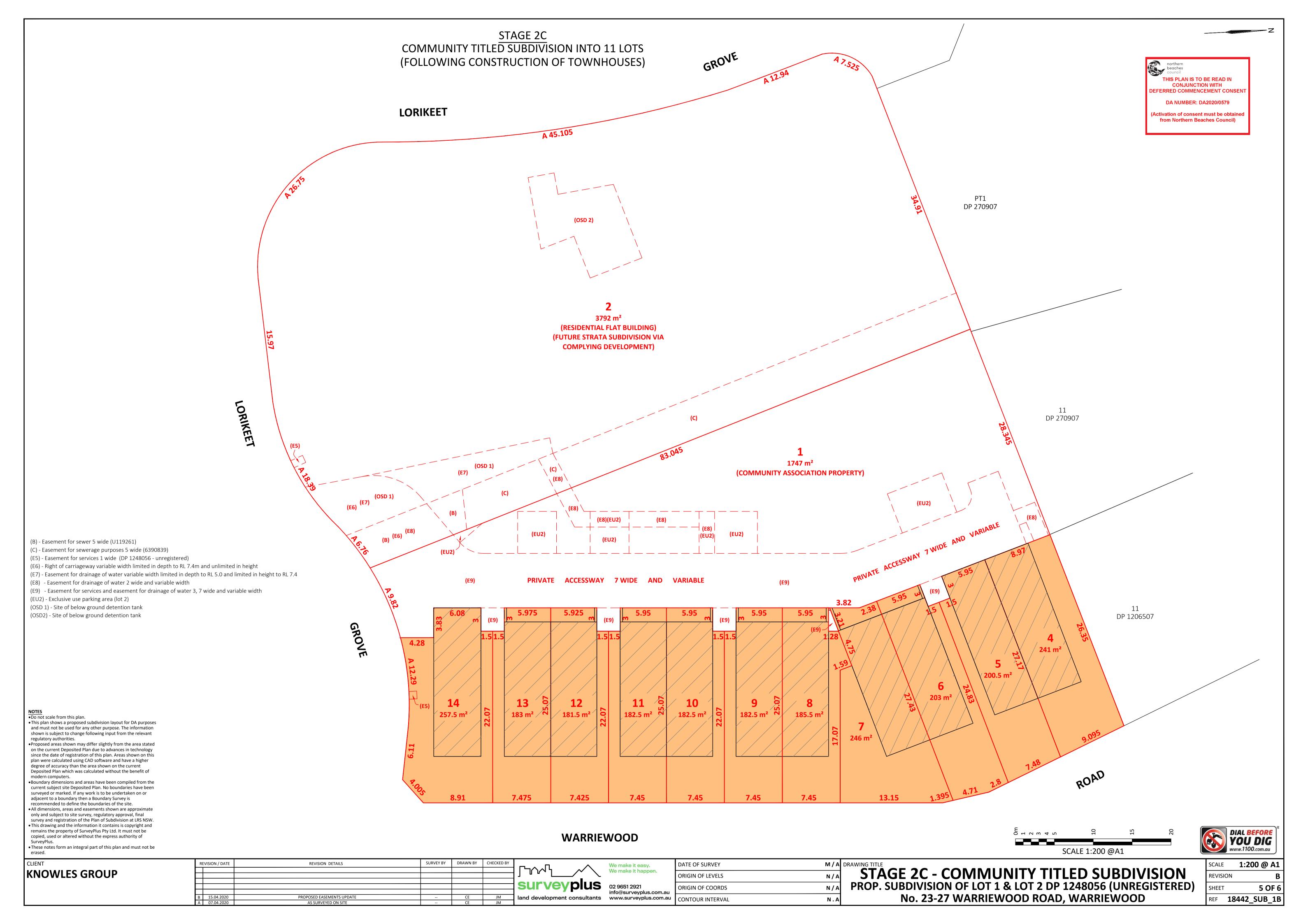
| Me make it hamman   | ORI<br>ORI<br>COI |
|---|-------------------|
| We make it happen.  02 9651 2921 info@surveyplus.com.au www.surveyplus.com.au | OR                |
| 02 9651 2921 info@surveyplus.com.au   | OR                |
| www.surveyplus.com.au   | СО                |
|   |                   |

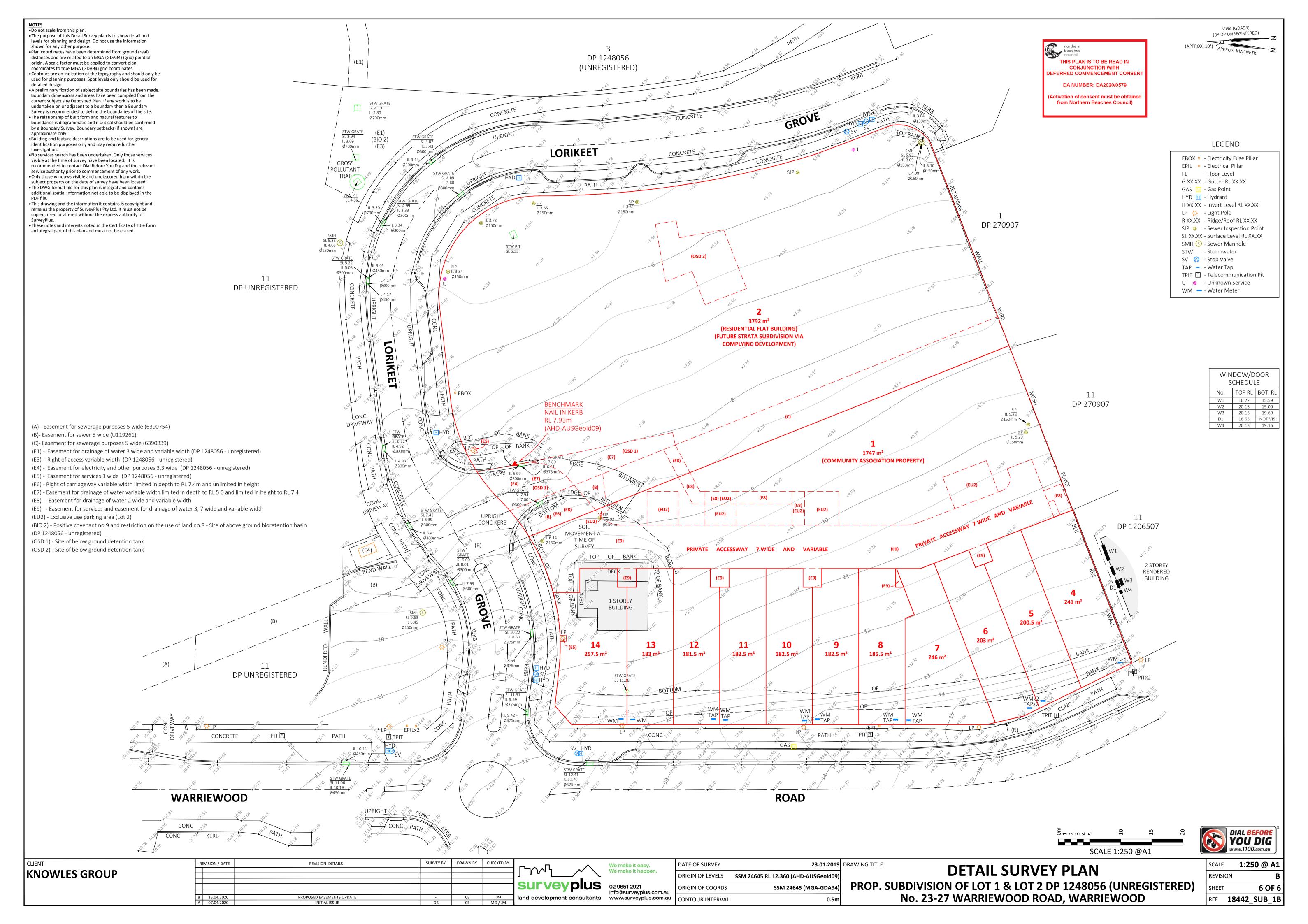
| DATE OF SURVEY   | M/A |
|------------------|-----|
| ORIGIN OF LEVELS | N/A |
| ORIGIN OF COORDS | N/A |
| CONTOUR INTERVAL | N.A |

M/A DRAWING TITLE STAGE 2A - FACILITATING SUBDIVISION PROP. SUBDIVISION OF LOT 1 & LOT 2 DP 1248056 (UNREGISTERED)
No. 23-27 WARRIEWOOD ROAD, WARRIEWOOD









11 SW500

|              |       | DRAWING REGISTER  |     |
|--------------|-------|---|-----|
| SHEET<br>No. | No.   | TITLE   | REV |
| 1            | SW100 | COVER SHEET   | D   |
| 2            | SW101 | STORMWATER DRAINAGE DESIGN - SPECIFICATION SHEET          | D   |
| 3            | SW200 | STORMWATER DRAINAGE DESIGN - BASEMENT PLAN                | D   |
| 4            | SW201 | STORMWATER DRAINAGE DESIGN - GROUND FLOOR PLAN            | D   |
| 5            | SW202 | STORMWATER DRAINAGE DESIGN - LEVEL 1 PLAN                 | D   |
| 6            | SW203 | STORMWATER DRAINAGE DESIGN - LEVEL 2 PLAN                 | D   |
| 7            | SW204 | STORMWATER DRAINAGE DESIGN - ROOF PLAN                    | D   |
| 8            | SW300 | STORMWATER DRAINAGE DESIGN - DETAILS SHEET - SHEET 1 OF 2 | D   |
| 9            | SW301 | STORMWATER DRAINAGE DESIGN - DETAILS SHEET - SHEET 2 OF 2 | D   |
| 10           | SW400 | EROSION AND SEDIMENT CONTROL - PLAN & DETAILS             | D   |
|              |       |   |     |

