



BCC DS

RECEIVED

19-JUN-2026

APPLICATION REF

A007048358

Site Based Stormwater Management Plan

for the
Proposed Child Care Centre
at
675 Seventeen Mile Rocks Road, Sinnamon Park
for
GSEJ Development

Project No: WCD-21894

Revision: E

Date: 17 June 2026

RPEQ Certification

This document has been reviewed and approved by the following appropriately qualified and experienced Registered Professional Engineer of Queensland (RPEQ).

A handwritten signature in blue ink, appearing to read "Wayne Clark", is positioned above a horizontal dotted line.

Wayne Clark (RPEQ No.16580)

WC Designs Pty Ltd
707 / 17 Deshon Street, Woolloongabba Qld 4102
0412 469 686

www.wcdesigns.net.au

REVISION	AUTHOR	DESCRIPTION	DATE	APPROVED
A	JP	For Approval (Final)	17/07/2023	WC
B	WC	For Approval (Final)	28/07/2023	WC
C	WC	For Approval (Final)	22/01/2024	WC
D	WC	For Approval (Final)	21/04/2026	WC
E	WC	For Approval (Final)	17/06/2026	WC

Copyright Notice

WC Designs Pty Ltd © 2026

The authors retain copyright in this material. Copying permitted under Copyright Act 1968 and Sustainable Planning Act 2009. Intellectual Property resides with WC Designs.

Table of Contents

1. Executive Summary	3
1.1 Introduction	3
1.2 Objectives	4
1.3 Development Details	4
1.4 Existing Infrastructure	5
1.5 Report Limitations	5
2. Stormwater Quality	6
2.1 Water Quality Objectives	6
2.2 Pollutant Concerns	7
2.3 Construction Phase	7
2.4 Operational Phase	7
3. EROSION AND SEDIMENT MANAGEMENT	8
3.1 Objectives	8
3.2 Erosion & Sediment Management During Development Phases	8
3.3 Erosion Control Measures	9
3.4 Sediment Control Measures	9
4. STORMWATER QUANTITY	11
4.1 Water Quantity Objectives	11
4.2 Methodology	11
4.3 Post Development Scenario	12
4.4 Stormwater Strategy	13
5. Conclusion and Recommendations	14
6. References	15

Appendices

A	~	Architectural Plans
B	~	Conceptual Services Layout Plan
C	~	Rational Method Calculations

1. Executive Summary

1.1 Introduction

The following Site Based Stormwater Management Plan (SBSMP) has been prepared on behalf of GSEJ Development for the proposed “Child Care Centre” of 675 Seventeen Miles Rocks Road, Sinnamon Park. The proposed development shall include the construction of a Child Care Centre. Refer to Appendix A for a copy of the Proposed Architectural Plans prepared by Z Architects.

This SBSMP has been prepared primarily to address water quantity & quality objectives for the proposed child care centre on Lot 1 on RP 114727.

The existing topography varies between RL.27.85m AHD on the Southern boundary of the development to RL.23.51 AHD on the Northern boundary of the development as shown via the natural surface contours included in the Z Architects Drawings as included in Appendix A. The existing allotment includes a single church with the remainder of the site being grassed.

Refer to Figures 1.1 and 1.2 below showing Street Locality and existing Aerial View of the proposed development site.

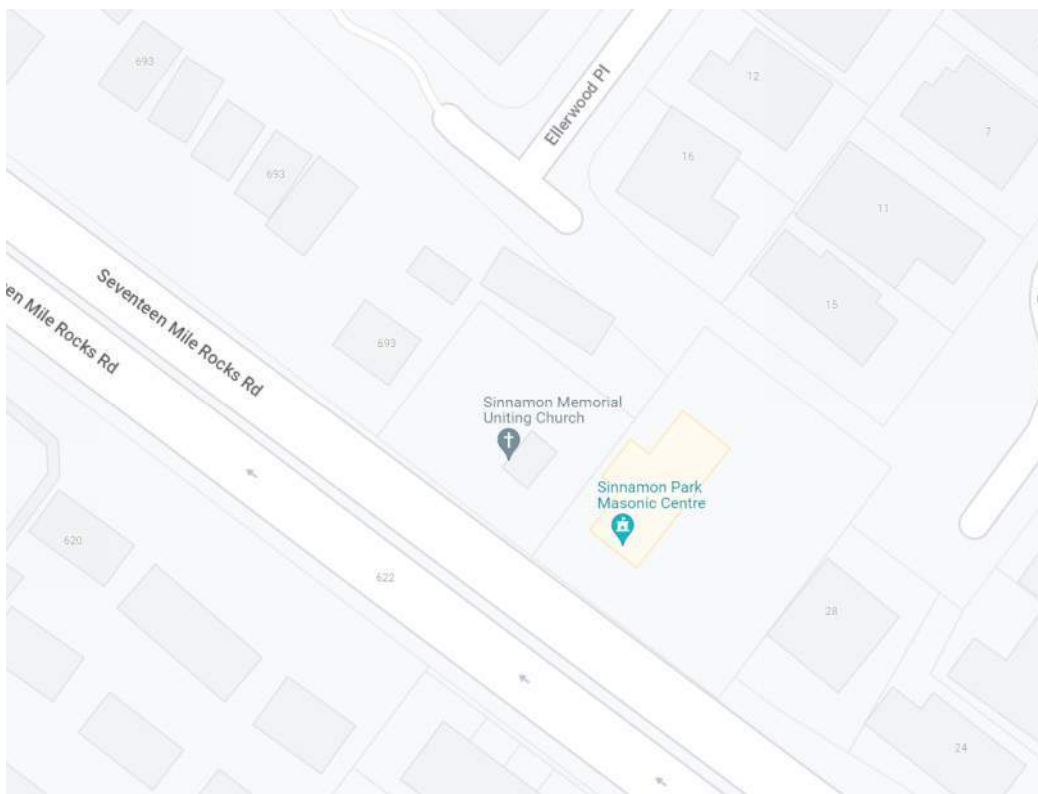


Figure 1.1 ~ Locality Plan (Google Maps 2023)

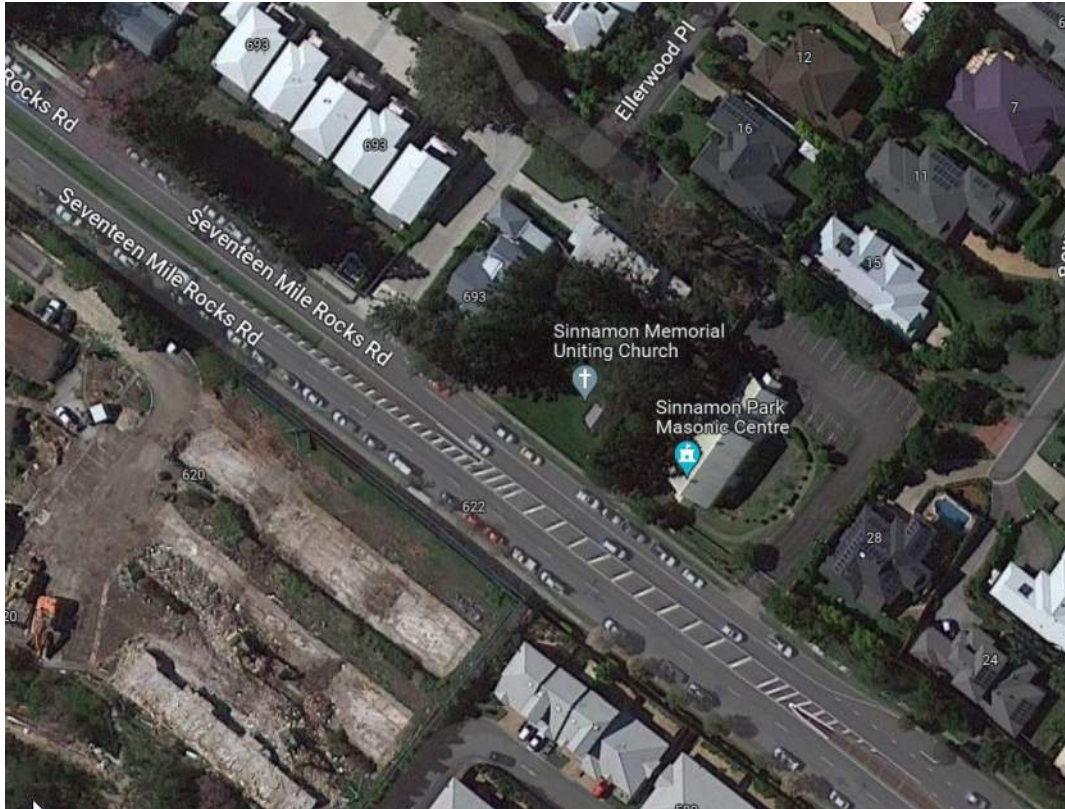


Figure 1.2 ~ Aerial View (Google Maps 2023)

1.2 Objectives

The objective of this report is to address the stormwater quality and quantity requirements of the Queensland Urban Drainage Manual (QUDM), Brisbane City Council (BCC), the South East Queensland Regional Plan 2009-2031 Implementation Guideline No.7, the Environmental Protection Act 1994 and its associated Environmental Protection (Water) Policy 2009.

The aim of this Conceptual Stormwater Management Plan is to identify any stormwater detention requirements (if required) and an appropriate level of quality improvement for the treatable flow (if required) being $Q_{3\text{Month}}$ (as determined by BCC) to a level that achieved the Water Quality Objectives as deemed required.

1.3 Development Details

Site Address: 675 Seventeen Miles Rocks Road, Sinnamon Park QLD 4073

Property Description: Lot 1 on RP114727

Site Area: 1012m² (Total Site)

Proposed Use: Child Care Centre

Local Authority: Brisbane City Council (BCC)

1.4 Existing Infrastructure

The site falls from the southern edge of the property to the northern edge of the property at approximately 10.0%. Site levels range from RL27.85 to RL23.72. Roof water is discharged to the existing ground where runoff flows overland towards the north. Ground runoff currently sheets to the north.

1.5 Report Limitations

This report has been prepared by WC Designs Pty Ltd for GSEJ Development may only be used and relied on by GSEJ Development for the purpose agreed between WC Designs Pty Ltd and GSEJ Development as detailed within this report.

WC Designs Pty Ltd otherwise disclaims responsibility to any person other than GSEJ Development arising in connection with this report. WC Designs Pty Ltd also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by WC Designs Pty Ltd in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation on the report. WC Designs Pty Ltd has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by WC Designs Pty Ltd described in this report. WC Designs Pty Ltd disclaims liability arising from any of the assumptions being incorrect.

WC Designs Pty Ltd has prepared this report on the basis of information provided by GSEJ Development and others who provided information to WC Designs Pty Ltd (including Government Authorities), which WC Designs Pty Ltd has not independently verified or checked beyond the agreed scope of work. WC Designs Pty Ltd does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

2. Stormwater Quality

2.1 Water Quality Objectives

The Department of State Development, Infrastructure and Planning, "State Planning Policy (SPP), July 2017" defines development of state interest for receiving waters only when the development application triggers any of the following:

Material Change of Use:

A material change of use for urban purposes that involves premises 2500m² or greater in size? ->

Not Applicable

And, if yes:

- *Will result in six or more dwellings; or*
- *Will result in an impervious area greater than 25% of the NET development area*

Reconfiguration of Lot:

- *Reconfiguring a lot for an Urban purpose that involves premises 2500m² or greater in size AND will result in six or more lots? -> **Not Applicable***

Operational Works:

- *Operational works for an urban purpose that involves disturbing a land area 2500m² or greater in size? -> **Not Applicable***

Introduction of water quality improvement devices are therefore **not** required under the SPP.

2.2 Pollutant Concerns

The pollutants of concern are summarised below. These pollutants can have adverse environmental impacts within the downstream catchment. It is proposed to adopt Site-Based Water Sensitive Urban Design to provide capture and treatment to the below mentioned pollutants.

Table 2.1 Typical Pollutants

POLLUTANT	SOURCE
Litter	Paper, Construction Packaging, Food Waste, Cement, Off - Cuts
Sediment	Unprotected Exposed Soils, Stockpiles, Erosion
Hydrocarbons	Fuel and Oil Spills, Leaks from Machinery
Toxic Materials	Cement Slurry, Asphalt Primer, Solvents, Cleaning Agents
PH Altering Substances	Acid Sulphate Soils, Cement Slurry, Wash Water
Thermal Pollution	Vehicles and Machinery, Increased Impervious Areas

2.3 Construction Phase

During the construction phase, the potential exists for significant increases in the amount of pollutants, particularly sediment, escaping from the site. During this period, an Erosion and Sediment Control Plan is required to be prepared as part of the overall Environmental Management Plan prepared for the construction phase.

An Erosion and Sediment Control Plan will be prepared during the detailed design phase of the development. This plan will be prepared in accordance with Local Authority Guidelines and with recognised industry standards. This plan may also be submitted to Brisbane City Council for assessment.

2.4 Operational Phase

The Department of Environment and Resource Management, State Planning Policy, outlines the criteria for which types of developments are deemed 'high risk' for which the State Planning policy applies. Developments that fall outside the 'high risk' category are deemed to be 'low risk' and shall comply with local council requirements.

As this development has been identified as 'low risk', selection of appropriate Stormwater Quality Improvement devices is required to ensure best practice methods are implemented.

3. EROSION AND SEDIMENT MANAGEMENT

3.1 Objectives

The objective of Erosion and Sediment Management is to limit soil erosion and control sediment discharge from the proposed development by using suitable control devices during the four (4) primary phases; Existing, Earthworks, Construction and the Proposed Use.

Typical erosion and sediment control measures that will be incorporated into these development phases are highlighted in the following section.

3.2 Erosion & Sediment Management During Development Phases

PHASE 1 - EXISTING

Prior to construction commencing, the following sediment and erosion control measures will be implemented to minimise disturbance and ensure water quality is maintained:

- Designation of transport routes to ensure minimal vegetation disturbance. Transport routes will have construction exits in accordance with IEAust Guidelines,
- Construction entry/exit to be installed and will comprise of a designed gravel pad or placement of hardwood logs in accordance with the IEAust Guidelines,
- Install sediment fences around the proposed site (along tow of batter alignment),
- Install check dams if required, and
- Install dust control fences adjacent to the proposed earthworks areas (along property boundary) if required.

PHASE 2 - EARTHWORKS AND PHASE 3 - CONSTRUCTION

The following measures will be undertaken to mitigate water quality impacts during construction phase:

- Sediment fences to be erected at the base of all batters and stockpiles to prevent sediment transportation off site,
- Turf filter strips to be placed along all road verges,
- Diversion swales to divert sediment laden water,
- Rock check dams are to be placed intermittently along diversion swales,
- Re-vegetation of all disturbed areas as soon as possible,
- All sediment control structures to be maintained in an effective manner and inspected after each stormwater event. No structure is to accumulate sediment above 40% of its capacity,
- Construction of water quality treatment devices are to be undertaken in the final stages of construction of the development to ensure that clogging of the filter media is avoided, and
- Regular monitoring of water quality to determine the effectiveness of the sediment and erosion control measures.

PHASE 4 - PROPOSED DEVELOPMENT

Once construction is completed, the following strategies will be implemented to limit soil erosion and control sediment discharge leaving the site:

A monitoring program will be established for the stormwater treatment devices.

3.3 Erosion Control Measures

The time of disturbance on-site should be kept to a minimum by ensuring that construction works immediately follow the earthworks phase. Consideration to staging works should be given to minimise the area of exposed works at any given time.

Areas that may be subject to concentrated flow and that have been cleared may require turfing to ensure gully erosion does not start.

Any overburden that is not to be taken off-site should be stockpiled nearby and covered to prevent the mobilization of any particles into the drainage system.

The remaining exposed areas of the site are to be damped down as deemed necessary by the site supervisor to prevent dust. All batters are to have mulch or erosion control mats installed immediately after achieving final level.

Dust fencing is to be installed around the perimeter of earthworks to prevent wind velocities at ground level over the site if required.

The site is to be landscaped and revegetated in accordance with the approved Landscape Plans immediately after completion of construction activities to minimise the risk of erosion from exposed earthworks.

3.4 Sediment Control Measures

With reference to the IEAust Guidelines and Current Best Practice methods, there are four fundamental sediment control principles that have been identified for use during construction for this development site and are as follows:

Construction Exit

A dedicated construction exit is to be located at the sites entry and exit point for vehicles. This exit will be established to facilitate the removal of soil, mud, dust and debris from the tyres of vehicles prior to leaving the construction site. The construction exit can comprise of a gravel pad designed or placement of hardwood logs, constructed and maintained in accordance with the IEAust Guideline. Alternatively, a vibratory grid system can be hired or constructed. The advantages of the grid system include the ease of movement and that they can be used for several years.

Sediment Fences

Sediment fencing is to be established down slope of any exposed earthworks where there is a risk of contaminated water leaving the site prior to clearing and site works commencing. Sediment fencing may be required at regular spacing down the disturbed grade to limit rutting caused by concentration of sheet flow. Sediment fences shall be used to protect any temporary stockpile areas on an as-needs basis. Sediment collected from sediment barriers is to be regularly removed and either taken off site as part of the earthworks phase of the proposed development or stockpiled for use during revegetation.

Sediment Barriers

Sediment barriers are to be constructed around all stormwater drainage inlet points where contaminated water may drain to. This will aid in ensuring sediments are settled out prior to flows entering the underground stormwater drainage system. Sediment barriers are to be gravel wrapped in geotextile 'sausage' or similar.

Turf Filter Strips

If required, turf filter strips approximately 600mm minimum wide can be placed on the upstream side of the proposed concreted footpath. These will act in conjunction with sediment fences to further treat any overland flow from the site. Turf filter strips are to be constructed and maintained in accordance with the IEAust Guidelines.

4. STORMWATER QUANTITY

4.1 Water Quantity Objectives

Water quantity objectives for the proposed development have been determined in accordance with the Brisbane City Council Planning Scheme and the Queensland Urban Drainage Manual (QUDM 2014) as follows:

- “Lawful Point of Discharge” (**for all captured roof water drainage**) being a proposed pipe connection to the proposed stormwater infrastructure located within Seventeen Mile Rocks Road in accordance with Brisbane City Council requirements.
- “Lawful Point of Discharge” (**for all surface water drainage**) being a proposed pipe connection to the existing infrastructure located within the pedestrian pathway located at the end of Ellerwood Place in accordance with Brisbane City Council requirements.
- No adverse impact on adjoining or downstream properties.

4.2 Methodology

It is proposed to utilise a series of strategically placed field inlet pits to capture all surface runoff within the development area from the drive / hardstand areas. From there the runoff will be directed the LPOD's.

Pre-development Scenario

For hydrologic modelling of the expected pre and post developed flows the Rational Method equation were utilized.

The Rational Method adopted a C10 coefficient of runoff of 0.710 and Time of Concentration of 10 minutes for the pre-development catchment based upon the type of development and minimum C10 values and times as stated within QUDM 2014.

Table 4.1 below outlines the calculations, methodology and input parameters used to undertake the pre-development hydrologic modelling for the pre-developed site.

Table 4.1 ~ Pre-development Rational Method Input Parameters

Parameter	Value	Units	Source
IFD Chart	BCC	N/A	Bureau of Meteorology
IFD Coefficients	BCC	N/A	Bureau of Meteorology
Pervious Catchment Area	0.9620	ha	Survey Plan
Impervious Catchment Area	0.0500	ha	Survey Plan
Vectored Slope	10.0	%	Survey Plan

Table 4.2 below outlines the results of the hydrological modelling. Refer detailed Rational Method calculation outputs included in Appendix C for further details.

Table 4.2 ~ Pre-development Peak Flow Rates

ARI (Years)	Value (m ³ /s)
Q1	0.014
Q2	0.017
Q5	0.027
Q10	0.033
Q20	0.040
Q50	0.050
Q100	0.058

4.3 Post Development Scenario

The Rational Method adopted a C10 coefficient of runoff of 0.851 and Time of Concentration of 6 minutes for the post development catchment based upon the type of development and minimum C10 values and times as stated within QUDM 2014.

Table 4.3 below outlines the calculations, methodology and input parameters used to undertake the post-development hydrologic modelling for the post developed scenario.

Table 4.3 ~ Post-development Rational Method Input Parameters

Parameter	Value	Units	Source
IFD Chart	BCC	N/A	Bureau of Meteorology
IFD Coefficients	BCC	N/A	Bureau of Meteorology
Pervious Catchment Area	0.0346	ha	Survey Plan
Impervious Catchment Area	0.0667	ha	Survey Plan
Vectored Slope	1.0	%	Survey Plan

Table 4.4 below outlines the results of the hydrological modelling. Refer detailed Rational Method calculation outputs included in Appendix C for further details.

Table 4.4 ~ Post Development Peak Flow Rates

ARI (Years)	Value (m ³ /s)
Q1	0.020
Q2	0.024
Q5	0.036
Q10	0.045
Q20	0.055
Q50	0.070
Q100	0.081

The development of the site will increase the impervious surface and therefore has the potential to increase local site runoff thus Brisbane City Council wishes to create a 'no worsening' effect of peak discharge. The table below identifies the difference between predevelopment and post development peak flows.

Table 4.5 ~ Pre vs Post Development Peak Flow Rates

ARI (Years)	Pre-Development Peak Flow Value (m ³ /s)	Post-Development Peak Flow Value (m ³ /s)	Difference (m ³ /s)
Q1	0.014	0.020	+ 0.006
Q2	0.017	0.024	+ 0.007
Q5	0.027	0.036	+ 0.009
Q10	0.033	0.045	+ 0.012
Q20	0.040	0.055	+ 0.015
Q50	0.050	0.070	+ 0.020
Q100	0.058	0.081	+ 0.023

Refer detailed Rational Method calculation outputs included in Appendix C for further details.

4.4 Stormwater Strategy

The proposed stormwater strategy is to direct all roofwater runoff to Seventeen Mile Rocks Road with the remainder of flows being directed to the existing stormwater infrastructure within the pedestrian pathway via pipe connection through the neighbouring lot.

Table 4.6 ~ Pre vs Post Development Rear Boundary Peak Flows

ARI (Years)	Pre-Development Peak Flow Value (m ³ /s)	Post-Development Peak Flow Value (m ³ /s)	Difference (m ³ /s)
Q1	0.014	0.008	- 0.006
Q2	0.017	0.009	- 0.008
Q5	0.027	0.014	- 0.013
Q10	0.033	0.018	- 0.015
Q20	0.040	0.022	- 0.018
Q50	0.050	0.028	- 0.022
Q100	0.058	0.032	- 0.026

As can be seen within table 4.6 above the flows directed to the rear boundary are greatly reduced thus providing a non-worsening effect for all downstream properties. All roof flows are to be directed to the proposed infrastructure within Seventeen Mile Rocks Road and no detention is proposed.

Table 4.7 ~ Combined (Front & Rear Discharge) Post Development Peak Flows

ARI (Years)	Peak Flow Value (m ³ /s) (Front Discharge)	Peak Flow Value (m ³ /s) (Rear Discharge)	Total Discharge (m ³ /s)
Q1	0.012	0.008	0.020
Q2	0.014	0.009	0.024
Q5	0.022	0.014	0.036
Q10	0.027	0.018	0.045
Q20	0.033	0.022	0.055
Q50	0.041	0.028	0.069
Q100	0.045	0.032	0.078

Table 4.7 above displays the total flows being directed to each LPOD.

5. Conclusion and Recommendations

The aim of this conceptual SBSMP is to identify the need (if any) for water quality improvement measures and stormwater capacity requirements.

5.1. Stormwater Quality

Assessment of the development against the State Planning Policy and the Brisbane City Council Planning Scheme, determined that formal water quality measures are not required for the proposed development.

5.2. Stormwater Quantity

Stormwater quantity was modelled using the Rational Method. The development will connect the roof water to the proposed 375mm stormwater pipe within Seventeen Mile Rocks Road while the surface drainage and ancillary flows will be connected to the existing stormwater located within the pedestrian pathway via pipe connection through the adjoining property to the east.

Adoption of dual discharge points results in a considerable reduction of flow towards the existing infrastructure within the pedestrian pathway to the northeast.

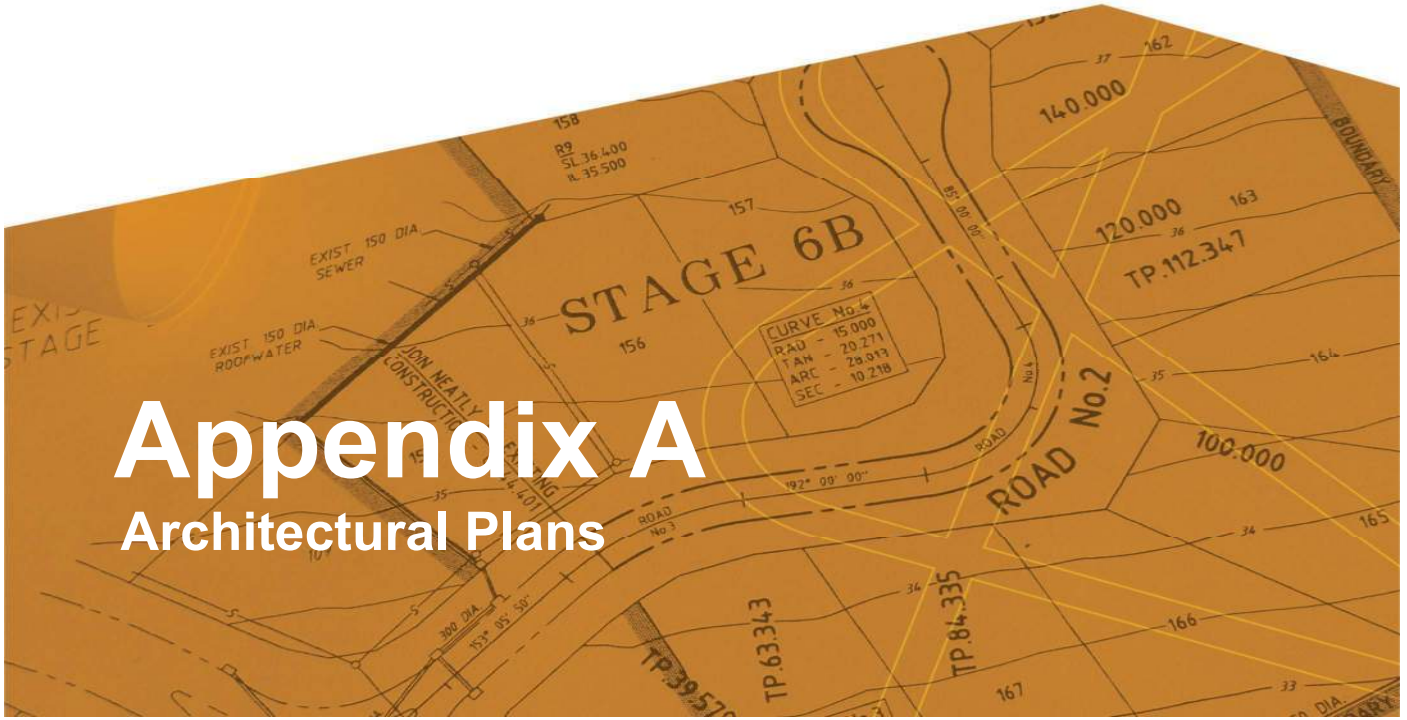
Connection of the roofwater from the new structure via new stormwater infrastructure within Seventeen Mile Rocks Road is expected to have minimal impact on the existing downstream piped network.

Based upon the above-mentioned comments, we believe that incorporation of the recommendations of this report will result in a development that satisfies BCC's requirements for stormwater quality and quantity.

6. References

Neville Jones & Associates (2007) "Queensland Urban Drainage Design Manual (QUDM)", Edition 2

Department of State Development, Infrastructure and Planning, "State Planning Policy, July 2014"



Appendix A

Architectural Plans

MINOR CHANGE: PROPOSED CHILDCARE



ADDRESS: 675 SEVENTEEN MILE ROCKS RD, SINNAMON PARK, QLD 4073
LOT: LOT 01 RP114727
AREA: 1,012m²
CLIENT: GSEJ DEVELOPMENT



DEVELOPMENT SUMMARY

ADDRESS: 675 SEVENTEEN MILE ROCKS RD,
SINNAMON PARK, QLD 4073
LOT: LOT 01 RP114727
AREA: 1012m²

DEEP PLANTING:

11.1% (112.7m²) COMPLIANT
DEEP PLANTING

11.8% (119.6m²) FUNCTIONAL
DEEP PLANTING

**TOTAL DEEP
PLANTING OUTCOME:
(FUNCTIONAL + COMPLIANT)** 22.9% (232.3m²)

CHILDCARE:
80 TOTAL PLACEMENTS

15 PARKINGS
54% = 8 STAFF PARKING (2.4m x 5.4m MINIMUM)
46% = 7 DROP-OFF PARKING (2.6m x 5.4m MINIMUM)

GROUND FLOOR:

ACTIVITY ROOM 01	32.9m ²	10 PLACEMENTS (10 x 3.25m ²)
ACTIVITY ROOM 02	71.9m ²	22 PLACEMENTS (22 x 3.25m ²)
ACTIVITY ROOM 03	36.0m ²	11 PLACEMENTS (11 x 3.25m ²)

OUTDOOR PLAY AREA REQ. 301² 43 PLACEMENTS (43 x 7m²)

LEVEL 01:

ACTIVITY ROOM 04	44.7m ²	13 PLACEMENTS (13 x 3.25m ²)
ACTIVITY ROOM 05	78.7m ²	24 PLACEMENTS (24 x 3.25m ²)

OUTDOOR PLAY AREA REQ. 259m² 37 PLACEMENTS (37 x 7m²)

GFA (GROSS FLOOR AREA INCLUDING FOYERS AND AMENITIES) AND IMPERVIOUS ROOFED STRUCTURES, HARDSTANDS AND OTHER IMPERVIOUS AREAS:

BASEMENT
GFA: -
IMPERVIOUS/ HARDSTAND/ OTHER: 628m²

GROUND FLOOR
GFA: 243m²
IMPERVIOUS/ HARDSTAND/ OTHER: 434m²

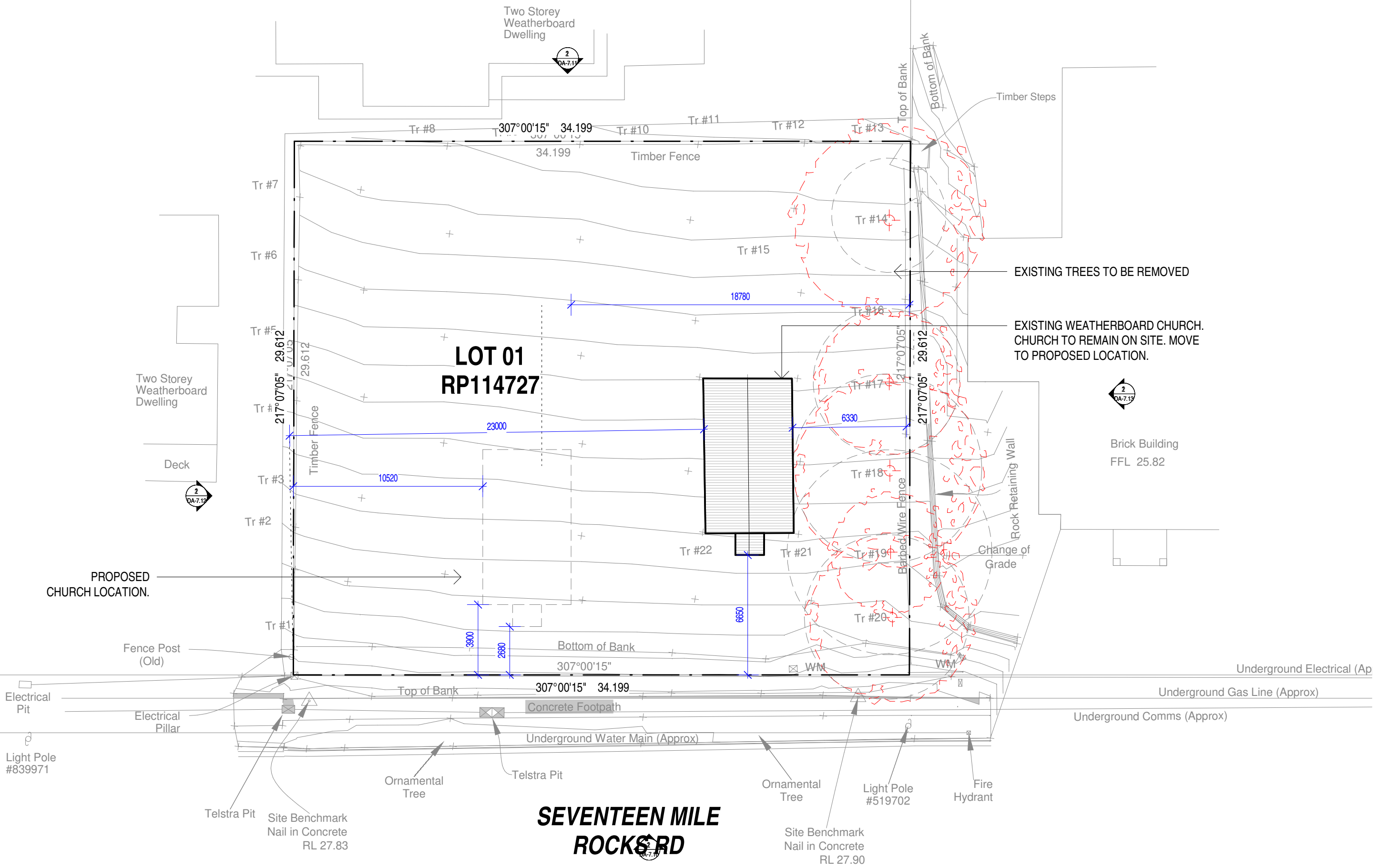
LEVEL 01
GFA: 188m²
IMPERVIOUS/ HARDSTAND/ OTHER: 280m²

GFA TOTAL: 431m²
IMPERVIOUS/ HARDSTAND/ OTHER TOTAL: 1,413m²

SITE COVER:

GROUND FLOOR: SITE COVER: 61% (612m²/1012m²)
LEVEL 01: SITE COVER: 50% (508m²/1012m²)





1 EXISTING SITE PLAN
1 : 200

DEVELOPMENT SUMMARY

BASEMENT PARKING:

15 PARKINGS
(8 x STAFF, 7 x DROP-OFF)

GROUND FLOOR:

43 PLACEMENTS
OUTDOOR PLAY:
304m²

LEVEL 01:

37 PLACEMENTS
OUTDOOR PLAY: 262m²

TOTAL PLACEMENTS:

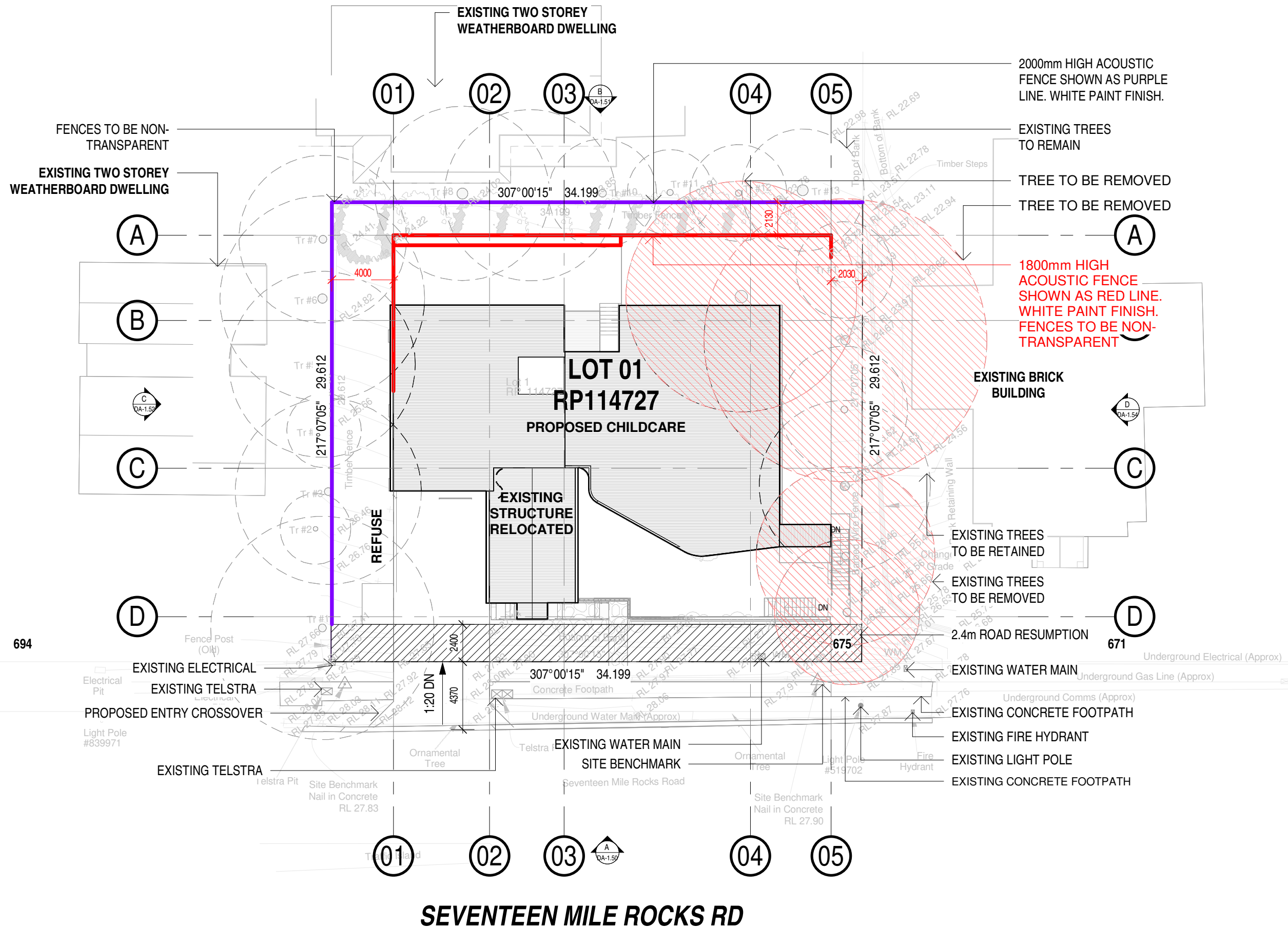
80

COMPLIANT DEEP

PLANTING: 112m²

FUNCTIONAL DEEP

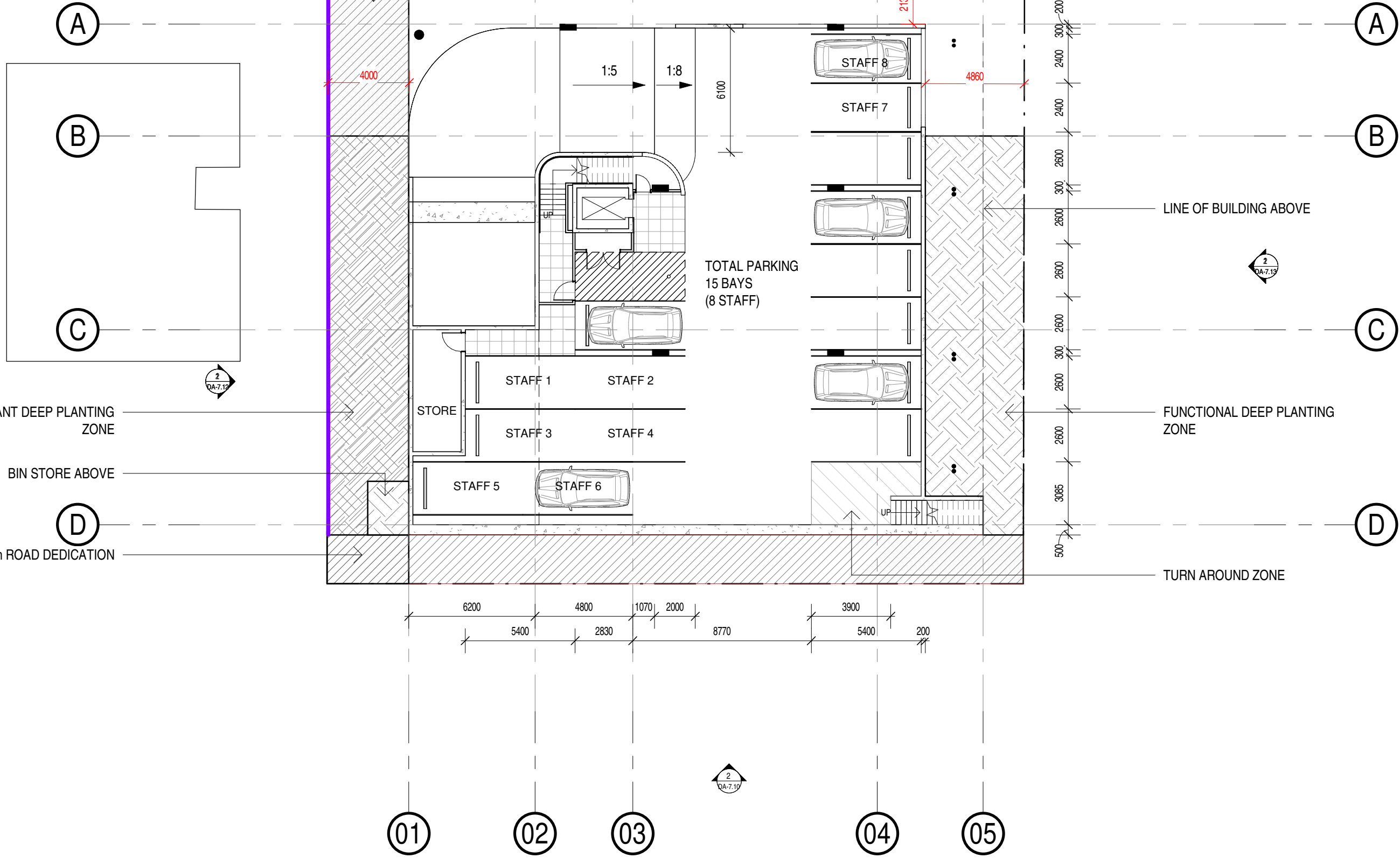
PLANTING: 119m²



PROPOSED LANDSCAPING TO LANDSCAPE ARCHITECT'S DETAILS

FENCES TO BE NON-TRANSPARENT

2000m HIGH ACOUSTIC FENCE SHOWN AS PURPLE LINE. DOUBLE LAPPED AND CAPPED. WHITE PAINT FINISH



COMPLIANT DEEP PLANTING ZONE

BIN STORE ABOVE

2.4m ROAD DEDICATION

LINE OF BUILDING ABOVE

FUNCTIONAL DEEP PLANTING ZONE

TURN AROUND ZONE



ZARCHITECTS

CLIENT
GSEJ DEVELOPMENT

PROJECT
675 SEVENTEEN MILE ROCKS RD, SINNAMON
PARK, QLD, 4073

TRUE NORTH

PROJECT NORTH

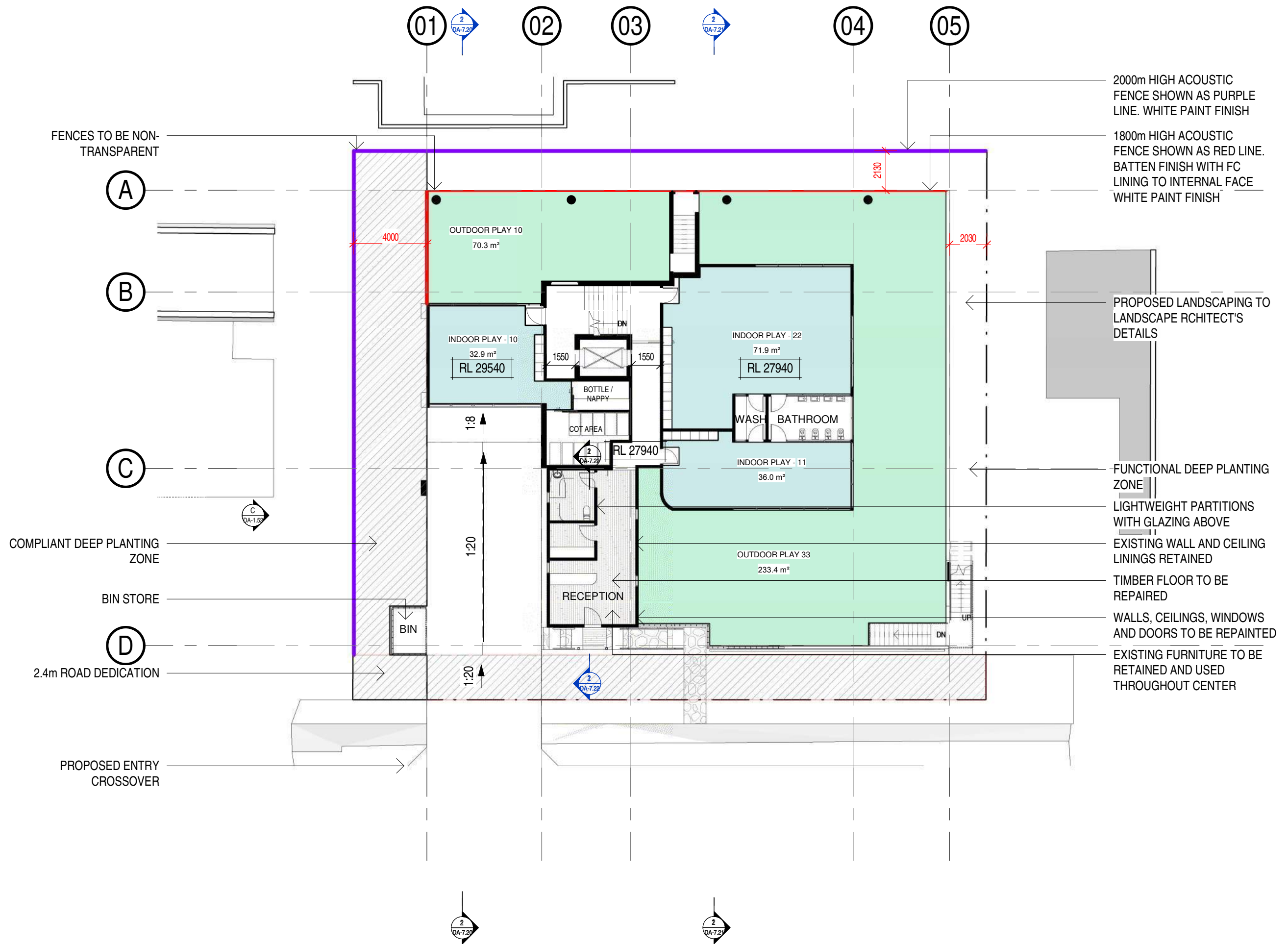
SCALE (A3)
1 : 200

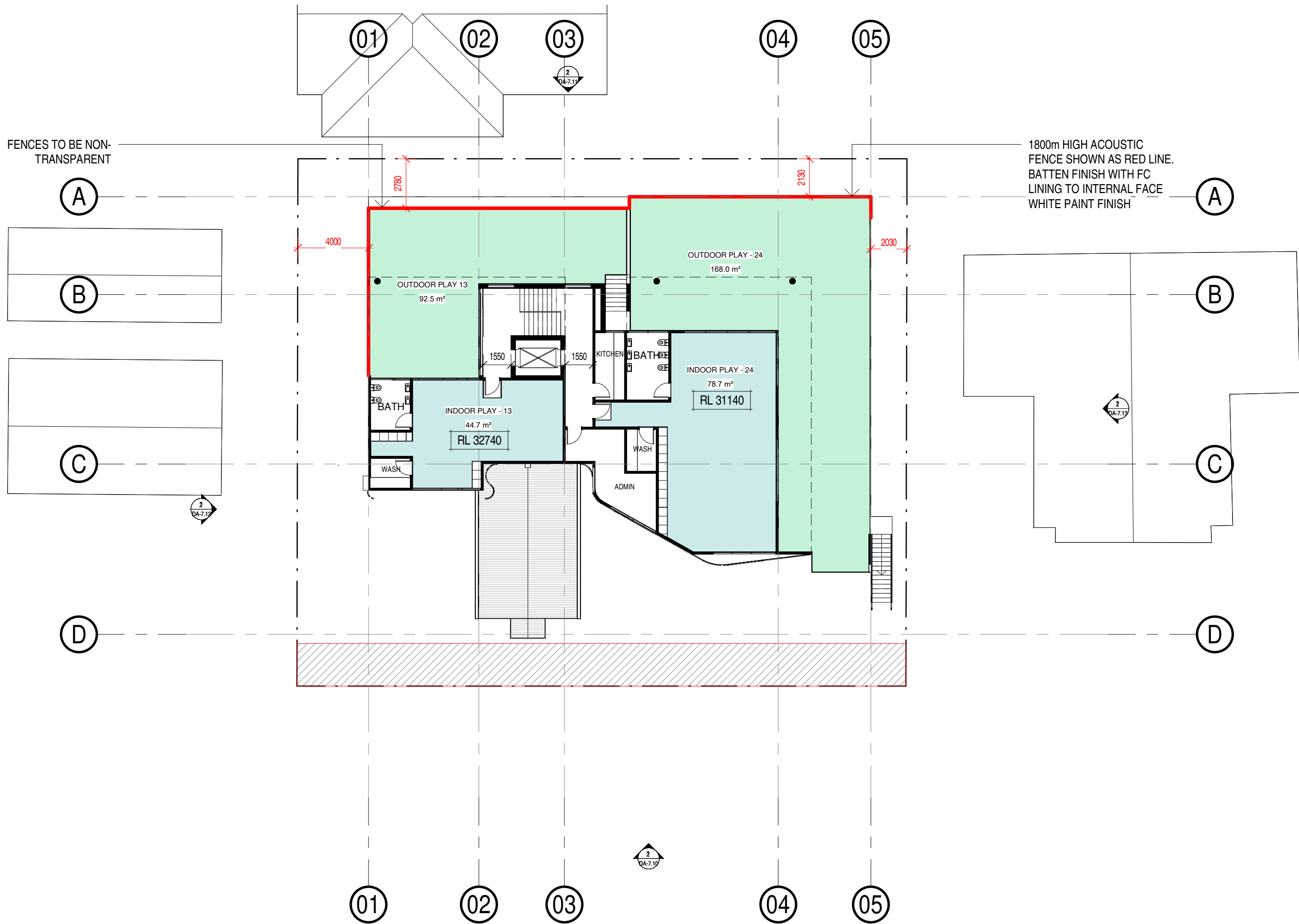
DRAWING NUMBER
DA-1.01

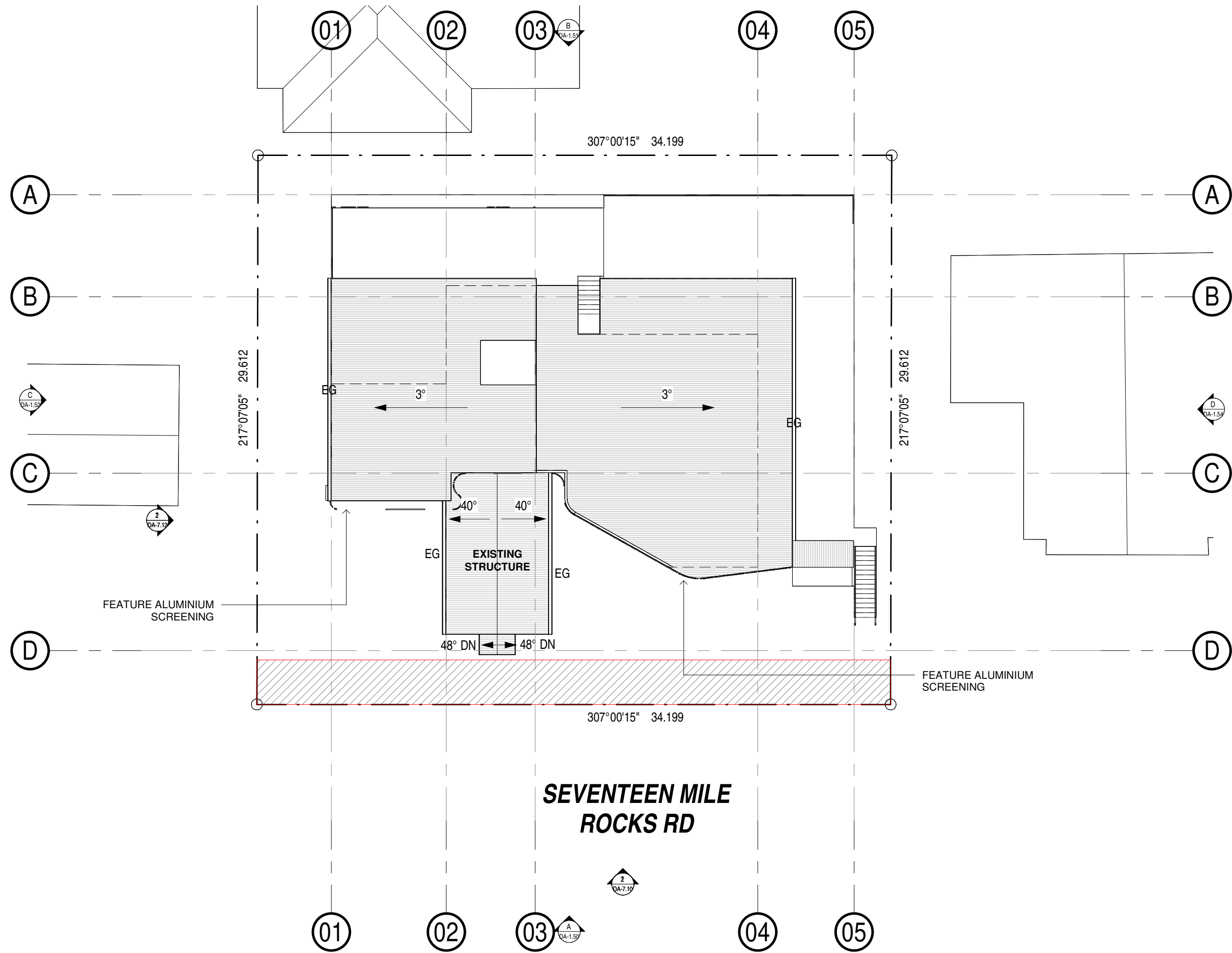
STATUS
DA RFI

DATE
19.05.2026

DRAWING
GA BASEMENT PLAN







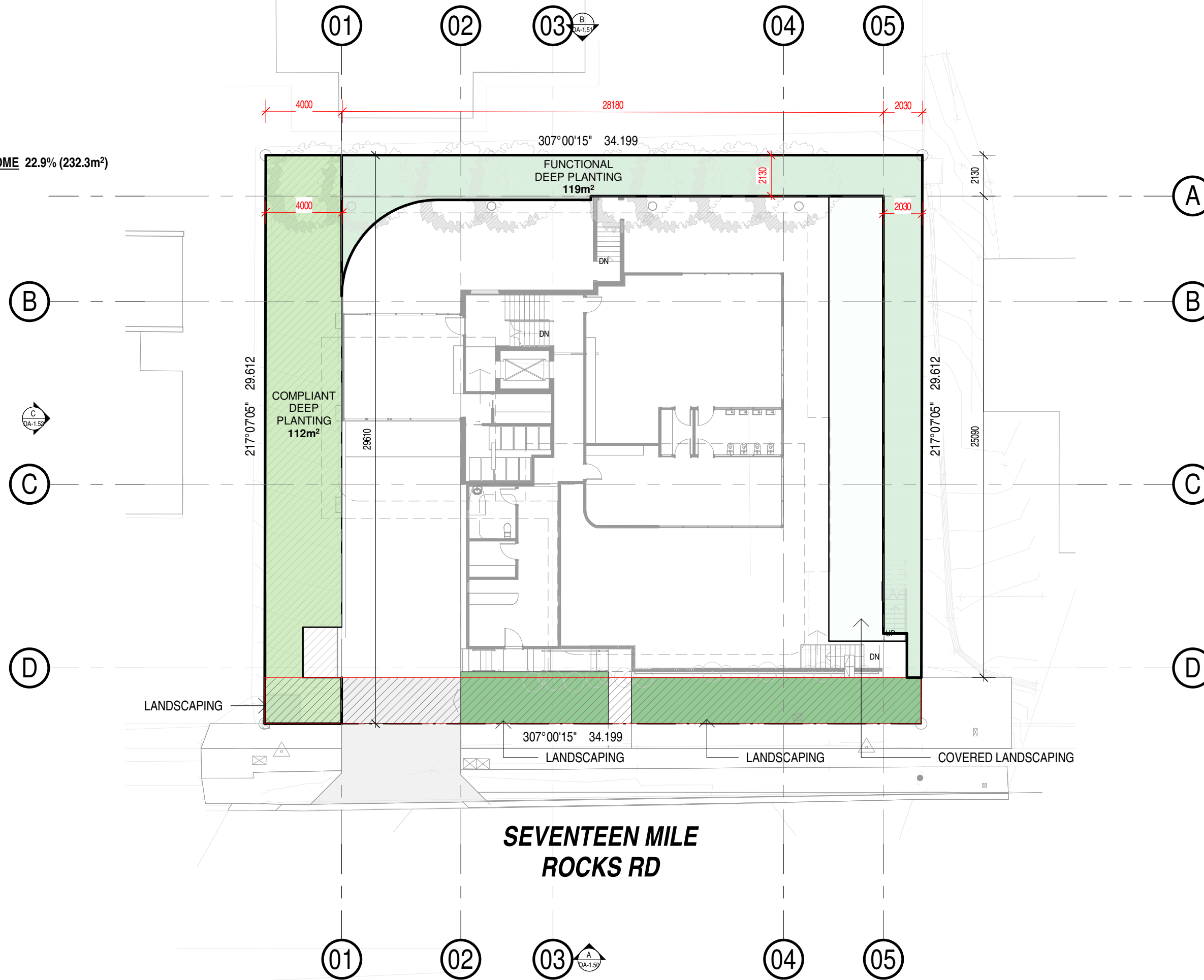
**SEVENTEEN MILE
ROCKS RD**

LEGEND

11.1% (112.7m²) COMPLIANT DEEP PLANTING

11.8% (119.6m²) FUNCTIONAL DEEP PLANTING

TOTAL DEEP PLANTING OUTCOME 22.9% (232.3m²)



ZARCHITECTS™

CLIENT
GSEJ DEVELOPMENT

PROJECT
675 SEVENTEEN MILE ROCKS RD, SINNAMON
PARK, QLD, 4073

TRUE NORTH



PROJECT NORTH



SCALE (A3)
1 : 200

DRAWING NUMBER
DA-1.25

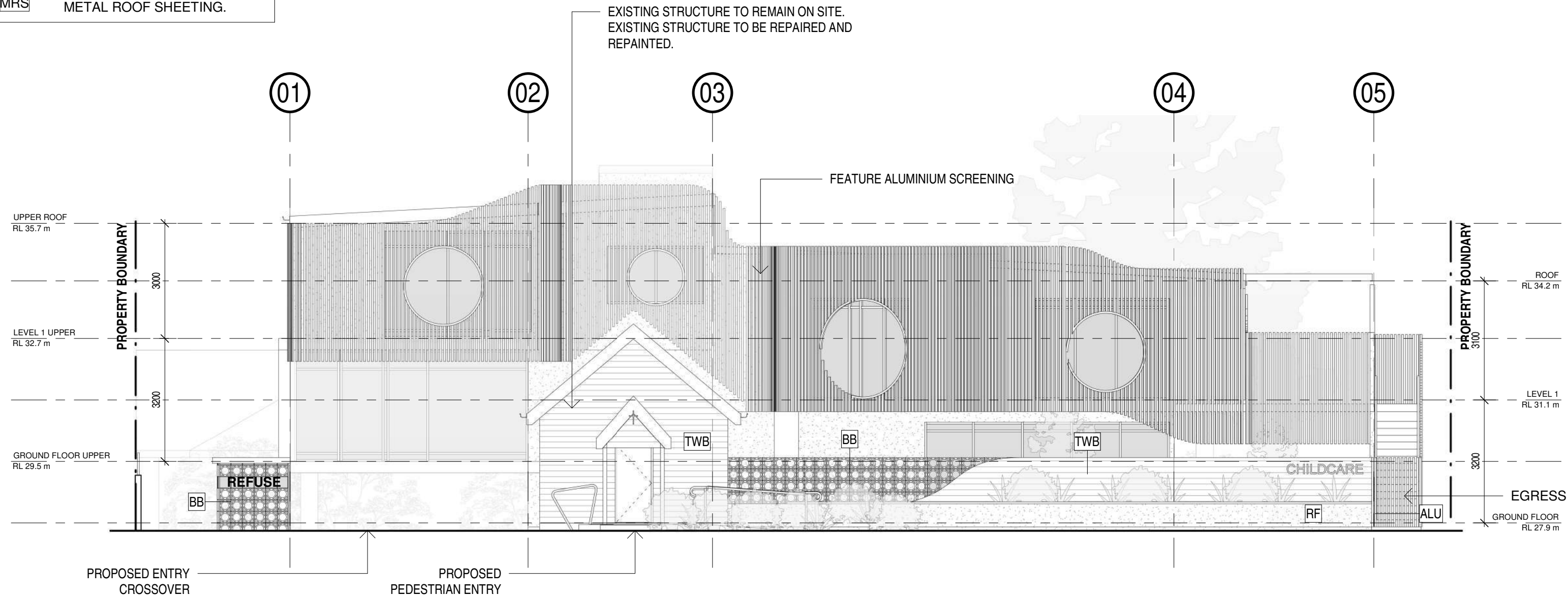
STATUS
DA RFI

DATE
19.05.2026

DRAWING
DEEP PLANTING PLAN

MATERIAL LEGEND - ELEVATIONS

- ALU** POWDERCOATED ALUMINIUM BATTEN SCREENING. WHITE FINISH.
- CONC** CONCRETE FINISH.
- RF** WHITE RENDER FINISH.
- TWB** TIMBER WEATHERBOARD. WHITE FINISH.
- BB** AUSTRAL BREEZE BLOCK. PORCELAIN.
- MRS** METAL ROOF SHEETING.