STORMWATER DRAINAGE DESIGN - MUSIC CATCHMENT PLAN

## **GENERAL**

- G1 ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS, BUILDING CODE OF AUSTRALIA, NSW CODE OF PRACTICE AND THE TO THE RELEVANT SERVICE CODES.
- G2 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' 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 SUPERINTENDENT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- G3 ALL DIMENSIONS SHOWN ON THE DRAWINGS ARE IN MILLIMETERS (U.N.O.). DIMENSIONS SHALL NOT BE OBTAINED BY SCALING OF THESE DRAWINGS. USE FIGURED DIMENSIONS ONLY.
- G4 BENCHMARKS HAVE BEEN ESTABLISHED WHERE INDICATED ON THE DRAWINGS. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (A.H.D.). THE CONTRACTOR SHALL UNDERTAKE ALL NECESSARY SURVEY WORK TO ENSURE THAT THE WORKS ARE CONSTRUCTED TO DESIGN LINE AND LEVEL.
- G5 SETTING OUT DIMENSIONS AND LEVELS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR.
- G6 ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE RELEVANT SZZ CODES AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES.
- G7 IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL SAFETY FENCES, WARNING SIGNS, TRAFFIC DIVERSIONS AND THE LIKE DURING CONSTRUCTION. ALL WORKS TO COMPLY WITH WORK HEALTH AND SAFETY REQUIREMENTS AND OTHER RELEVANT AUTHORITY SAFETY REQUIREMENTS.
- G8 NO TREES SHALL BE REMOVED, CUTBACK OR RELOCATED WITHOUT THE WRITTEN INSTRUCTION FROM THE SUPERINTENDENT.
- G9 WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
- G10 ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS AND THESE SPECIFICATIONS.
- G11 DESIGN LEVELS GIVEN ARE TO FINISHED SURFACE LEVEL AND INCLUSIVE OF TOPSOIL. (TOPSOIL DEPTH VARIES)
- G12 THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A N.A.T.A. REGISTERED SURVEYOR.
- G13 CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER TELECOMMUNICATIONS OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
- G14 THE LOCATIONS OF UNDERGROUND SERVICES SHOWN ON THE DRAWING HAVE BEEN PLOTTED FROM DIAGRAMS PROVIDED BY SERVICE AUTHORITIES. THIS INFORMATION HAS BEEN PREPARED SOLELY FOR THE AUTHORITIES OWN USE AND MAY NOT NECESSARILY BE UPDATED OR ACCURATE.
- G15 THE POSITION OF SERVICES AS RECORDED BY THE AUTHORITY AT THE TIME OF INSTALLATION MAY NOT REFLECT CHANGES IN THE PHYSICAL ENVIRONMENT SUBSEQUENT TO INSTALLATION.
- G16 S&G CONSULTANTS DOES NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THE DRAWING SHOWS MORE THAN THE PRESENCE OR ABSENCE OF SERVICES, AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.
- G17 IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN FROM THE UTILITY SERVICES AUTHORITIES A CURRENT COPY OF UNDERGROUND SERVICES SEARCH FOR THE LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF ANY WORK AND NOTIFY ANY CONFLICT WITH THE DRAWINGS IMMEDIATELY. CLEARANCE SHALL BE OBTAINED FROM THE RELEVANT REGULATORY AUTHORITY. CONTRACTOR TO KEEP COPY OF UNDERGROUND SERVICES SEARCH ON SITE AT ALL TIMES. ANY DAMAGES TO SERVICES OR SERVICES ADJUSTMENTS SHALL BE CARRIED OUT BY THE CONTRACTOR OR RELEVANT AUTHORITY AT THE CONTRACTOR'S EXPENSE.
- G18 VISIT THE SITE BEFORE SUBMITTING THE FINAL TENDER PRICE TO ASSESS 'ON SITE' CONDITIONS. FAILURE TO DO SO WILL FORFEIT ANY CLAIM FOR NOT BEING AWARE OF CONDITIONS AFFECTING THE TENDER.
- G19 THE CONTRACTOR SHALL PREPARE ACCURATE WORK-AS-EXECUTED DRAWINGS FOLLOWING THE COMPLETION OF ALL WORKS.
- G20 IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE IN PLACE & MAINTAIN TRAFFIC FACILITIES AT ALL TIMES DURING CONSTRUCTION.
- G21 CONTRACTOR TO PROVIDE WORKSHOP COORDINATED DRAWINGS PRIOR TO COMMENCING WORKS ON SITE. WORKSHOP DRAWINGS TO BE REVIEWED AND APPROVED BY DESIGN ENGINEER.

SURVEY

## STORMWATER

- S1 ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE AS3500.3-2003:'STORMWATER DRAINAGE'.
- S2 FOR STORMWATER DRAINAGE PIPES THAT EXCEED 1:5 GRADE, REINFORCED CONCRETE ANCHOR BLOCKS SHALL BE INSTALLED. ANCHOR BLOCKS TO BE CONSTRUCTED TO SPECIFICATIONS SET OUT IN AS3500.3-2018 SECTION 8.10
- S3 EXISTING SERVICES SHOWN IN APPROXIMATE LOCATIONS ONLY. CONFIRM EXACT LOCATIONS ON SITE PRIOR TO COMMENCING WORK.
- S4 COORDINATE THE INSTALLATION OF NEW SERVICES WITH ALL NEW & EXISTING
- S5 ALL PIPEWORK TO BE SUPPORTED IN ACCORDANCE WITH AS3500.3-2018.

SERVICES & STRUCTURAL PROVISIONS AS DETERMINED ON SITE.

- S6 ALL PIPEWORK IS TO BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS AS SET DOWN IN AS3500.3-2003. ALL IN-GROUND PIPEWORK TO BE INSPECTED BY THE SUPERINTENDENT UNDER TEST CONDITIONS PRIOR TO BACKFILLING. BACKFILLING AND BEDDING TO AS3500.3-2018.
- S7 PIPES SHALL BE TRUE TO GRADES SHOWN AND ALIGNED SO THAT THE CENTRE OF THE INLET PIPE INTERSECTS WITH THE CENTRE OF THE OUTLET PIPE AT THE DOWNSTREAM FACE OF THE PIT.
- S8 BED ALL PIPES FIRMLY AND EVENLY WITH IMPORTED FILL ONLY. THICKNESS OF BEDDING LAYER SHALL BE 75mm IN SOIL AND 200mm IN ROCK.
- S9 LAY AND JOINT ALL PIPES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND AS3725-2007: DESIGN FOR INSTALLATION OF BURIED CONCRETE PIPES'.
- S10 ALLOW TO TEST ALL PIPES AND PITS TO LOCAL AUTHORITY'S REQUIREMENTS.
- S11 EXCAVATE TRENCHES AND STOCKPILE ALL MATERIAL FOR INSPECTION WITH REGARD TO REUSE FOR TRENCH BACKFILL. REMAINING MATERIAL TO BE REMOVED
- S12 BACKFILL PIPES WITH IMPORTED FILL. PROVIDE 200mm SIDE SUPPORT AND 150mm OVERLAY ABOVE PIPE CROWN. TRENCH FILL ABOVE THE EMBEDMENT ZONE TO THE UNDERSIDE OF THE ROAD PAVEMENT OR THE FOOTWAY SHALL BE AS FOLLOW:-

# UNDER ROADWAY

TRENCH FILL MATERIAL SHALL CONSIST OF IMPORTED FILL AS SPECIFIED HEREIN OF EITHER HIGH GRADE COMPACTION SAND OR APPROVED CRUSHED ROAD GRAVEL CONFORMING TO RMS QA SPECIFICATION 3051 OR SIMILAR.

OTHER THAN ROADWAY TRENCH MATERIAL EXCAVATED SHALL CONSIST OF SELECT FILL AS SPECIFIED HEREIN AND SHALL NOT CONTAIN MORE THAN 20% OF STONES OF SIZE BETWEEN 25mm AND 75mm AND NONE LARGER THAN 75mm. PRIOR TO USE OF THE EXCAVATED MATERIAL IT SHALL BE INSPECTED AND APPROVED BY THE

S13 COMPACT BEDDING. EMBEDMENT AND TRENCH FILL MATERIALS AS FOLLOW:-

FOR GRANULAR FILL MATERIAL (NON-COHESIVE SOIL) e.g. COARSE AGGREGATE FILL, THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 70%.

FOR GRANULAR MATERIAL (NON COHESIVE SOILS). THE DENSITY INDEX (ID) SHALL BE NOT LESS THAN 70%. FOR NON-GRANULAR FILL MATERIAL (COHESIVE SOILS), THE DRY DENSITY RATIO (RD) SHALL BE NOT LESS THAN 95%.

### S14 EXISTING SERVICES

- UTILITY INFORMATION SHOWN ON THE PLANS IS NOT INTENDED TO DEPICT MORE THAN THE PRESENCE OF ANY SERVICES. ACTUAL LOCATIONS SHOULD BE VERIFIED BY HAND EXCAVATION PRIOR TO CONSTRUCTION.
- S15 THE CONTRACTOR SHALL ALLOW FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF ALL EXISTING SERVICES IN AREAS AFFECTED BY THE
- S16 THE CONTRACTOR SHALL ENSURE THAT SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED AT ALL TIMES. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING WHERE REQUIRED. ONCE THE WORKS ARE COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD ALL DISTURBED AREAS.

## S17 DRAINAGE PIPES

- EXISTING PIPES WHICH FORM NO PART OF THE DRAINAGE SYSTEM SHALL BE REMOVED OR SEALED AS INDICATED ON THE PLANS. PIPES UP TO 300mm DIAMETER SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS (U.N.O.). ALL PIPE JUNCTIONS AND TAPERS SHALL BE VIA PURPOSE MADE FITTINGS.
- S18 WHERE DOWNPIPES PASS UNDER FLOOR SLABS, SEWER GRADE uPVC WITH RUBBER RING JOINTS ARE TO BE USED.
- S19 MINIMUM GRADE TO DRAINAGE PIPES TO BE 1% (U.N.O.), MIN. SIZE 100mm DIAMETER (U.N.O.).
- S20 PIPES LARGER THAN OR EQUAL TO 300mm DIAMETER TO BE REINFORCED CONCRETE RUBBER RING JOINTED TYPE (CLASS 2) MANUFACTURED TO AS4058 (U.N.O.).
- S21 PIPE INSTALLATION UNDER TRAFFICABLE AREAS SHALL BE IN ACCORDANCE WITH CONCRETE PIPE ASSOCIATION OF AUSTRALIA PUBLICATION "CONCRETE PIPE SELECTION & INSTALLATION" TYPE HS3 SUPPORT.
- S22 EQUIVALENT STRENGTH FRC PIPES MAY BE USED SUBJECT TO AUTHORITY
- S23 MINIMUM PIPE COVER TO BE 600mm UNDER TRAFFICABLE AREAS AND 300mm ELSEWHERE (U.N.O.).

#### STORMWATER (CONTINUED)

- S24 CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR
- S25 PROVIDE CLEANING EYES TO ALL DOWNPIPES NOT DIRECTLY CONNECTED TO PITS.
- S26 STORMWATER DRAINAGE CONNECTIONS TO COUNCIL'S SYSTEM SHALL BE TO THE REQUIREMENTS AND THE SATISFACTION OF LOCAL COUNCIL.
- S27 DRAINAGE PITS PITS DEEPER THAN 1200mm TO BE FITTED WITH STEP IRONS AT 300 CENTRES TO AS1657-2013: FIXED PLATFORMS, WALKWAYS, STAIRWAYS AND LADDERS -
- S28 ALL EXPOSED EDGES TO BE ROUNDED WITH 20mm RADIUS, OR CHAMFERED 20mm
- S29 PIT REINFORCEMENT MESH SL82 LAP TO BE 400mm MIN. CLEAR COVER 40 MIN. CAST AGAINST BLINDING OR FORMWORK. CORNER RETURNS MAY BE FABRIC OR EQUIVALENT BARS.
- S30 BENCHING TO BE HALF OUTGOING PIPE DEPTH. CONCRETE FOR BENCHING TO BE 20MPa MASS CONCRETE.
- S31 APPROVED PRECAST PITS MAY BE USED.

DESIGN, CONSTRUCTION AND INSTALLATION'.