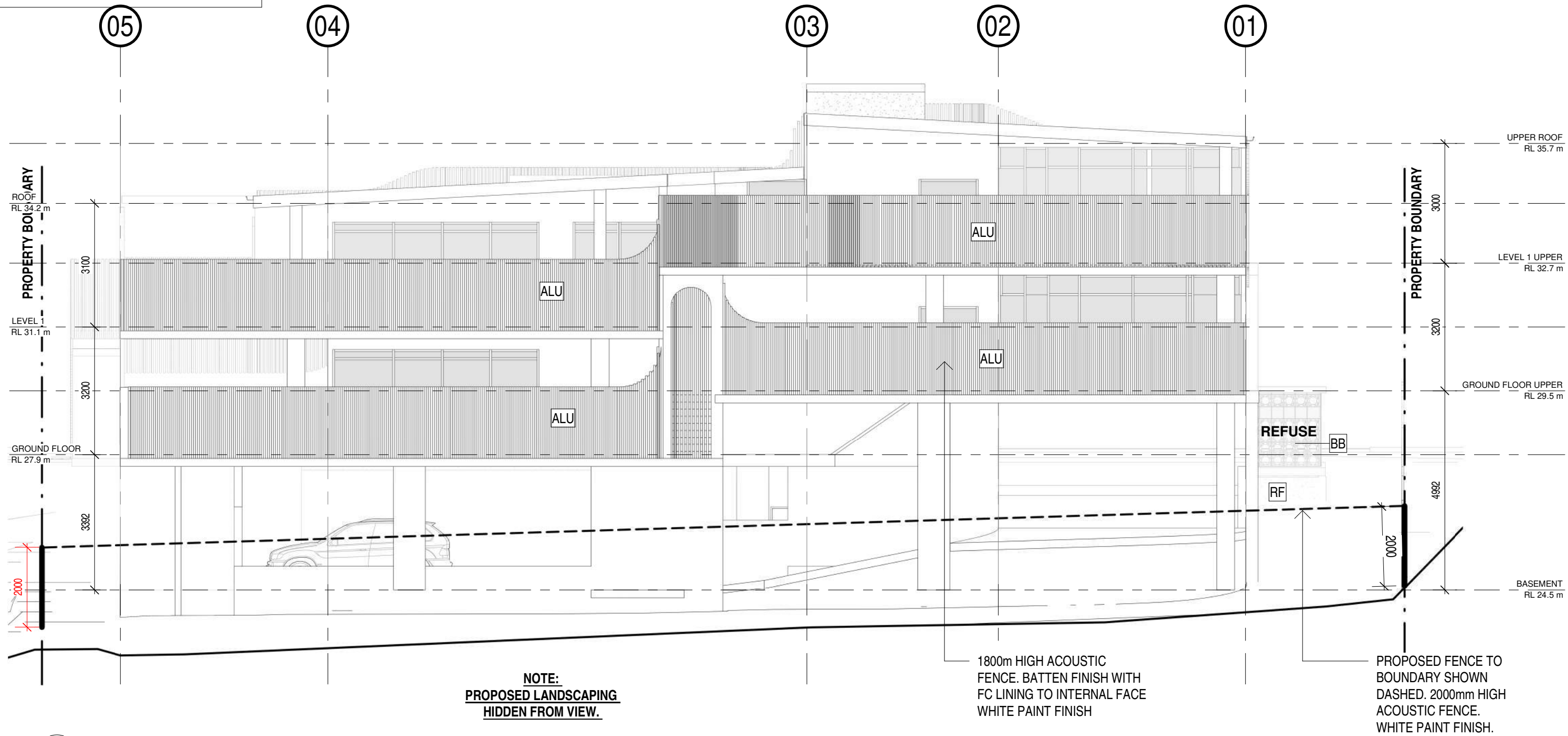


A ELEVATION A
DA-1.00 1 : 100

SEVENTEEN MILE ROCKS RD

MATERIAL LEGEND - ELEVATIONS

- ALU** POWDERCOATED ALUMINIUM BATTEN SCREENING. WHITE FINISH.
- CONC** CONCRETE FINISH.
- RF** WHITE RENDER FINISH.
- TWB** TIMBER WEATHERBOARD. WHITE FINISH.
- BB** AUSTRAL BREEZE BLOCK. PORCELAIN.
- MRS** METAL ROOF SHEETING.



ZARCHITECTS

CLIENT
GSEJ DEVELOPMENT

PROJECT
675 SEVENTEEN MILE ROCKS RD, SINNAMON
PARK, QLD, 4073

TRUE NORTH

PROJECT NORTH

SCALE (A3)
As indicated

DRAWING NUMBER
DA-1.51

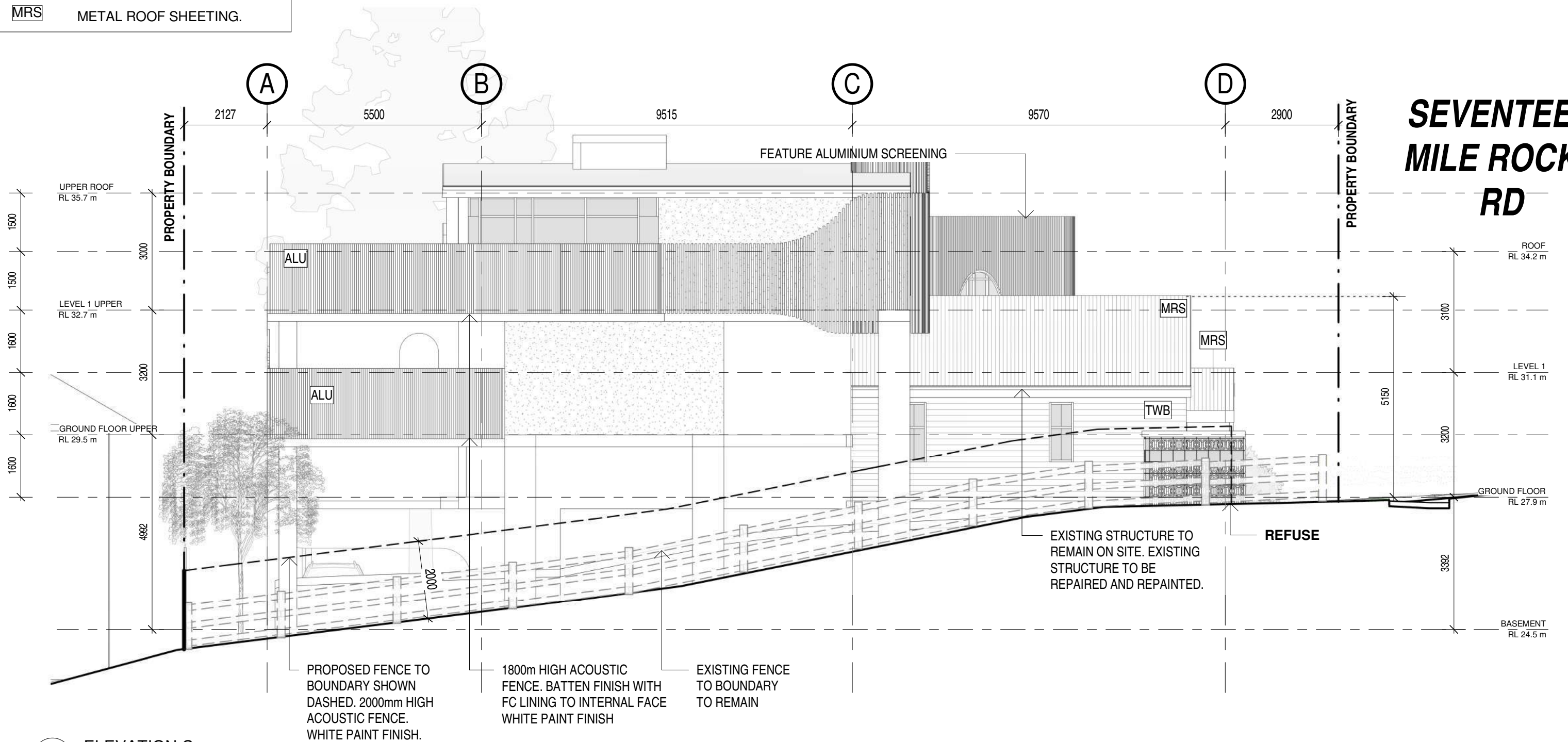
STATUS
DA RFI

DATE
19.05.2026

DRAWING
ELEVATION B

MATERIAL LEGEND - ELEVATIONS

- ALU** POWDERCOATED ALUMINIUM BATTEN SCREENING. WHITE FINISH.
- CONC** CONCRETE FINISH.
- RF** WHITE RENDER FINISH.
- TWB** TIMBER WEATHERBOARD. WHITE FINISH.
- BB** AUSTRAL BREEZE BLOCK. PORCELAIN.
- MRS** METAL ROOF SHEETING.