- S32 100mm DIAMETER HOLE FOR SUBSOIL DRAINAGE OUTLET TO BE LOCATED 100mm ABOVE INVERT OF ALL INLET PIPES. SUBSOIL DRAINAGE TO EXTEND FOR A DISTANCE OF 3m UPSTREAM OF PIT (AT EACH INLET TRENCH) WITH THE UPSTREAM END SEALED.
- S33 ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH.
- S34 PIT GRATE, FRAMES AND SOLID COVERS SHALL BE CLASS B IN NON TRAFFIC AREAS AND CLASS D IN TRAFFICABLE AREAS IN ACCORDANCE WITH AS3996.
- S35 ALL GRATES SHALL BE PROVIDED WITH A LOCKING CLIP.
- S36 MAXIMUM FRONT ENTRY PIPE:-STRAIGHT ENTRY - Ø 750

SKEW ENTRY 45° - Ø 525

- S37 PIT GRATING TO BE GALVANISED STEEL TYPE 'WELDLOK' OR APPROVED EQUIVALENT.
- S38 SUBSOIL DRAINAGE
- SUBSOIL PIPES SHALL BE LAID AT A MIN GRADE OF 0.5% (U.N.O.).
- S39 ADDITIONAL SUBSOIL DRAINAGE SHALL BE LAID TO SUIT SITE CONDITIONS AND GROUNDWATER PRESENCE AS DIRECTED.
- S40 SUBSOIL PIPES SHALL BE LAID BEHIND KERBS IN CUT AREAS OF THE SITE.
- S41 SUBSOIL DRAINAGE SHALL CONSIST OF A SLOTTED 100mm DIAMETER PLASTIC PIPE WRAPPED IN GEOTEXTILE AND PLACED A MINIMUM OF 600mm BELOW THE SUBGRADE LEVEL AND COVERED WITH 500mm OF 20mm GRAVEL. PROVIDE A MINIMUM OF 150mm GRAVEL AROUND SUBSOIL PIPE. TRENCH TO BE LINED WITH GEOTEXTILE FABRIC TYPE BIDIM A24
- S42 GRATES TO PITS IN FOOTPATH AREAS SHALL BE HEEL SAFE COMPLYING WITH THE DISABLED ACCESS CODE
- S43 CONTRACTOR TO PROVIDE WORKSHOP COORDINATED DRAWINGS PRIOR TO COMMENCING WORKS ON SITE. WORKSHOP DRAWINGS TO BE REVIEWED AND APPROVED BY DESIGN ENGINEER.
- S44 ALL EXTERNAL AREA TO HAVE A MINIMUM 1% FALL TO OUTLETS PROVIDED.
- S45 PROVIDE OVERFLOWS TO ALL AREAS TO ARCHITECT'S SPECIFICATIONS.
- S46 ALL RAINWATER OUTLETS TO OPEN AREAS SHALL BE SPS TRUFLO TYPE TIA100F UNLESS NOTED OTHERWISE. DO NOT INSTALL BALCONY OUTLETS OR SIMILAR IN AREAS SUBJECT TO DIRECT RAINFALL.

# **EROSION CONTROL**

- EC1 BEFORE EARTHWORKS CAN COMMENCE THE EROSION & SEDIMENT CONTROL MEASURES MUST BE IN PLACE.
- EC2 DURING THE CONSTRUCTION PERIOD, THESE CONTROL MEASURES WILL NEED TO BE INSPECTED & MAINTAINED REGULARLY, ESPECIALLY AFTER STORM EVENTS, BY THE CONTRACTOR.
- EC3 ALL WORK IS TO BE CARRIED OUT TO PREVENT EROSION, CONTAMINATION & SEDIMENTATION OF THE STORAGE SITE, SURROUNDING AREAS & DRAINAGE
- EC4 MINIMIZE DISTURBED AREA COVERED WITH NATURAL VEGETATION. ONLY THOSE

AREAS DIRECTLY REQUIRED FOR CONSTRUCTION ARE TO BE DISTURBED.

- ECS INSTALL EROSION/SEDIMENT CONTROL MEASURES PRIOR TO COMMENCEMENT OF CONSTRUCTION OR EXCAVATION OPERATIONS.
- EC6 PROVIDE SILT FENCE/STRAW BAIL BARRIERS TO THE LOW SIDE OF ALL EXPOSED EARTH EXCAVATIONS. TIE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.
- EC7 ISOLATE EXISTING STORMWATER PITS WITH STRAW BALES OR SILT TRAPS TO FILTER ALL INCOMING FLOWS.
- EC8 DO NOT STOCKPILE EXCAVATED MATERIAL ON THE ROAD WAY.
- EC9 DIVERT CLEAN WATER FROM UNDISTURBED AREAS AROUND THE WORKING AREAS.

#### EROSION CONTROL (CONTINUED)

SEDIMENT CONTROL MEASURES.

- EC10 CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING AND LEAVING THE SITE DO SO IN A FORWARD DIRECTION.
- EC11 TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL
- EC12 ADOPT TEMPORARY MEASURES AS MAY BE NECCESSARY FOR EROSION & SEDIMENT CONTROL, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: -- DRAINS: TEMPORARY DRAINS AND CATCH DRAINS.
- SPREADER BANKS OR OTHER STRUCTURES: TO DISPERSE CONCENTRATED - SILT TRAPS: CONSTRUCTION AND MAINTENANCE OF SILT TRAPS TO PREVENT
- DISCHARGE OF SCOURED MATERIAL TO DOWNSTREAM AREAS. EC13 AFTER RAIN, INSPECT, CLEAN, AND REPAIR IF REQUIRED, TEMPORARY EROSION &
- EC14 REMOVE TEMPORARY EROSION & SEDIMENT CONTROL MEASURES WHEN THEY ARE NO LONGER REQUIRED.
- EC15 COMPLY WITH THE REQUIREMENTS OF LANDCOM'S MANAGING URBAN STORMWATER - SOIL AND CONSTRUCTION 'THE BLUE BOOK' LATEST EDITION
- EC16 THE EROSION & SEDIMENT CONTROL PLAN PROVIDED IS ONLY INDICATIVE. THE CONTRACTOR SHOULD PREPARE A DETAILED ESCP SUITABLE FOR THE SPECIFIC SITE CONDITIONS



DIAL BEFORE YOU DIG SHOULD BE CONTACTED PRIOR TO ANY EXCAVATION ON SITE TM: TRADE MARK OF THE ASSOCIATION OF DIAL BEFORE YOU DIG SERVICES LTD. USED UNDER LICENSE.

**ABBREVIATIONS**: Ø or DIA DIAMETER CLEAR OUT DISH DRAIN OUTLET DOWNPIPE EXISTING FINISHED FLOOR LEVEL GTD GRATED TRENCH DRAIN GRATED SURFACE INLET PIT INVERT LEVEL KERB INLET PIT NATURAL GROUND LEVEL OVERLAND FLOWPATH OSD ON-SITE DETENTION RCP REINFORCED CONCRETE PIPE REDUCED LEVEL RWT RAINWATER TANK STORMWATER SWP STORMWATER PIT SWRM STORMWATER RISING MAIN STORMWATER SUMP SWS

TOP OF KERB

TOP OF WALL

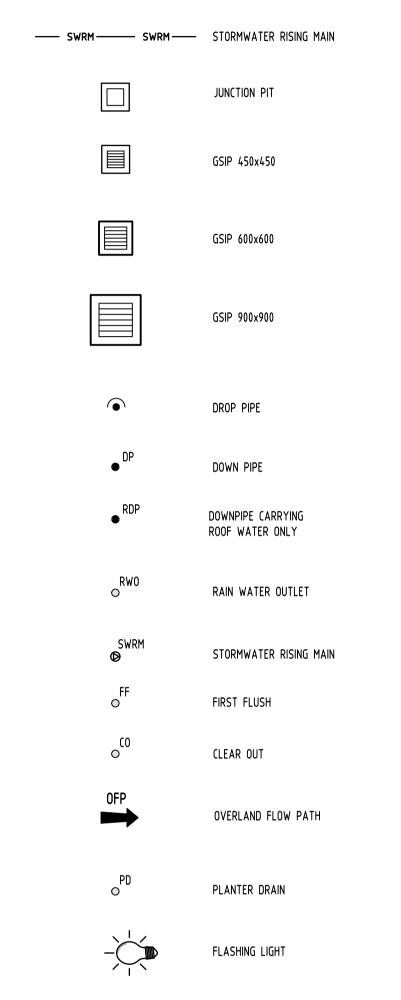
CHLORIDE

UPVC

UNPLASTICISED POLYVINYL

THIS PLAN IS TO BE READ IN CONJUNCTION WITH **DEFERRED COMMENCEMENT CONSENT** DA NUMBER: DA2020/0579 Activation of consent must be obtained from Northern Beaches Council)

| SITEWORKS LEGEN  | <u>ND</u>                            |
|------------------|--------------------------------------|
|                  | STORMWATER LINE                      |
| RWRW             | STORMWATER LINE TO<br>RAINWATER TANK |
| GTD              | GRATED DRAIN                         |
| SSD              | SUBSOIL LINE                         |
| — SWRM—— SWRM——  | STORMWATER RISING MAIN               |
|                  | JUNCTION PIT                         |
|                  | GSIP 450x450                         |
|                  | GSIP 600x600                         |
|                  | GSIP 900x900                         |
|                  | DROP PIPE                            |
| ● DP             | DOWN PIPE                            |
| ● RDP            | DOWNPIPE CARRYING<br>ROOF WATER ONLY |
| ⊗ <sup>RW0</sup> | RAIN WATER OUTLET                    |
| SWRM<br><b>©</b> | STORMWATER RISING MAIN               |
| o FF<br>⊘        | FIRST FLUSH                          |
| © <sup>(0</sup>  | CLEAR OUT                            |
| OFP              | OVERLAND FLOW PATH                   |
| PD<br>⊘          | PLANTER DRAIN                        |
|                  | FLASHING LIGHT                       |
|                  |                                      |



Reference Coordination Drawing COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERT QUALITY CONTROL D ISSUE FOR DA MS | 26.05.20 | 2 | Discipline COPIED. ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY Drawing Title and Number DATE 26.05.20 MS 15.05.20 2 ARCH RJ 05.05.20 2 ARCH DRAWN MS C ISSUE FOR DA B ISSUE FOR DA RJ 30.04.20 2 STRUCT DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE.

DO NOT SCALE OF THIS DRAWING, POSITIONS OF A ISSUE FOR DA MS 24.02.20 1 MECH P3 | PRELIMINARY ISSUE AUTHORITIES MAINS AND/OR EXISTING SERVICES MS 17.01.20 1 ELEC ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE 2 PRELIMINARY ISSUE DATE 26.05.20 MS 29.11.19 1 HYD 1 PRELIMINARY ISSUE WORK, REPURI AND DISTREPARIES TO THE
CONSULTING ENGINEER FOR DECISION/CLARIFICATION
BEFORE PROCEEDING WITH THE WORK. THIS DRAWING
IS TO BE READ IN CONJUNCTION WITH THE
SPECIFICATIONS AND OTHER CONSULTANTS'
DRAWINGS. by Date Status FIRE Issue Last revision title DATE 26.05.20 Issuer internal sequence and revision history LANDS DATE 26.05.20 3-construction certificate 2-development application 4-tender 5-construction 6-other

THE KNOWLES GROUP- ARCARE





Suite 5.03, Level 5, 156 PACIFIC HIGHWAY. T: +61 2 8883 4239 Email: office@sgce.com.au Web: www.sgce.com.au

A.B.N. 21 118 222 530

PROPOSED RESIDENTIAL ST. LEONARDS, NSW 2065 APARTMENTS

25-27 WARRIEWOOD ROAD, WARRIEWOOD - STAGE

2 OF 10

A.H.D.

Scale (at original size)

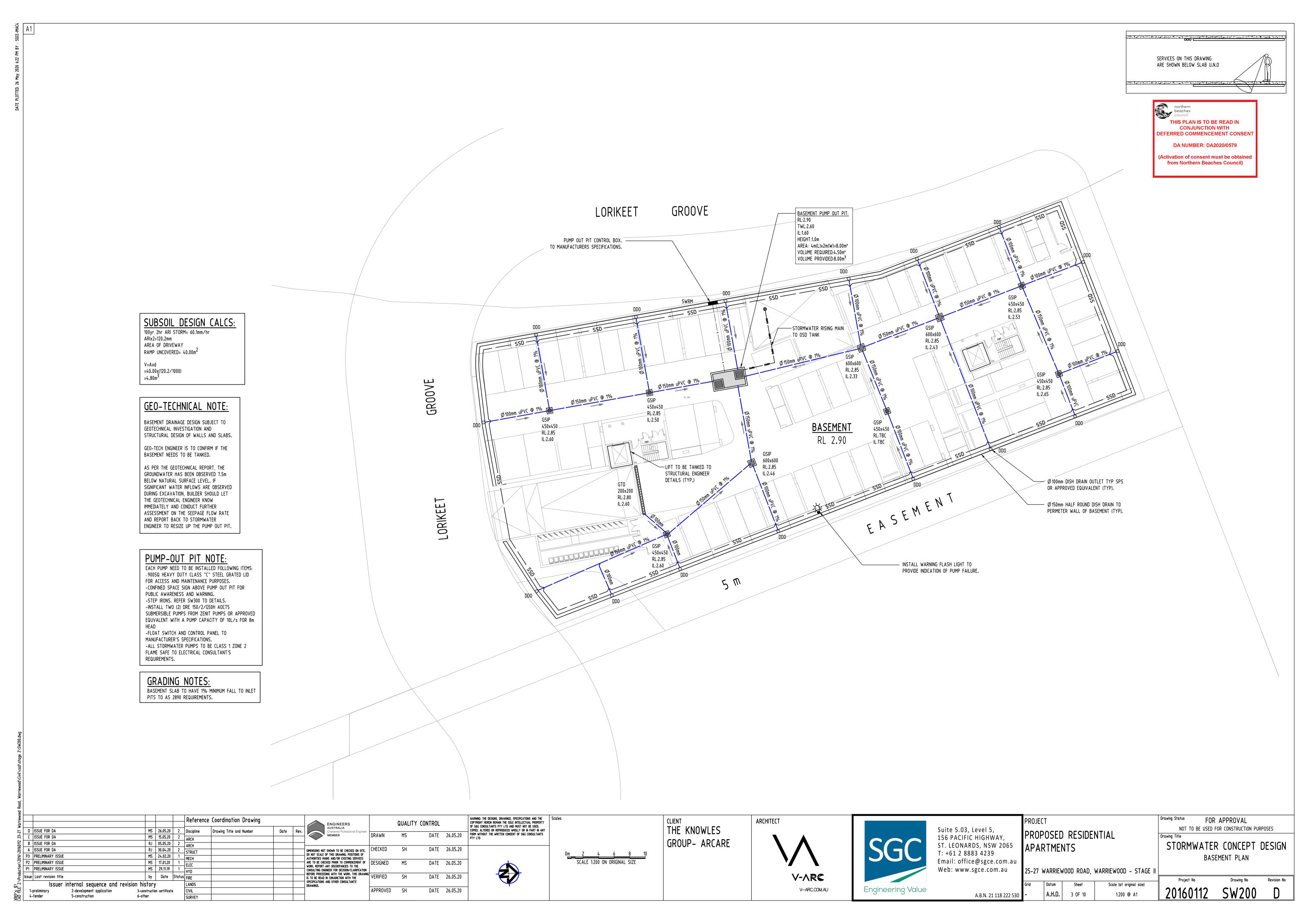
NTS

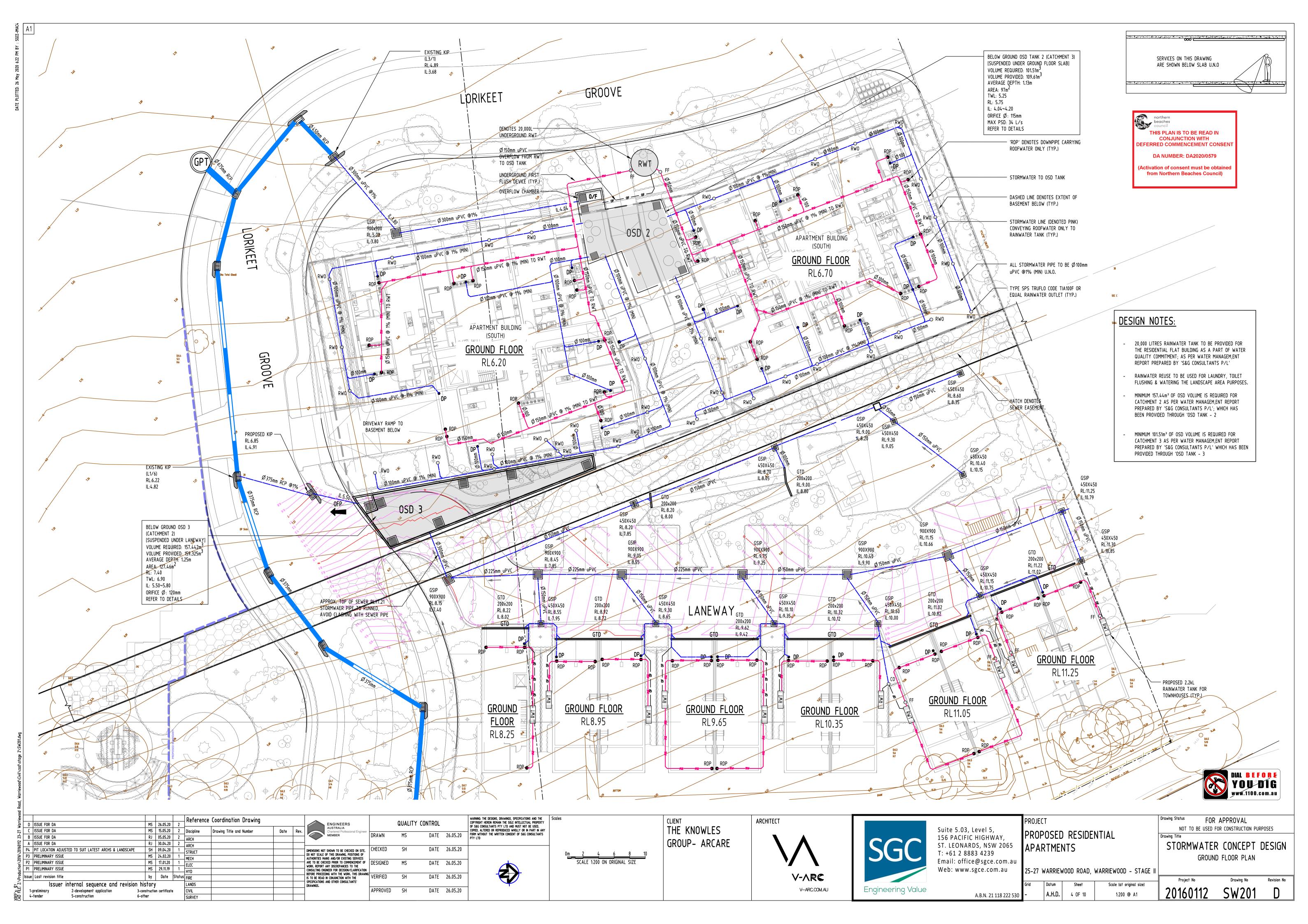
STORMWATER CONCEPT DESIGN SPECIFICATION SHEET

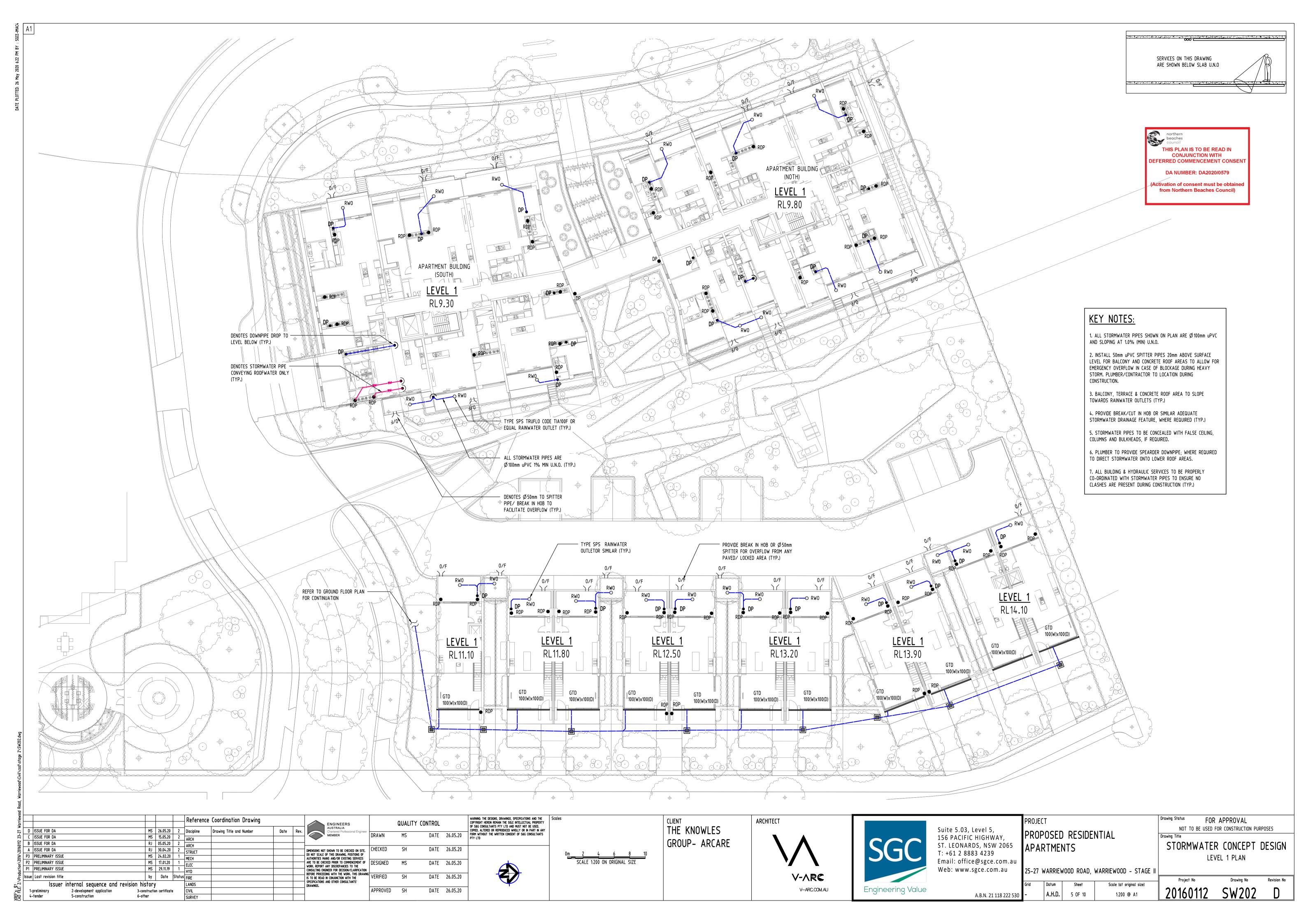
FOR APPROVAL

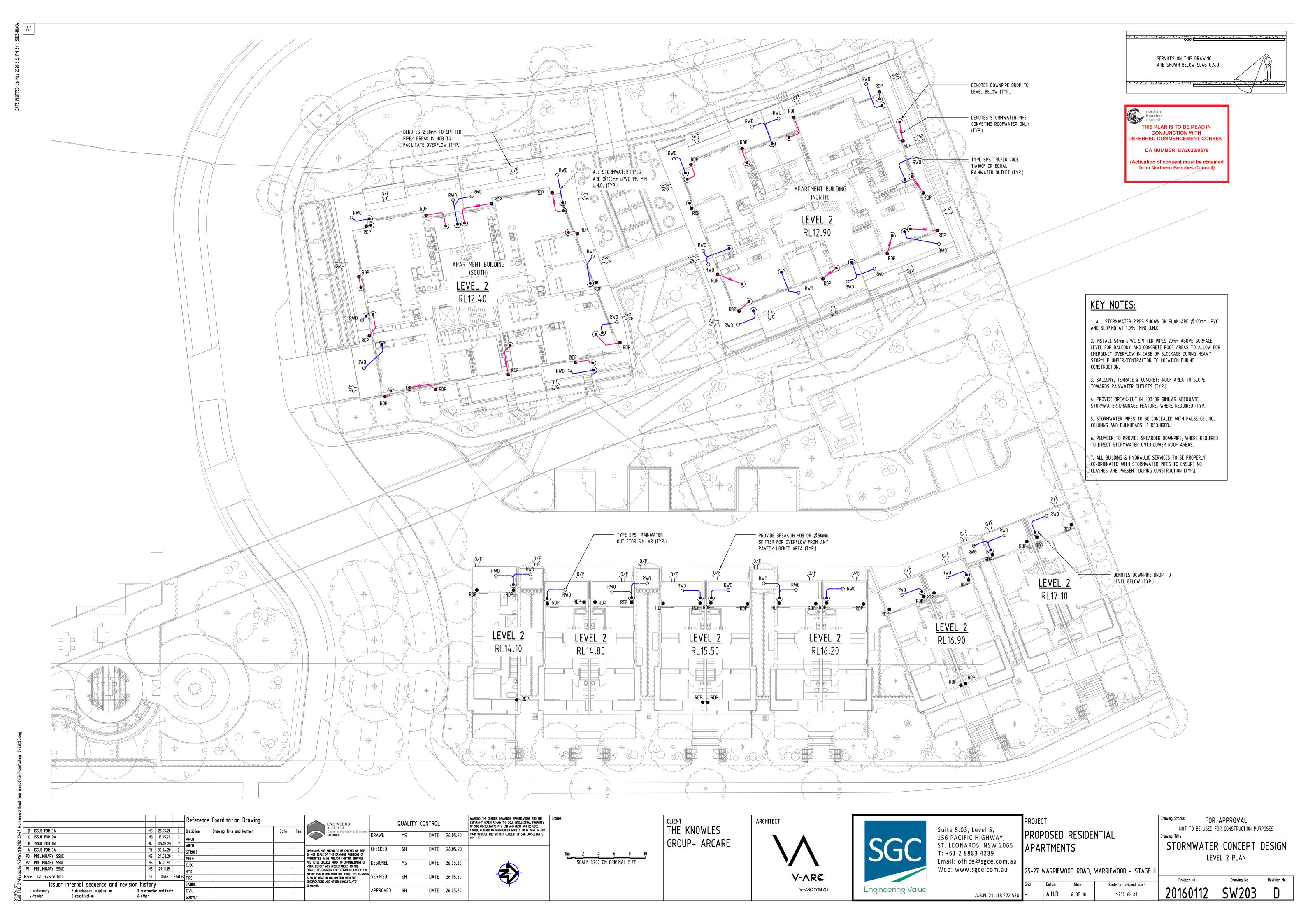
NOT TO BE USED FOR CONSTRUCTION PURPOSES