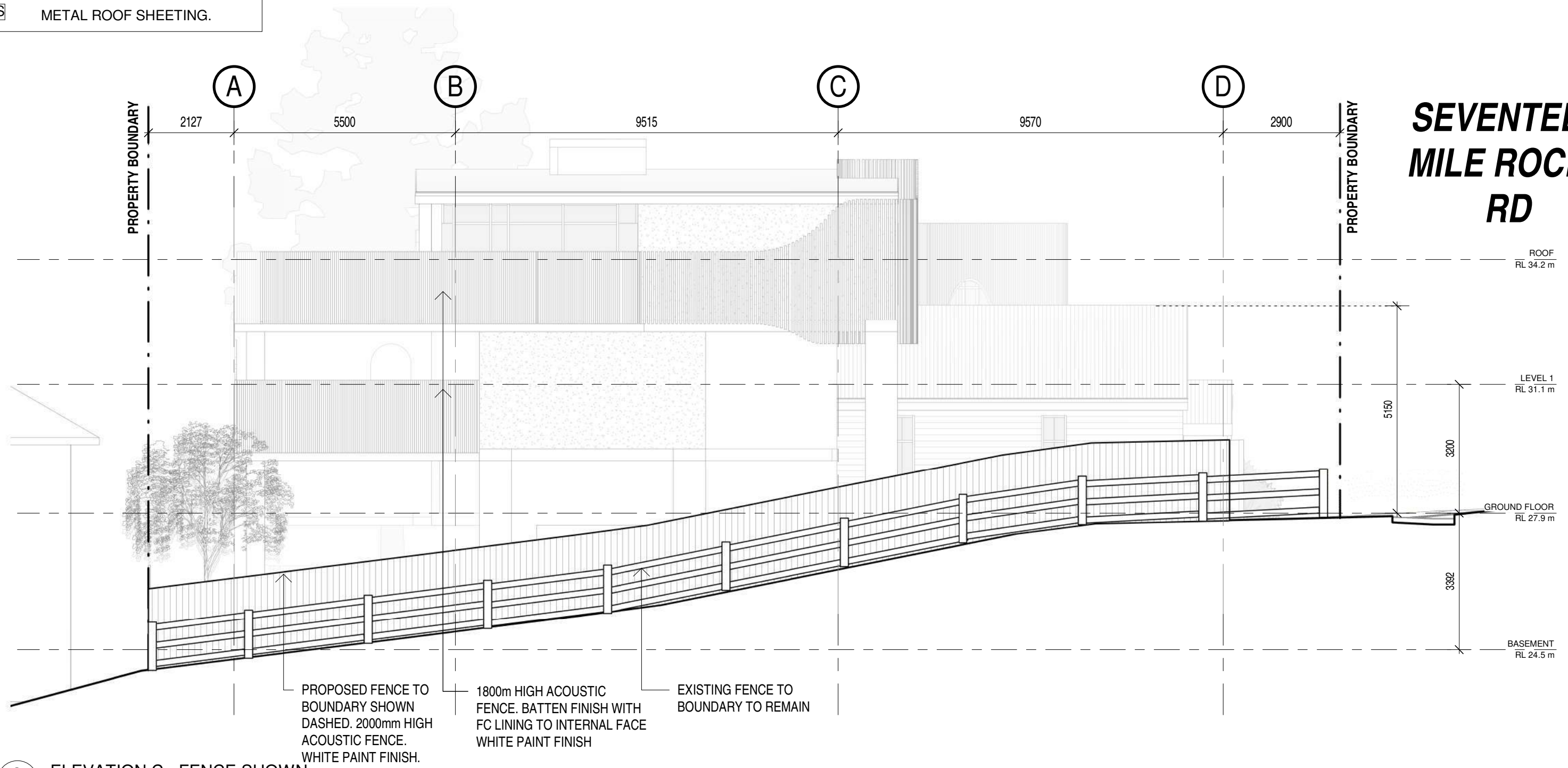


SEVENTEEN MILE ROCKS RD

C ELEVATION C
DA-1.00 1 : 100

MATERIAL LEGEND - ELEVATIONS

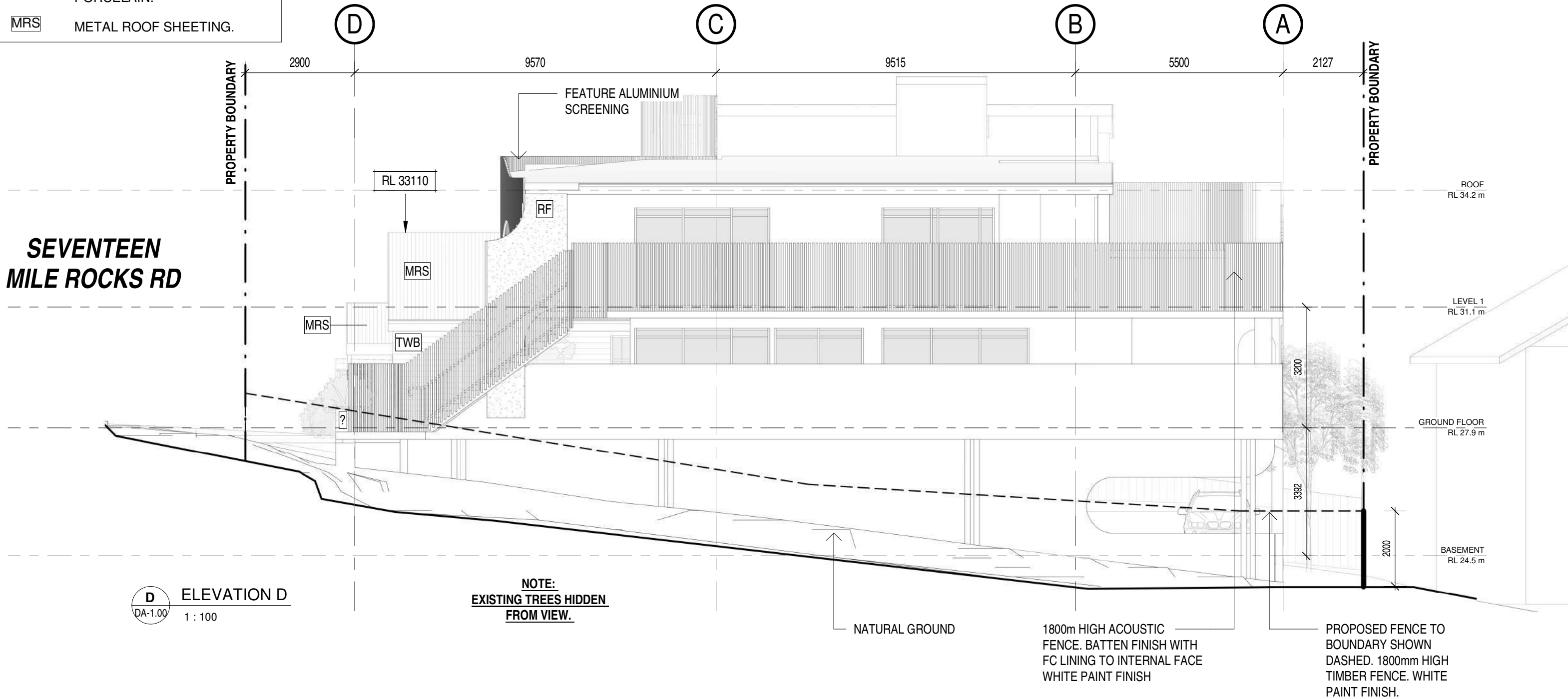
- ALU** POWDERCOATED ALUMINIUM BATTEN SCREENING. WHITE FINISH.
- CONC** CONCRETE FINISH.
- RF** WHITE RENDER FINISH.
- TWB** TIMBER WEATHERBOARD. WHITE FINISH.
- BB** AUSTRAL BREEZE BLOCK. PORCELAIN.
- MRS** METAL ROOF SHEETING.



C ELEVATION C - FENCE SHOWN
1 : 100

MATERIAL LEGEND - ELEVATIONS

- ALU** POWDERCOATED ALUMINIUM BATTEN SCREENING. WHITE FINISH.
- CONC** CONCRETE FINISH.
- RF** WHITE RENDER FINISH.
- TWB** TIMBER WEATHERBOARD. WHITE FINISH.
- BB** AUSTRAL BREEZE BLOCK. PORCELAIN.
- MRS** METAL ROOF SHEETING.