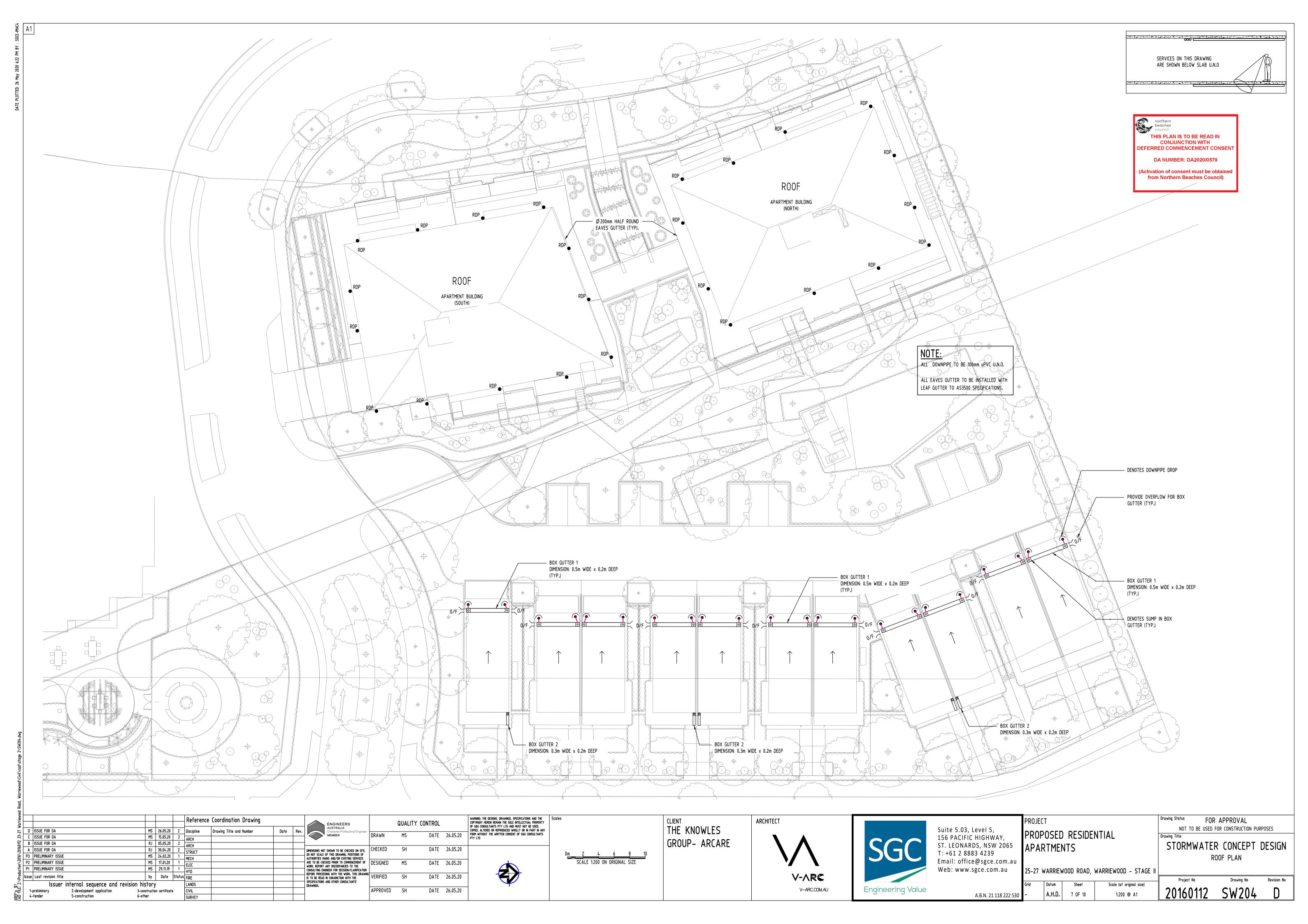
Revision No 20160112 SW101

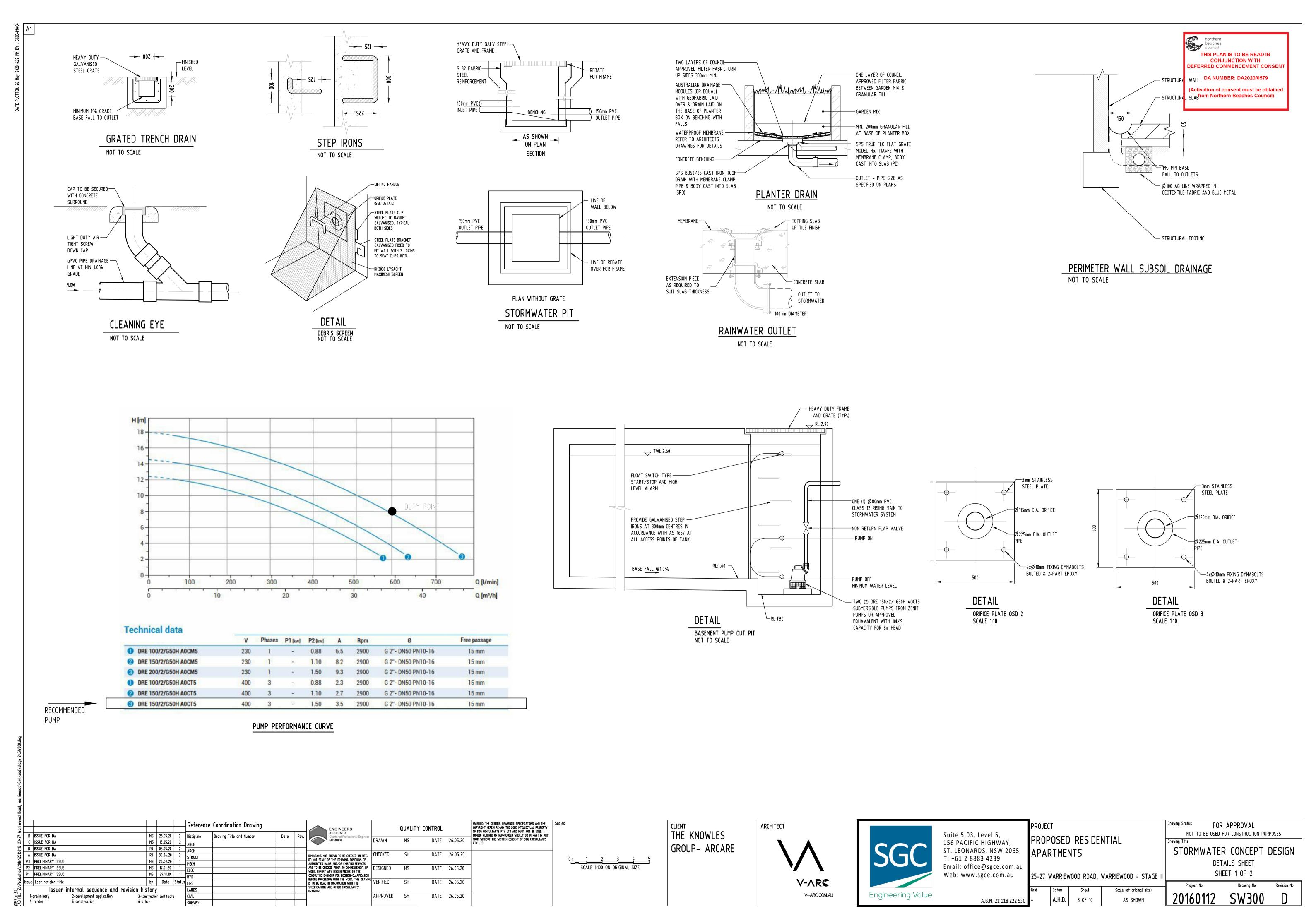


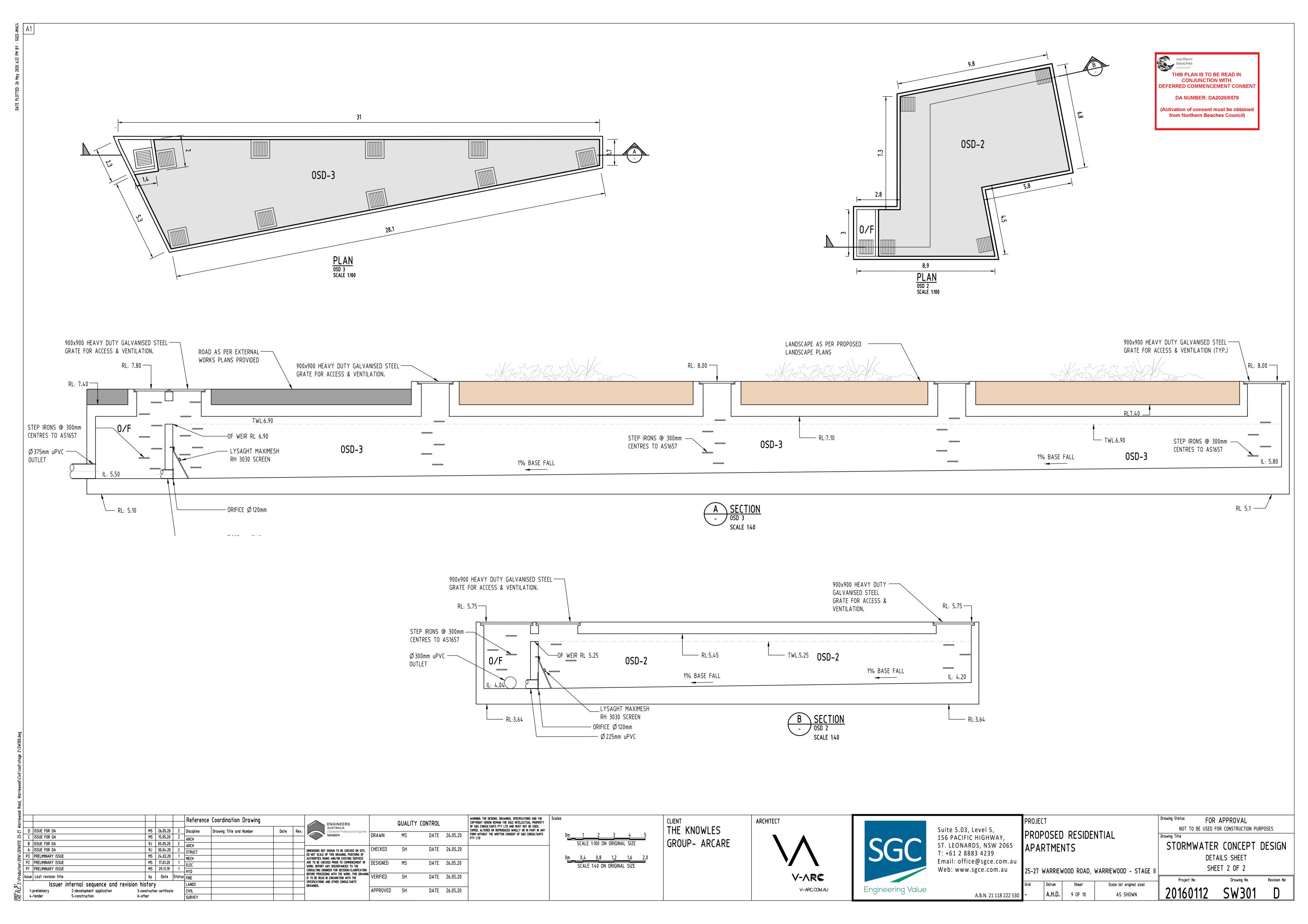


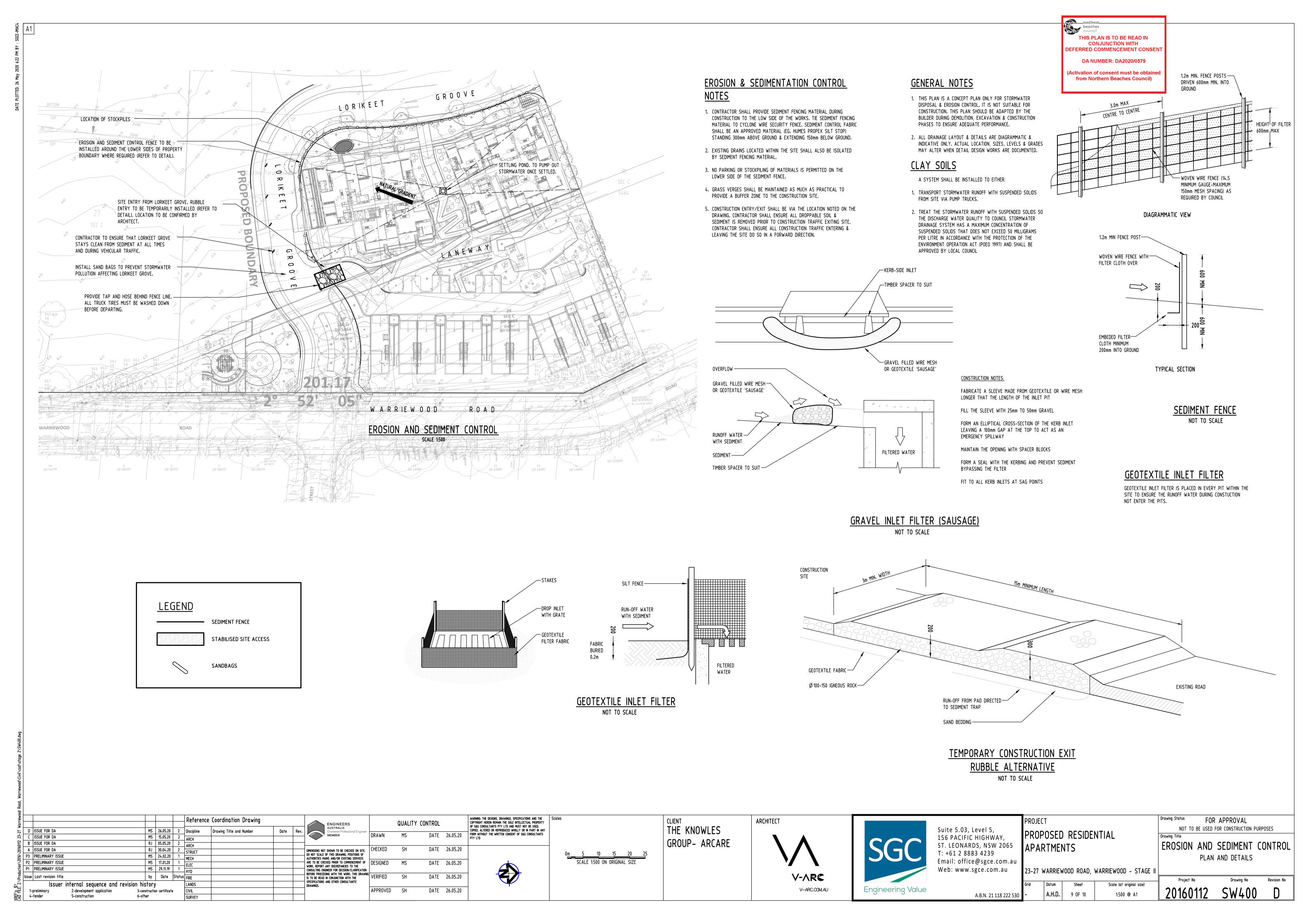


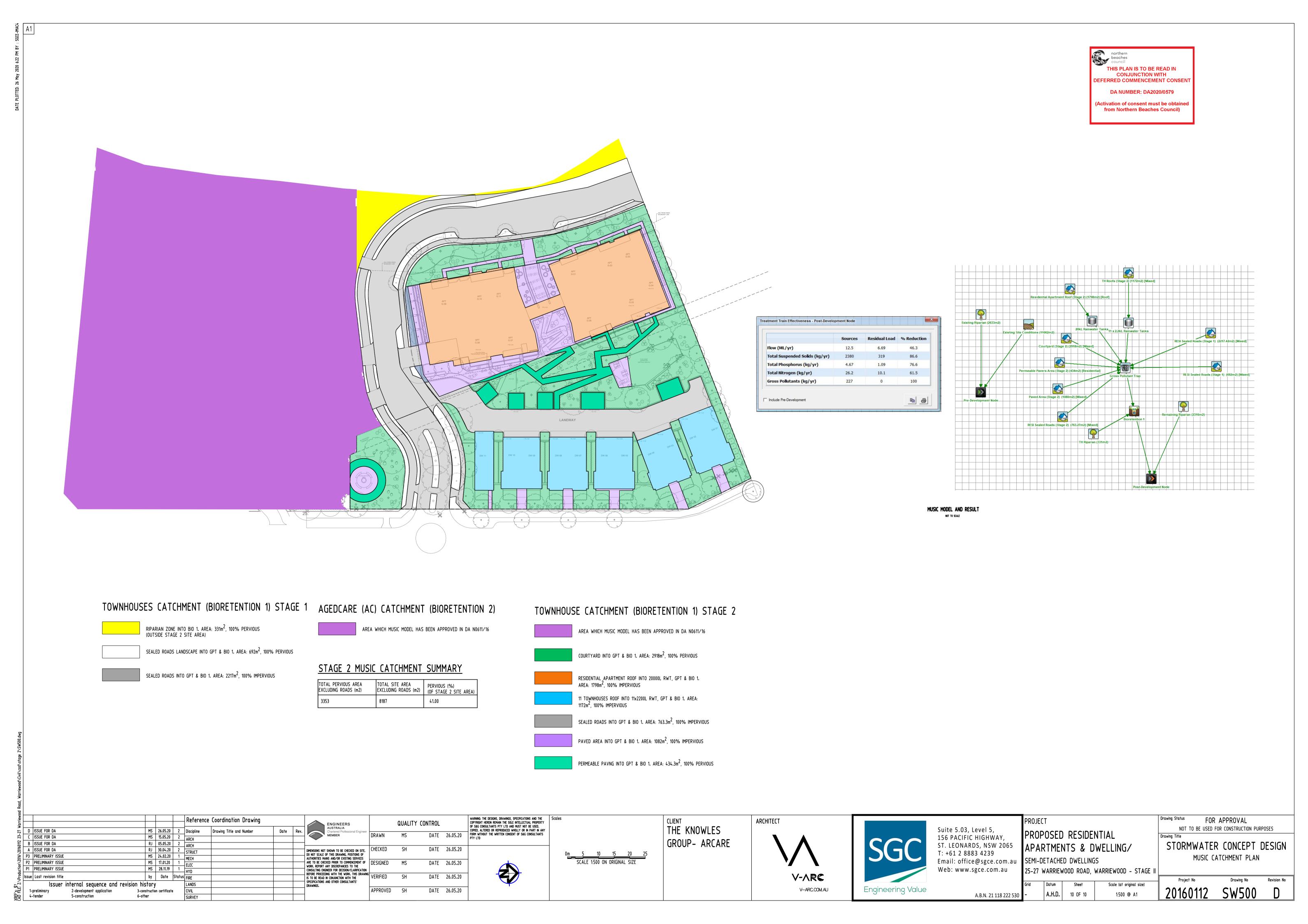


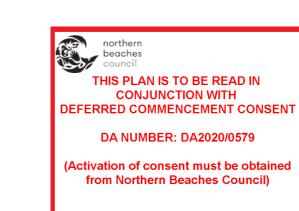


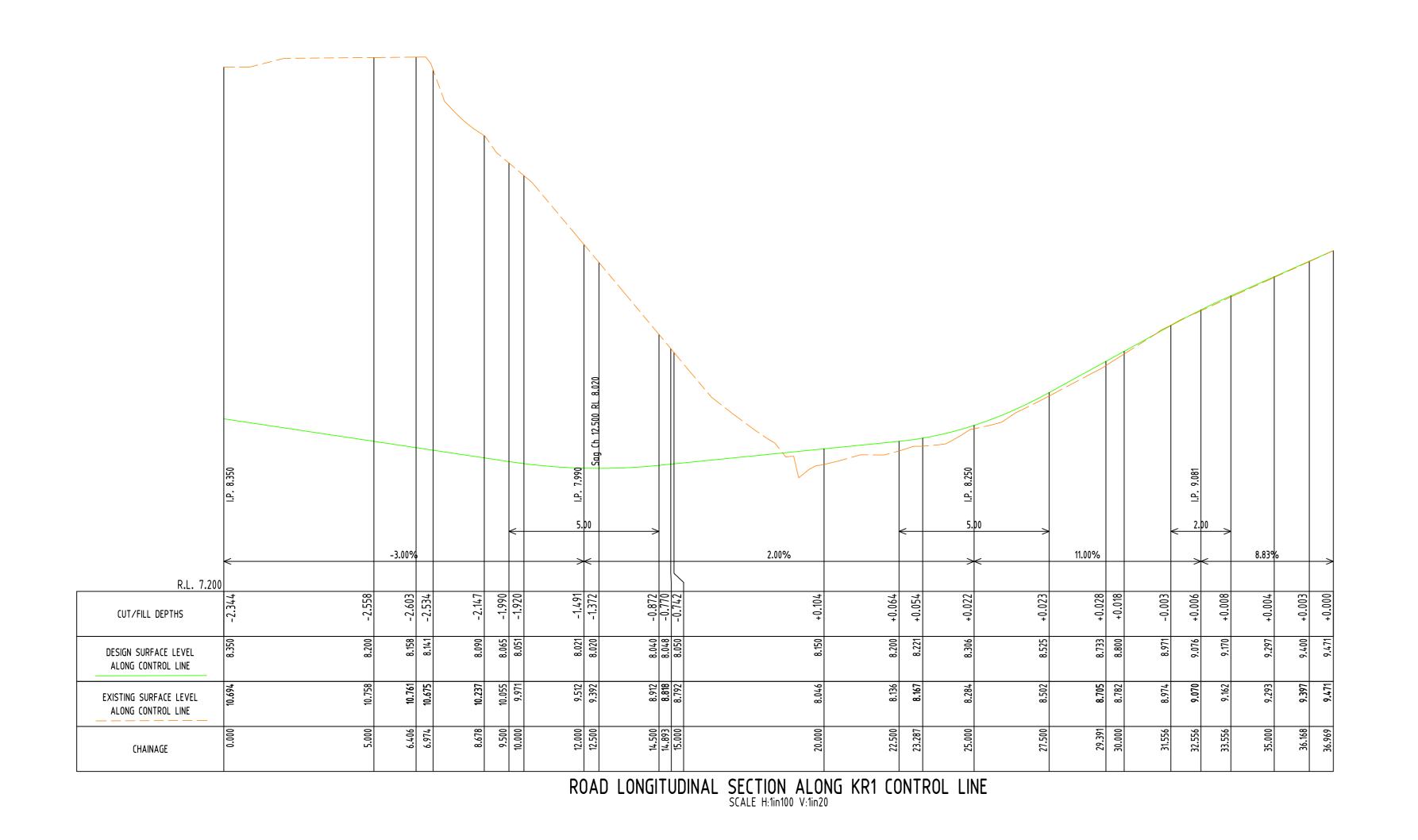


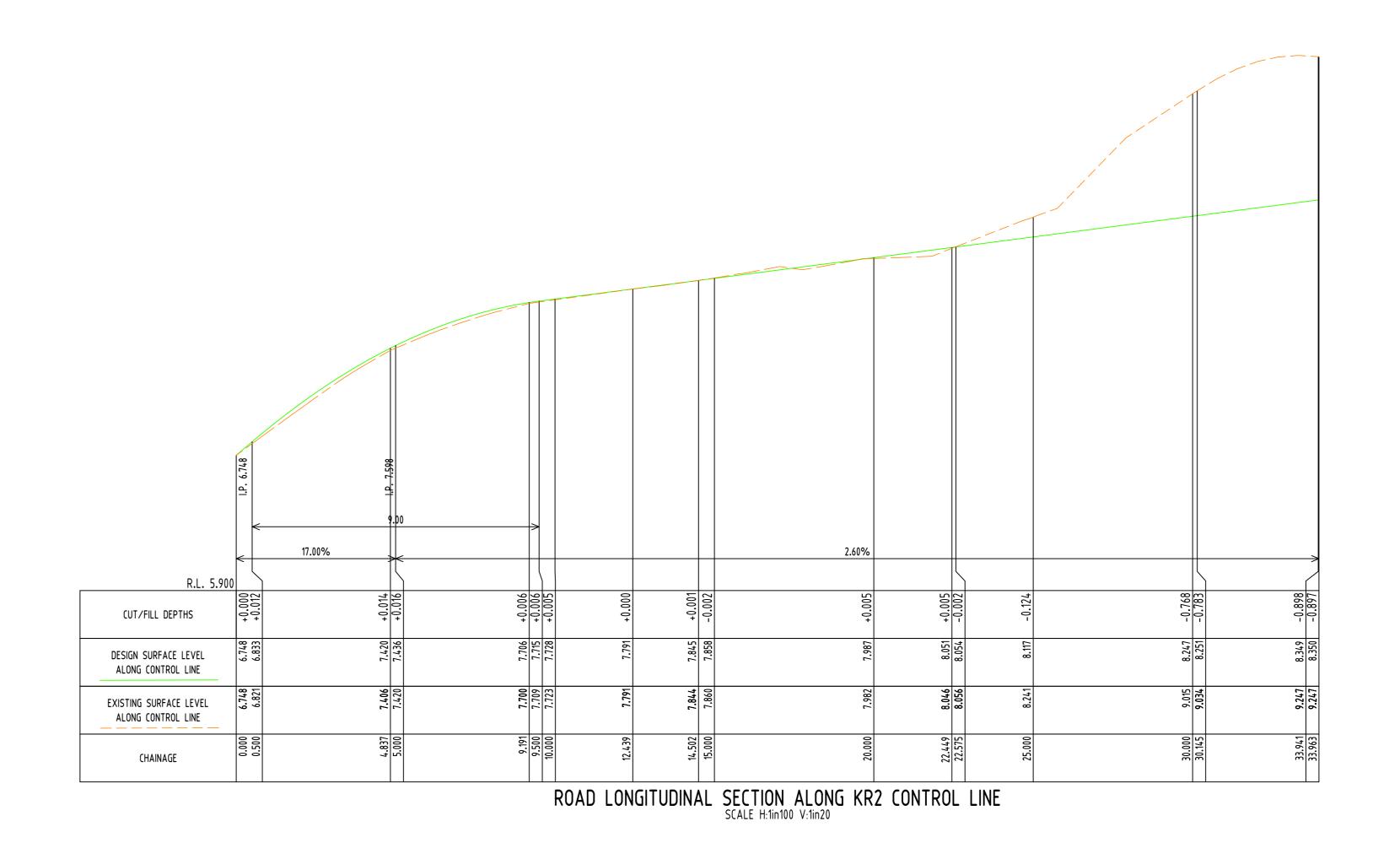


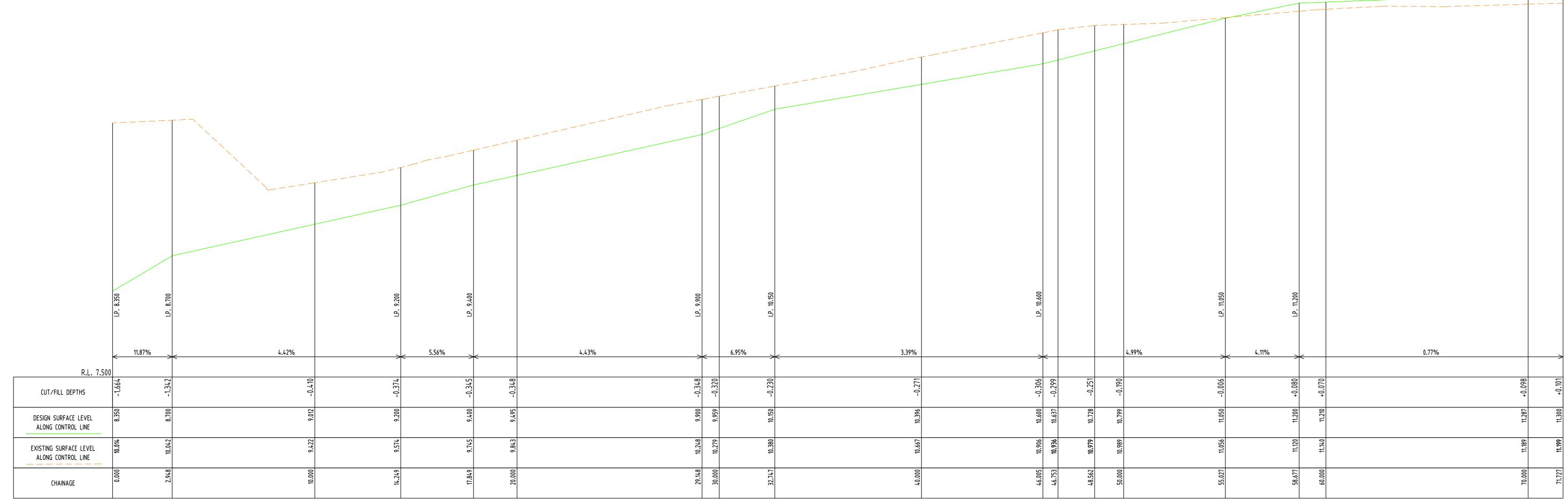












ROAD LONGITUDINAL SECTION ALONG LANEWAY CL CONTROL LINE SCALE H:1in100 V:1in20

DIAL BEFORE
YOU DIG
www.1100.com.au

Reference Coordination Drawing

Discipline
Drawing Title and Number

ARCH
ARCH
STRUCT
MECH
ELEC
HYD
by Date Status
FIRE

TISION history
3-construction certificate
6-other

Reference Coordination Drawing
Drawing Title and Number

ARCH
STRUCT
MECH
ELEC
HYD
ELEC
HYD
SURVEY WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST NOT BE USED, COPIED, ALTERED OR REPRODUCED WHOLLY OR IN PART IN ANY FORM WITHOUT THE WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD 0m 1 2 3 4 5 SCALE 1:100 ON ORIGINAL SIZE DIMENSIONS NOT SHOWN TO BE CHECKED ON SITE. DO NOT SCALE OF THIS DRAWING.
POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED
PRIOR TO COMMENCEMENT OF WORK. REPORT ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DECISION/CLARIFICATION BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER CONSULTANTS' DRAWINGS.

CHECKED CK

DATE 26.0

VERIFIED
SAM HADDAD
SAM HADDAD
MI EAUST CPENG NPER 2247040 C SUBMISSION TO COUNCIL

B SUBMISSION TO COUNCIL

CK 26.05

A SUBMISSION TO COUNCIL

Issue Last revision title

Issuer internal sequence and revision history

2 development application

3 construction coefficients

3 construction coefficients 0<u>m 0.5 1 1.5 2 2.5</u> SCALE 1:50 ON ORIGINAL SIZE 1-preliminary 4-tender 2-development application 5-construction



CLIENT





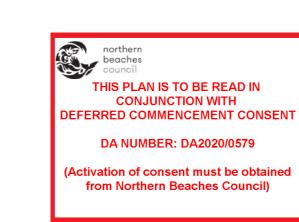
Engineering Value

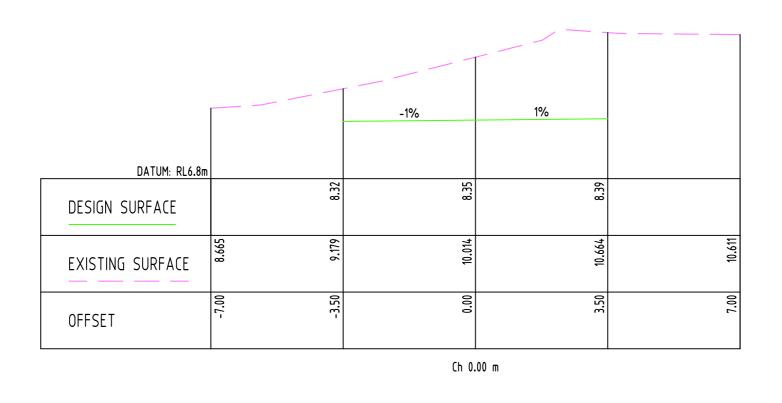
Suite 5.03, Level 5,
156 PACIFIC HIGHWAY
ST. LEONARDS, NSW 2065
T: +61 2 8883 4239
Email: office@sgce.com.au
Web: www.sgce.com.au Scale (at original size)