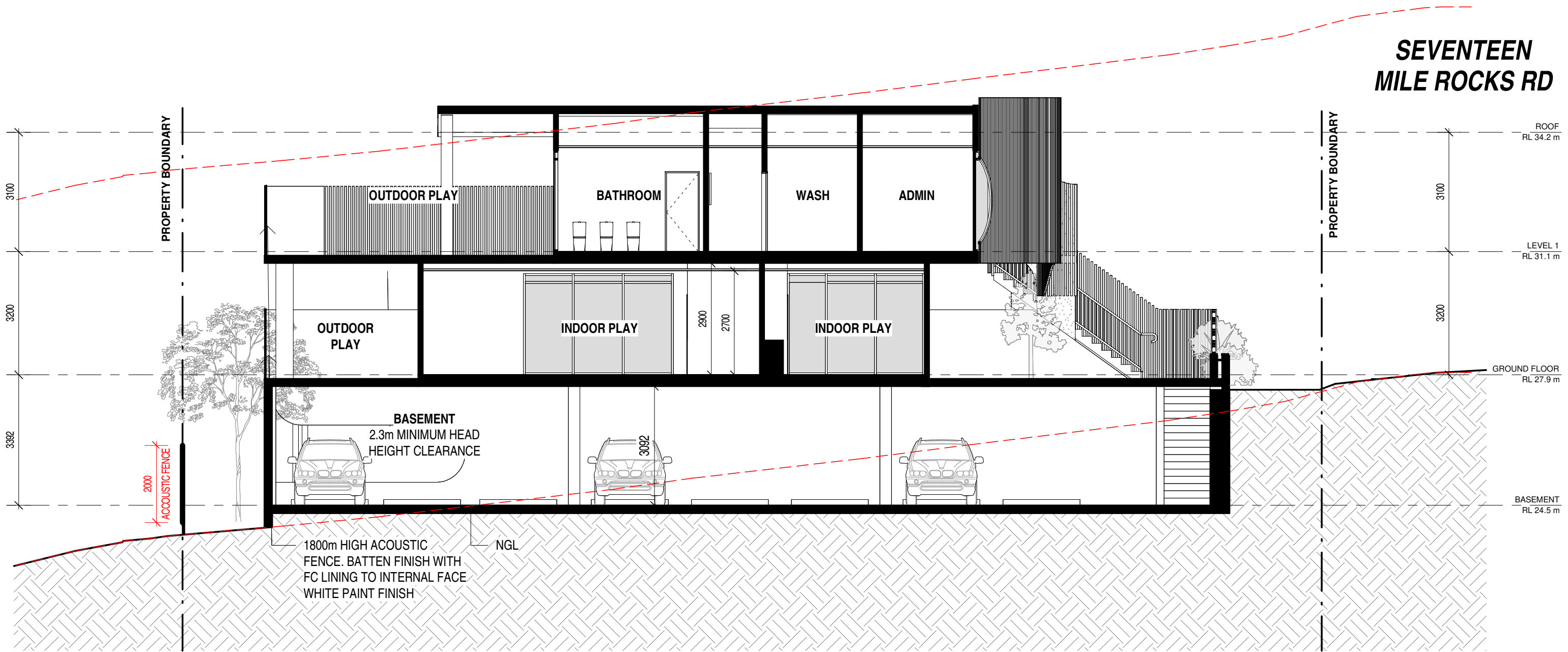


D ELEVATION D
DA-1.00 1 : 100

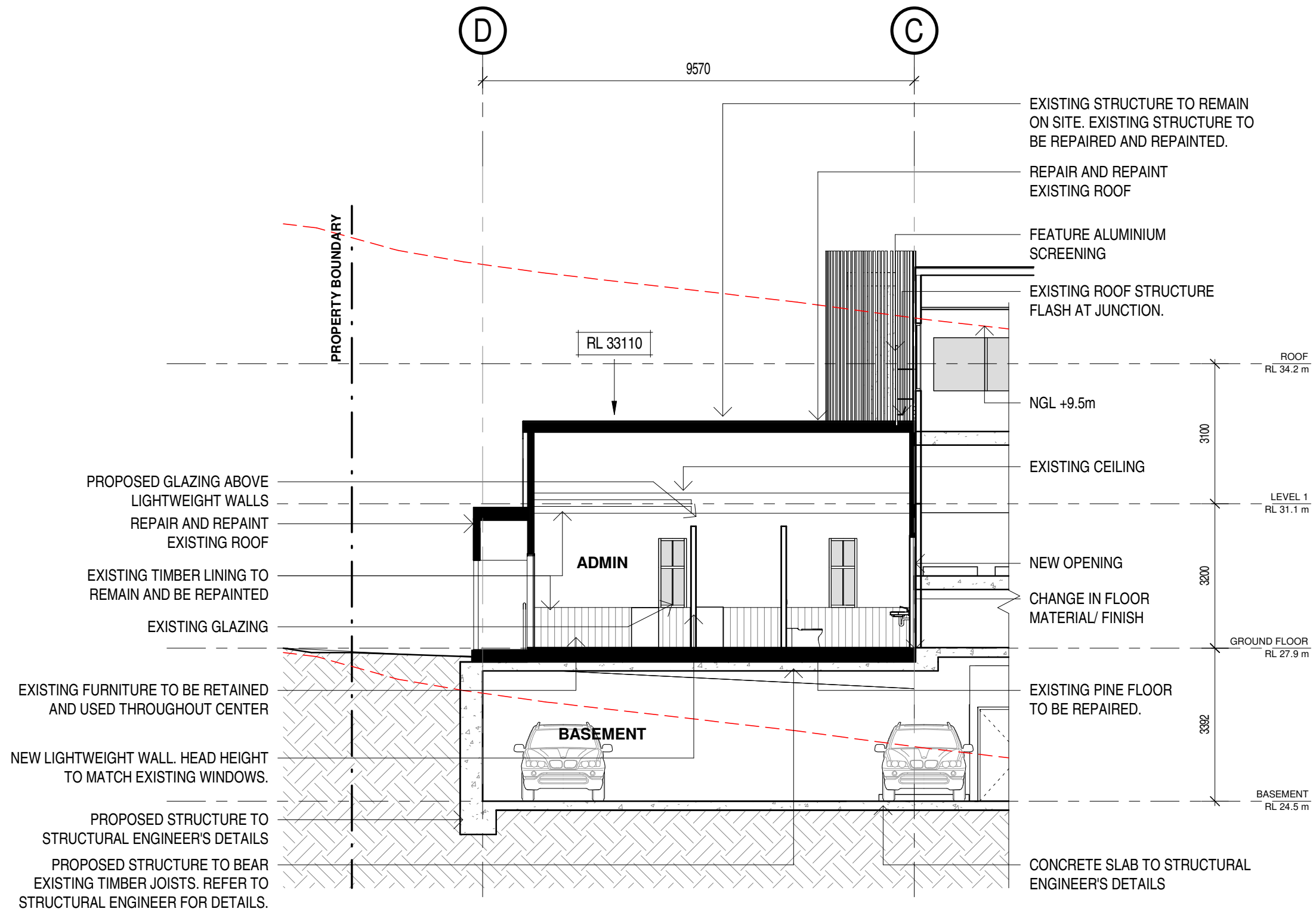


A SECTION A
1 : 100

SEVENTEEN MILE ROCKS RD

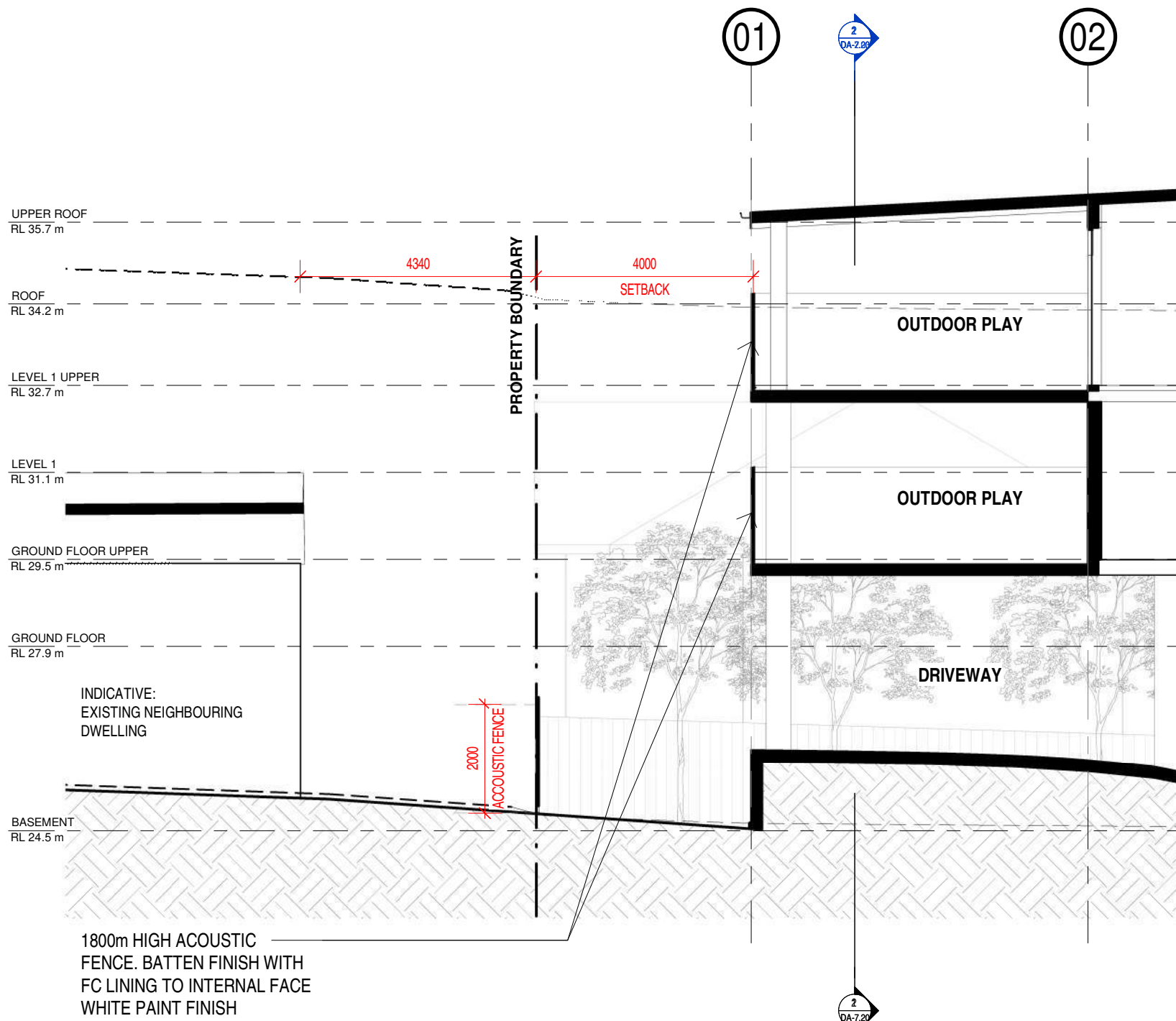


B SECTION B
1 : 100



c SECTION C
1 : 100

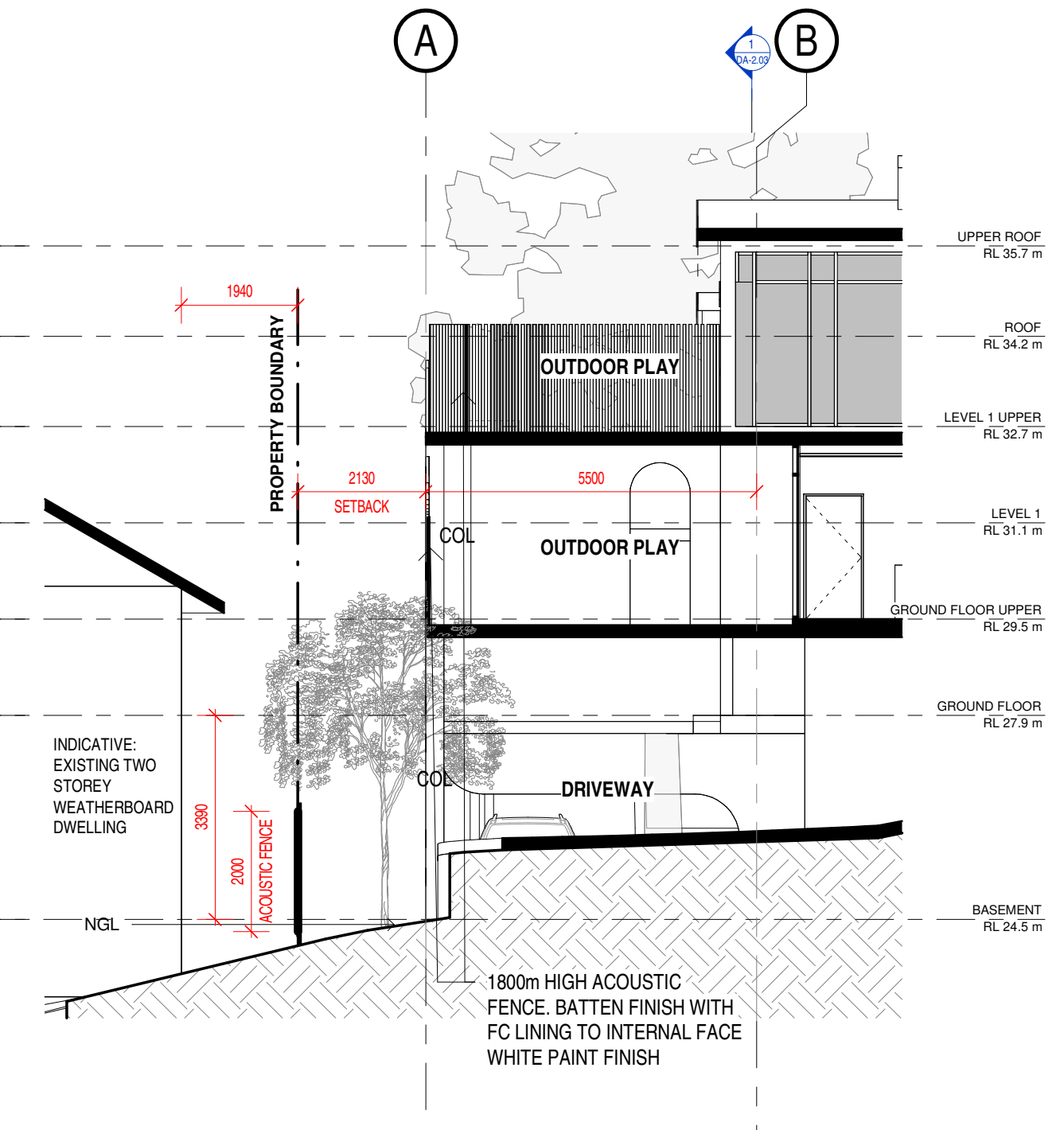




1 SITE BOUNDARY SECTION 01

1 : 100

1800m HIGH ACOUSTIC FENCE. BATTEN FINISH WITH FC LINING TO INTERNAL FACE WHITE PAINT FINISH

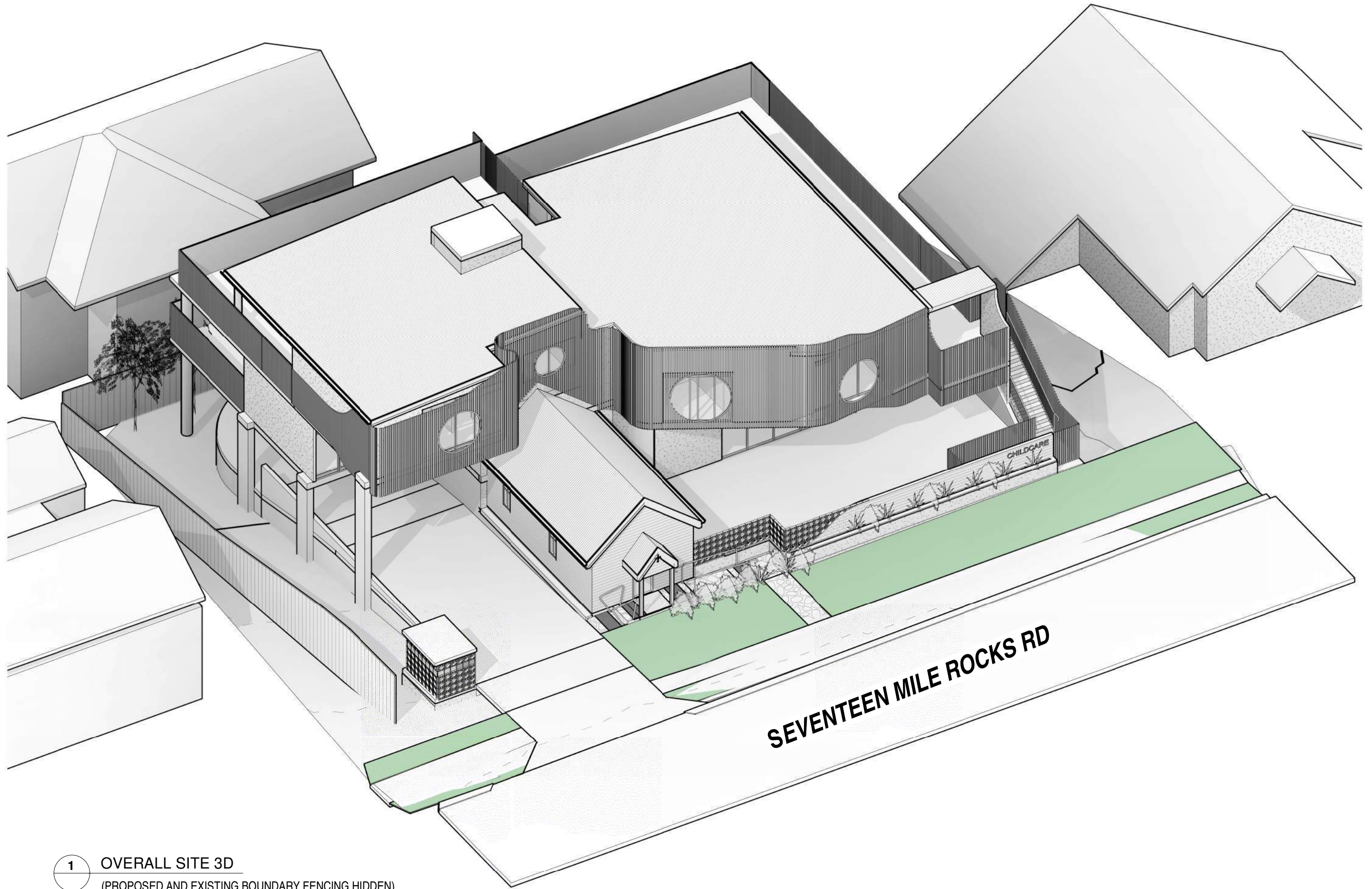


2 SITE BOUNDARY SECTION 02

1 : 100

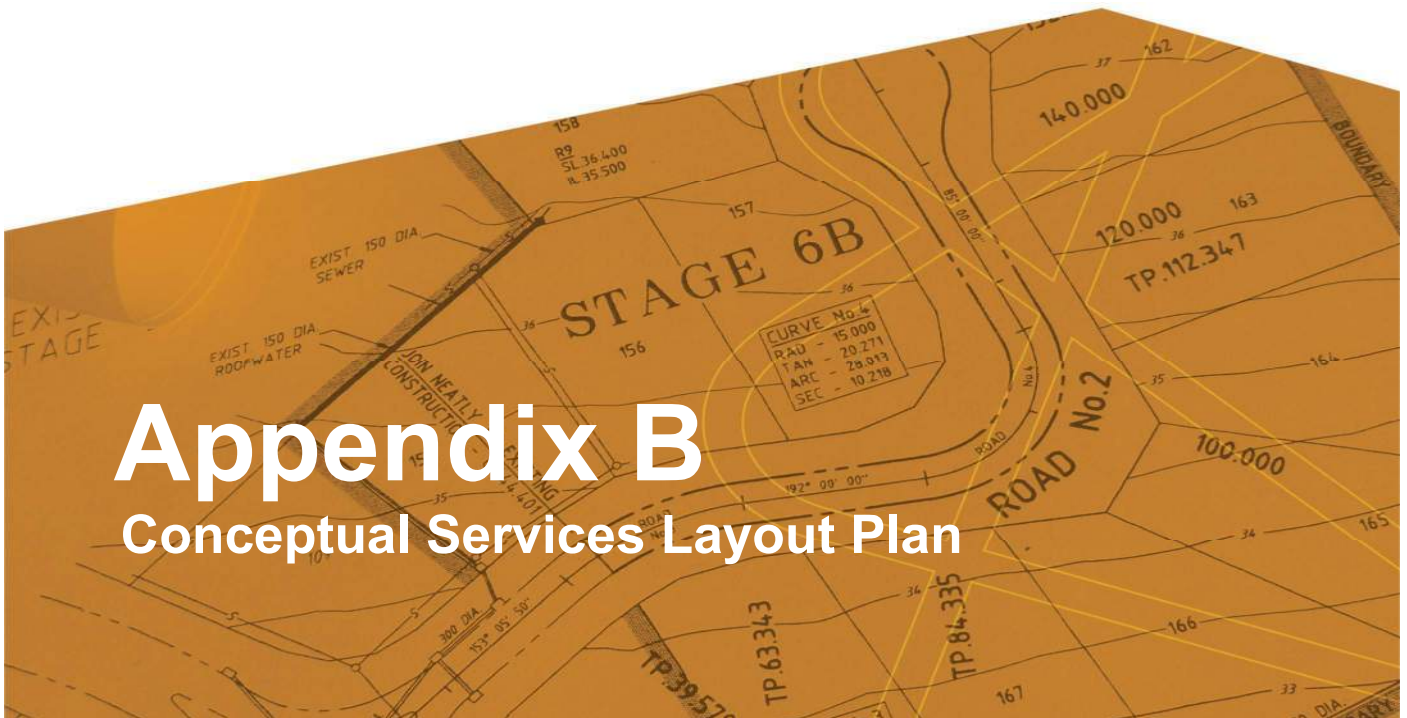
1800m HIGH ACOUSTIC FENCE. BATTEN FINISH WITH FC LINING TO INTERNAL FACE WHITE PAINT FINISH





1 OVERALL SITE 3D
(PROPOSED AND EXISTING BOUNDARY FENCING HIDDEN)





Appendix B

Conceptual Services Layout Plan

**WARNING
BEWARE OF UNDERGROUND SERVICES**

The locations of underground services are approximate only & their exact position should be proven on site. No guarantee is given that all existing services are shown. Locate all underground services before commencement of works.



INTERNAL DRAINAGE LAYOUT AND ASSOCIATED PLUMBING APPROVAL TO BE COORDINATED WITH HYDRAULIC CONSULTANTS DRAWINGS.

- GENERAL NOTES**
- ALL WORK TO CONFORM TO AS 3500 Part 1, 2 & 3.
 - ALL WORK TO CONFORM WITH ALL RELEVANT AUSTRALIAN STANDARDS.
 - CONTRACTOR TO VERIFY ALL LEVELS BEFORE COMMENCING WORK TO ENSURE CONNECTION TO SERVICE WITH ADEQUATE COVER AND FALL.
 - THE EXISTING UNDERGROUND SERVICES SHOWN HAVE BEEN OBTAINED FROM OLD RECORDS OF THE RELEVANT AUTHORITIES AND MAY NOT BE ACCURATE, THE CONTRACTOR SHALL ALLOW TO LOCATE EXISTING SERVICES AS REQUIRED FOR CONNECTION.

- LEGEND**
- PROPOSED STORMWATER PIPE
 - PROPOSED FIELD INLET
 - RETAINING WALL
 - SITE BOUNDARY
 - DESIGN SURFACE CONTOURS (10.5)
 - NATURAL SURFACE CONTOURS (10.5)

D	Amended Building Footprint	WC	21/04/26
C	For Approval	JP	18/12/23
B	For Approval	WC	28/07/23
A	For Approval	JP	7/06/23
Rev	Description	Drawn	Date



Client
GSEJ DEVELOPMENT



Engineering design and drafting services
707, 17 Deshon Street, Woolloongabba, QLD, 4102
0412 469 686 www.wcdesigns.net.au
ABN 79 619 955 145

COPYRIGHT: This drawings is copyright and the property of WC Designs. It must not be retained, copied or used without the authority of WC Designs.

DISCLAIMER: This drawing and its contents are electronically generated, are confidential and may only be used for the purpose for which they were intended. WC Designs will not accept responsibility for and consequence arising from the use of the drawing for other than its intended purpose or where the drawings has been altered, amended or changed either manually or electronically by any third party

NOTE: Dimensions take precedence over scale. Do not scale of these drawings. Verify dimensions prior to commencing any works. Electronic data is not provided in any case for the purpose of setout. For all setout refer Architectural and Structural Drawings.

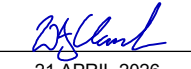
Project
**675 SEVENTEEN MILE ROCKS ROAD
SINNAMON PARK QLD 4073**

Drawing Title
**DEVELOPMENT APPROVAL
CONCEPTUAL SERVICES
LAYOUT PLAN**

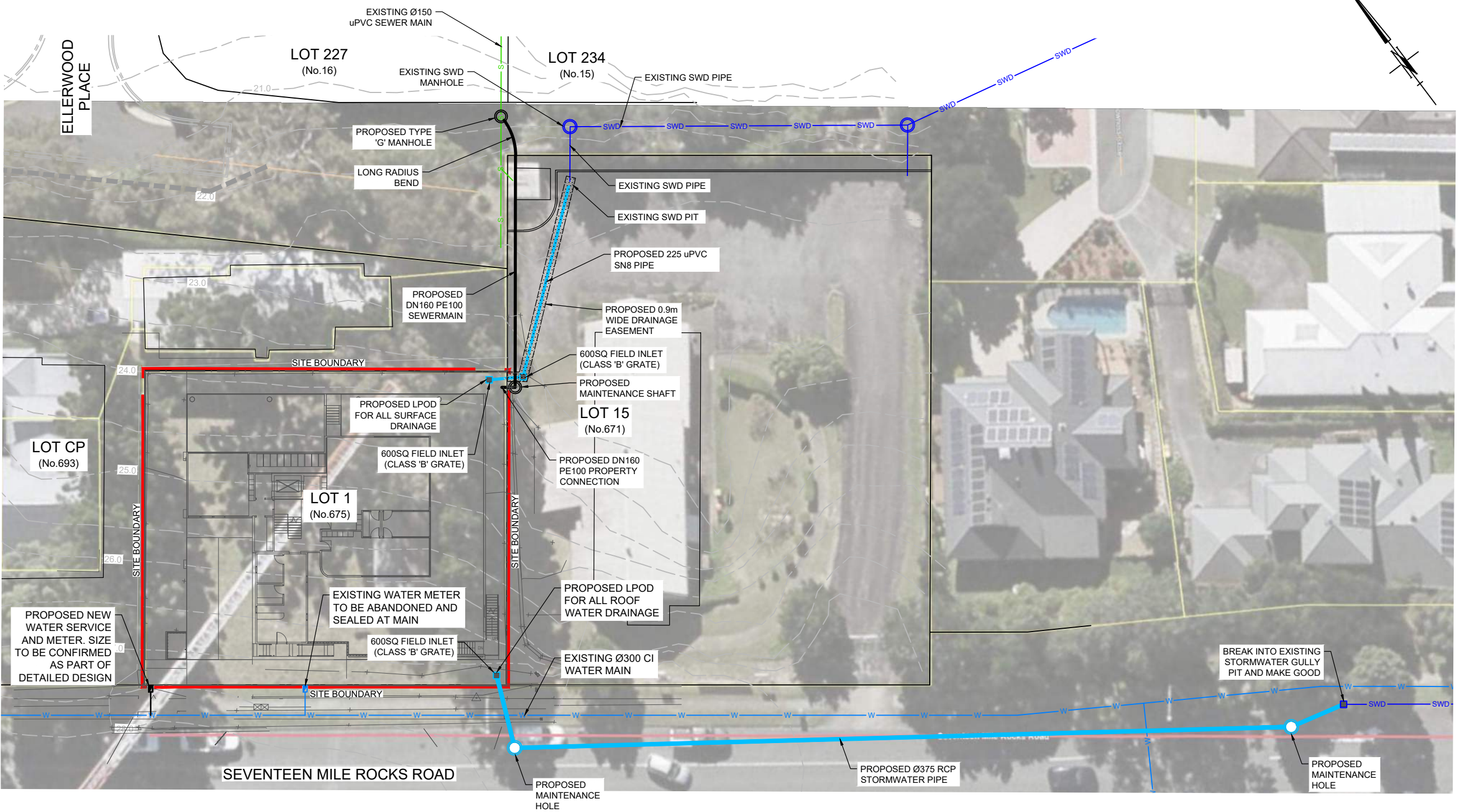
Council Reference
A006310690

Design	Drawn	Review
Initials WC Date 07/06/23	Initials JP Date 07/06/23	Initials WC Date 07/06/23