AS SHOWN

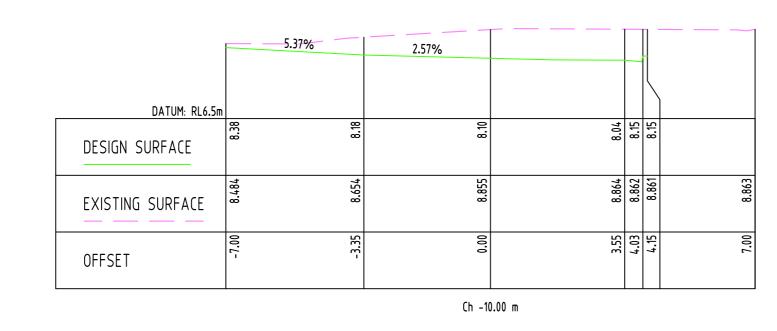
A.B.N. 21 118 222 530 MGA 56 A.H.D. 3 0F 4

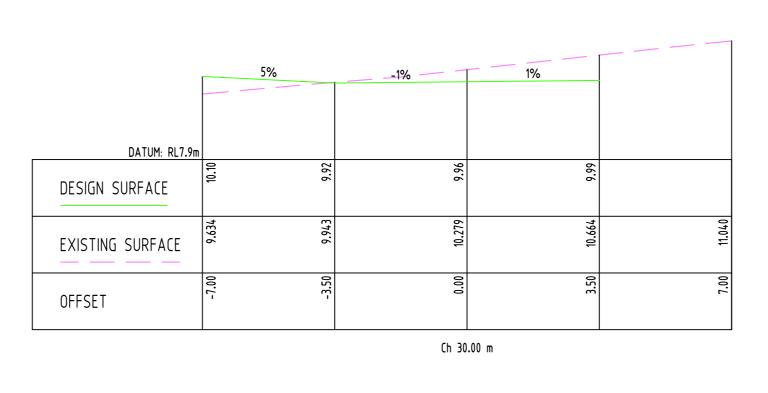
FOR APPROVAL CIVIL WORKS LONGITUDINAL SECTION ALONG KR1, KR2 & LANEWAY CONTROL LINE Project No Drawing No Revision No



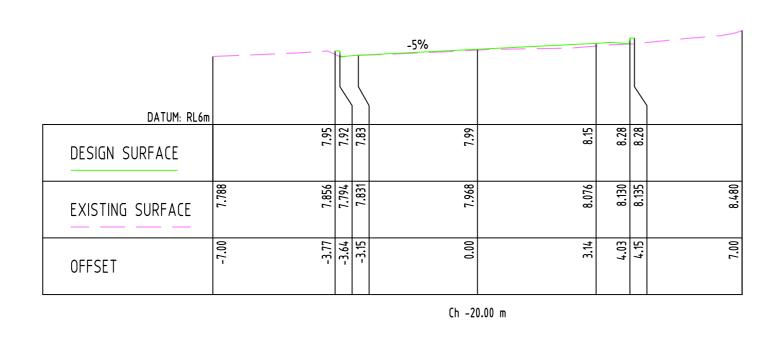


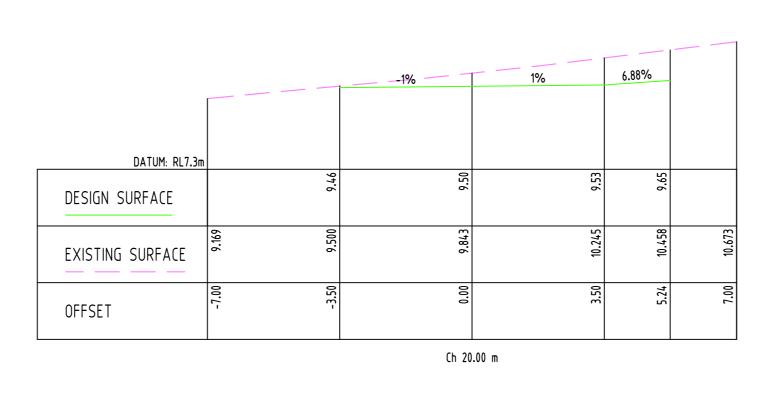
|                  |        |        | 1%     | -4.54% |        |
|------------------|--------|--------|--------|--------|--------|
|                  |        |        |        |        |        |
| DATUM: RL8.4m    |        |        |        |        |        |
| DESIGN SURFACE   | 10.36  | 10.40  | 10.43  | 10.35  |        |
| EXISTING SURFACE | 10.079 | 10.667 | 11.007 | 11.188 | 11.362 |
| OFFSET           | -7.00  | 0.00   | 3.50   | 5.29   | 7.00   |
|                  |        | Ch 40  | .00 m  |        |        |



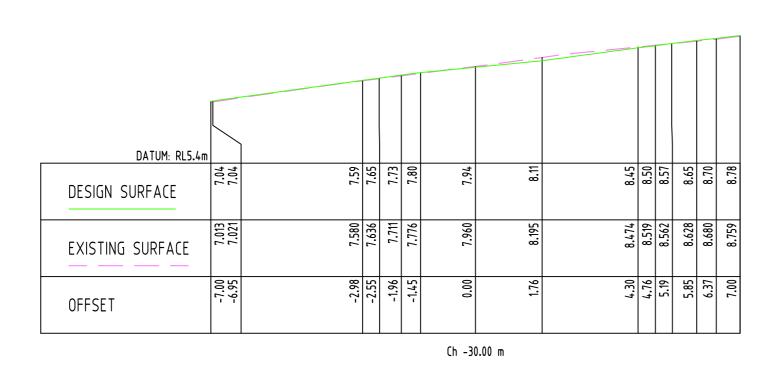


|                  |        | 5%     | -1%    | 1%     |  |
|------------------|--------|--------|--------|--------|--|
|                  |        |        |        |        |  |
|                  |        |        |        |        |  |
| DATUM: RL8.4     |        |        |        |        |  |
| DESIGN SURFACE   | 11.40  | 11.25  | 11.29  | 11.32  |  |
| EXISTING SURFACE | 10.467 | 10.815 | 11.189 | 11.564 |  |
| OFFSET           | -7.00  | -3.50  | 0.00   | 3.50   |  |
|                  | 1 1    |        | Ch 70  | .00 m  |  |





|                  |        | 5%     |        | 1%     |        |
|------------------|--------|--------|--------|--------|--------|
| DESIGN SURFACE   | 11.35  | 11.18  | 11.21  | 11.25  |        |
| EXISTING SURFACE | 10.432 | 10.786 | 11.140 | 11.483 | 11.842 |
| OFFSET           | -7.00  | -3.50  | 0.00   | 3.50   | 7.00   |
|                  | •      |        | Ch 60  | .00 m  |        |

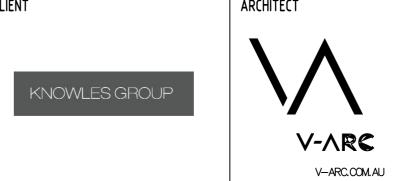


|                  |       | -1%   | 1%    | -5.65% |        |
|------------------|-------|-------|-------|--------|--------|
|                  |       |       |       |        |        |
| DATUM: RL7.1m    |       |       |       |        |        |
| DESIGN SURFACE   | 8.88  | 9.01  | 9.05  | 8.95   |        |
| EXISTING SURFACE | 8.840 | 9.422 | 07.6  | 9.938  | 10.126 |
| OFFSET           | -7.00 | 0.00  | 3.50  | 5.22   | 7.00   |
|                  |       | Ch 10 | .00 m |        |        |

|                  |        |        | 1%     | 1 in 8.38 |        |
|------------------|--------|--------|--------|-----------|--------|
|                  |        |        |        |           |        |
| DATUM: RL8.6m    |        |        |        |           |        |
| DESIGN SURFACE   | 10.76  | 10.80  | 10.83  | 11.05     |        |
| EXISTING SURFACE | 10.660 | 10.989 | 11.342 | 11.530    | 11.706 |
| OFFSET           | -7.00  | 0.00   | 3.50   | 5.31      | 7.00   |
|                  |        | Ch 50  | .00 m  |           |        |

DIAL BEFORE YOU DIG www.1100.com.au

| Temp\B       |   |                             |     |              |        | Reference      | Reference Coordination Drawing |      |      | ENGINEERS  | QUALITY CONTROL             |      |          | WARNING: THE DESIGNS, DRAWINGS, SPECIFICATIONS AND THE COPYRIGHT HEREIN REMAIN THE SOLE INTELLECTUAL |  |
|--------------|---|-----------------------------|-----|--------------|--------|----------------|--------------------------------|------|------|--|-----------------------------|------|----------|--|--|
| Local        |   |                             |     |              |        | Discipline     | Drawing Title and Number       | Date | Rev. | AUSTRALIA Chartered Professional Engineer MEMBER                           | DRAWN CK                    | DATE | 26.05.20 | PROPERTY OF S&G CONSULTANTS PTY LTD AND MUST<br>NOT BE USED, COPIED, ALTERED OR REPRODUCED           |  |
| )ata/        |   | +                           |     |              |        | ARCH           |                                |      |      | MEMBER   | DIAWN CK                    | DAIL | 20.03.20 | WHOLLY OR IN PART IN ANY FORM WITHOUT THE<br>WRITTEN CONSENT OF S&G CONSULTANTS PTY LTD              |  |
| \Appl        | C   | SUBMISSION TO COUNCIL       | CK  | 26.05.20     | 2      | ARCH<br>STRUCT |                                |      | +    | DIMENSIONS NOT SHOWN TO BE CHECKED ON                                      | CHECKED CK                  | DATE | 26.05.20 |  |  |
| are,         | В   | SUBMISSION TO COUNCIL       | CK  | 22.05.20     | 1      | MECH           |                                |      |      | SITE. DO NOT SCALE OF THIS DRAWING.  |                             |      |          |  |  |
| Š/cl         | Α   | SUBMISSION TO COUNCIL       | D.V | 19.10.18     | 1      | ELEC           |                                |      |      | POSITIONS OF AUTHORITIES MAINS AND/OR EXISTING SERVICES ARE TO BE CHECKED  | DESIGNED CK                 | DATE | 26.05.20 |  |  |
| User         | P1  | PRELIMINARY                 | D.V | 08.10.18     | 1      | HYD            |                                |      | +    | PRIOR TO COMMENCEMENT OF WORK. REPORT                                      |                             |      |          |  |  |
| ن کے         | Issue   | e Last revision title       | by  | Date         | Status |                |                                |      |      | ANY DISCREPANCIES TO THE CONSULTING ENGINEER FOR DECISION/CLARIFICATION    | VERIFIED                    | DATE |          | 1  |  |
| 'n.          | Issuer internal sequence and revision history |                             |     |              |        | LANDS          |                                |      |      | BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS TO BE READ IN CONJUNCTION |                             |      |          |  |  |
| KAPE<br>CAPE |   |                             |     | ion certific | ate    | CIVIL          |                                |      |      | WITH THE SPECIFICATIONS AND OTHER  | MI EAust CPEng NPER 2247040 | A    |          |  |  |
|              | 4   | tender 5-construction 6-oth | ier |              |        | SURVEY         |                                |      |      | CONSULTANTS' DRAWINGS.   |                             |      |          |  |  |





|     | PROJECT                           |
|-----|-----------------------------------|
|     | PROPOSED RESIDENTIAL              |
| 65  | SUBDIVISION & AGED CARE           |
| .au | 25-27 WARRIEWOOD ROAD, WARRIEWOOD |
|     |                                   |

| Project No                     | Drawing No   | Revision N |
|--------------------------------|--------------|------------|
| CROSS SECTIONS A               | LONG LANEWAT | CONTROL    |
| <b>CI\</b><br>CROSS SECTIONS A | /IL WORKS    | CONTDOL I  |
| Drawing Title                  |              |            |
| Drawing Status FOR             | APPROVAL     |            |