Approved
Name **W.Clark** RPEQ No. 16580

Signed 
Date **21 APRIL 2026**

Drawing No. WCD-21894-SK10	Rev. D
--------------------------------------	------------------



PROPERTY DESCRIPTION
LOT 1 on RP114727

LAYOUT PLAN
Scale 1:200
2 0 2 4 6 8 10m
SCALE 1 : 200
(BEFORE REDUCTION)

COUNCIL REF: A006310690

B	Amended Building Footprint	WC	21/04/26
A	For Approval	JP	18/12/23
Rev	Description	Drawn	Date

Associated Consultant



Client

GSEJ DEVELOPMENT

Engineering design and drafting services

707, 17 Deshon Street, Woolloongabba, QLD, 4102
 0412 469 686 www.wcdesigns.net.au
 ABN 79 619 955 145

COPYRIGHT: This drawing is copyright and the property of WC Designs. It must not be retained, copied or used without the authority of WC Designs.

DISCLAIMER: This drawing and its contents are electronically generated, are confidential and may only be used for the purpose for which they were intended. WC Designs will not accept responsibility for and consequence arising from the use of the drawing for other than its intended purpose or where the drawings has been altered, amended or changed either manually or electronically by any third party

NOTE: Dimensions take precedence over scale. Do not scale of these drawings. Verify dimensions prior to commencing any works. Electronic data is not provided in any case for the purpose of setout. For all setout refer Architectural and Structural Drawings.

Project
675 SEVENTEEN MILE ROCKS ROAD
SINNAMON PARK QLD 4073

Drawing Title
DEVELOPMENT APPROVAL
POST DEVELOPMENT
CATCHMENT PLAN

Council Reference
A006310690

Design	Drawn	Review
Initials WC Date 07/06/23	Initials JP Date 07/06/23	Initials WC Date 07/06/23

Approved
 Name W.Clark RPEQ No. 16580

Signed
 Date 21 APRIL 2026

Drawing No.	Rev.
WCD-21894-SK11	B

GENERAL NOTES

1. ALL WORK TO CONFORM TO AS 3500 Part 1, 2 & 3.
2. ALL WORK TO CONFORM WITH ALL RELEVANT AUSTRALIAN STANDARDS.
3. CONTRACTOR TO VERIFY ALL LEVELS BEFORE COMMENCING WORK TO ENSURE CONNECTION TO SERVICE WITH ADEQUATE COVER AND FALL.
4. THE EXISTING UNDERGROUND SERVICES SHOWN HAVE BEEN OBTAINED FROM OLD RECORDS OF THE RELEVANT AUTHORITIES AND MAY NOT BE ACCURATE, THE CONTRACTOR SHALL ALLOW TO LOCATE EXISTING SERVICES AS REQUIRED FOR CONNECTION.

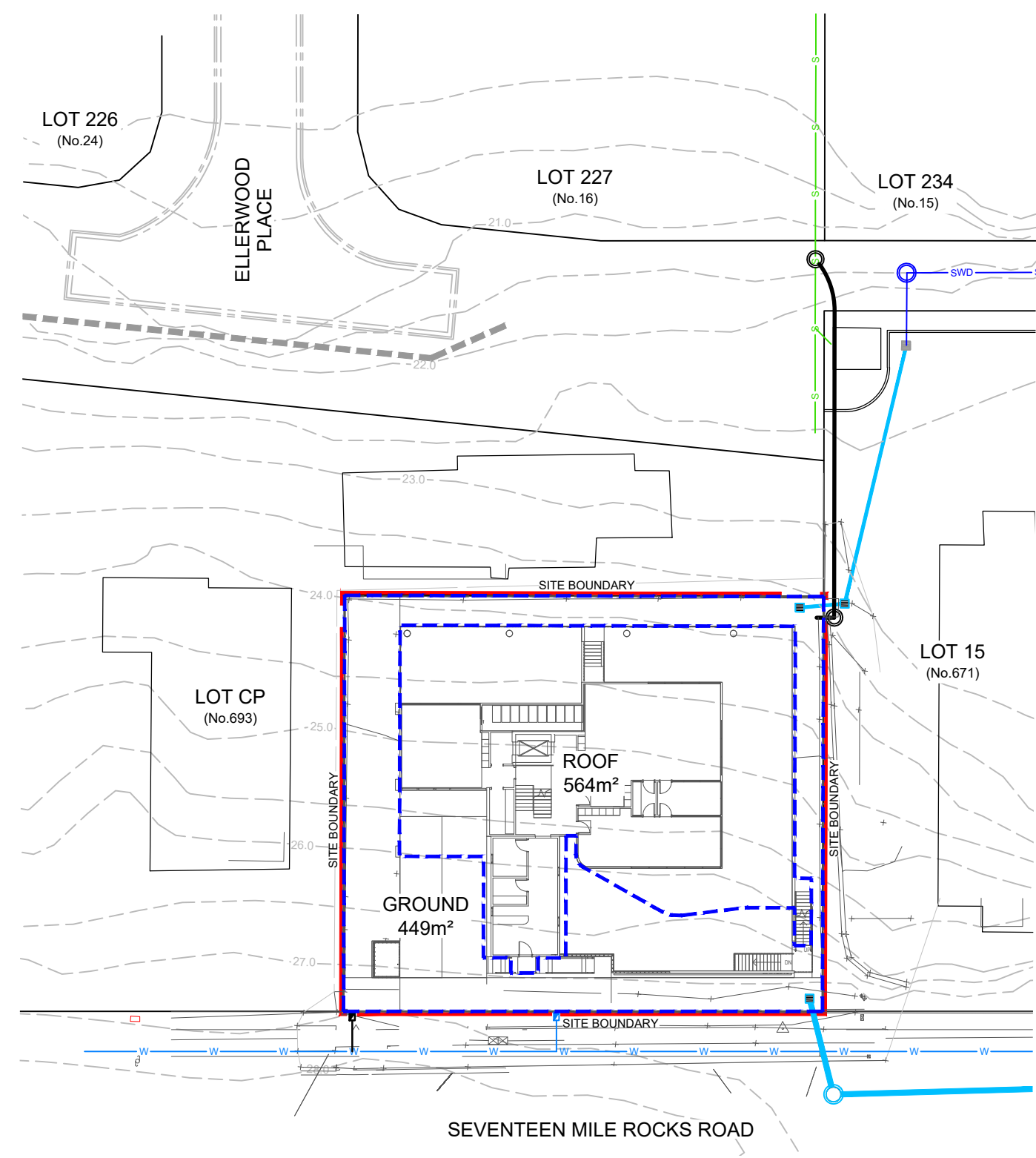
WARNING
BEWARE OF UNDERGROUND SERVICES

The locations of underground services are approximate only & their exact position should be proven on site. No guarantee is given that all existing services are shown. Locate all underground services before commencement of works.

INTERNAL DRAINAGE LAYOUT AND ASSOCIATED PLUMBING APPROVAL TO BE COORDINATED WITH HYDRAULIC CONSULTANTS DRAWINGS.

LEGEND

- PROPOSED STORMWATER PIPE
- PROPOSED FIELD INLET
- RETAINING WALL
- SITE BOUNDARY
- DESIGN SURFACE CONTOURS
- NATURAL SURFACE CONTOURS

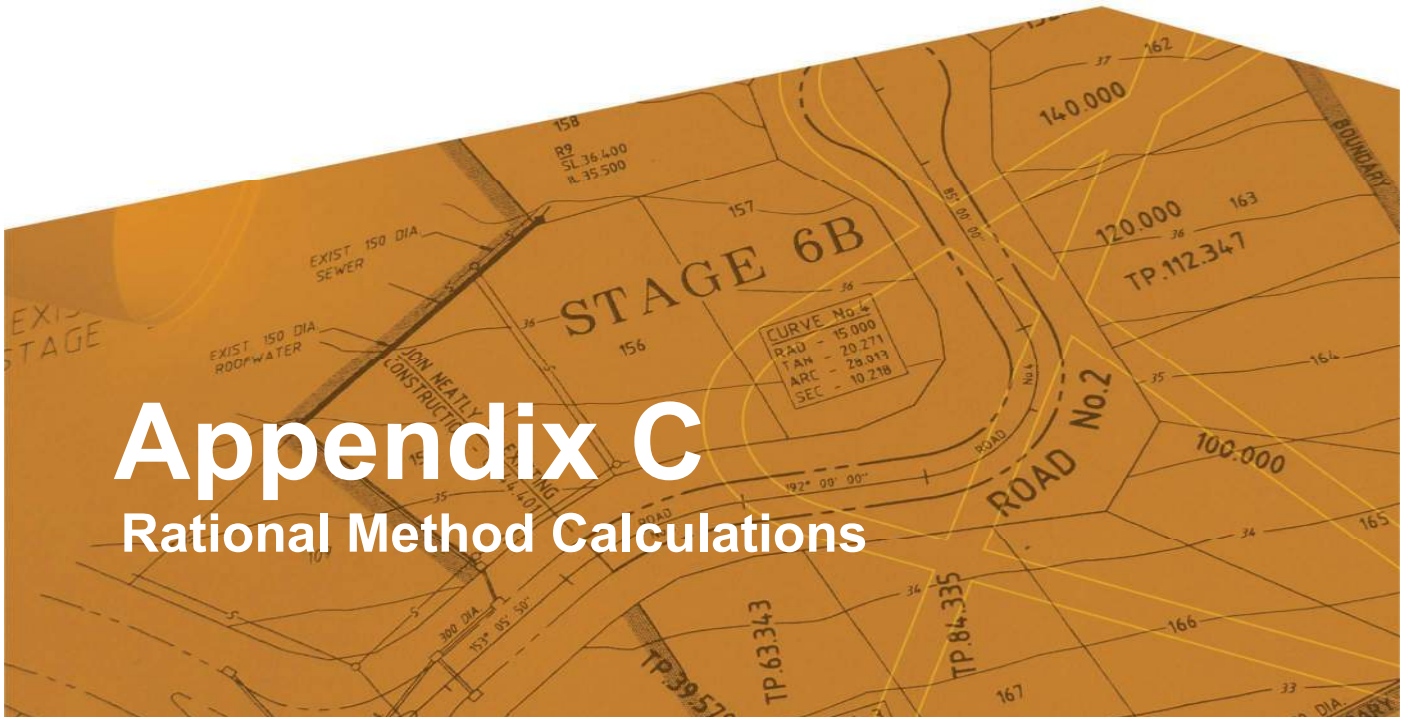


LAYOUT PLAN
 Scale 1:200

SCALE 1 : 200
 (BEFORE REDUCTION)

PROPERTY DESCRIPTION
 LOT 1 on RP114727

COUNCIL REF: A006310690



COMBINED (Front & Rear Discharge) POST DEVELOPMENT STORMWATER DISCHARGE CALCULATION

Spreadsheet based on QUDM 5.02, "The Rational Method"

Project Number **WCD-21894**
Project Address **675 Seventeen Mile Rocks Road**
Description **Stormwater Management Plan**



Designer **WC**
Date **21-Apr-26**

FRONT CATCHMENT		
Co-efficient of Run-Off Calculation		
Catchment Name	Area (m ²)	Co-efficient
Impervious	564	0.900
Pervious	0	0.700
Total Area	564	
	Adopted C ₁₀ :	0.900

; Co-efficient of Run-Off

REAR CATCHMENT		
Co-efficient of Run-Off Calculation		
Catchment Name	Area (m ²)	Co-efficient
Impervious	103	0.900
Pervious	346	0.700
Total Area	449	
	Adopted C ₁₀ :	0.746

; Co-efficient of Run-Off

T _e (min.) :	6	(10,000m ² = 1 ha)	; QUDM Table 5.05.1
Area (ha) :	0.0564		; QUDM Table 5.05.5

T _e (min.) :	6	(10,000m ² = 1 ha)	; QUDM Table 5.05.1
Area (Ha) :	0.0449		; QUDM Table 5.05.5

Flood Event ARI	Existing	Post Development	RAINFALL INTENSITY		Peak Outflow Capacity	Peak Outflow Capacity	Total
	C _y = F _y x C ₁₀	C _y = F _y x C ₁₀	Existing	Post Development	Q _o (Front Discharge)	Q _i (Rear Discharge)	Q _i -Q _o (Front & Rear)
1	0.720	0.597	105 mm / hr	105 mm / hr	0.012	0.008	0.020
2	0.765	0.634	120 mm / hr	120 mm / hr	0.014	0.009	0.024
5	0.855	0.709	164 mm / hr	164 mm / hr	0.022	0.014	0.036
10	0.900	0.746	194 mm / hr	194 mm / hr	0.027	0.018	0.045
20	0.945	0.783	222 mm / hr	222 mm / hr	0.033	0.022	0.055
50	1.000	0.858	260 mm / hr	260 mm / hr	0.041	0.028	0.069
100	1.000	0.895	289 mm / hr	289 mm / hr	0.045	0.032	0.078

Where Coefficients of Runoff calculated from the above equation exceed 1.00, they should be arbitrarily set to 1.00. QUDM Table 4.05.2

Rational Method
Q = CIA / 360

Rational Method
Q = CIA / 360

PRE & POST DEVELOPMENT STORMWATER DISCHARGE CALCULATION

Spreadsheet based on QUDM 5.02, "The Rational Method"

Project Number **WCD-21894**
 Project Address **675 Seventeen Mile Rocks Road**
 Description **Stormwater Management Plan**



Designer **WC**
 Date **26-Apr-26**

EXISTING USE		
Co-efficient of Run-Off Calculation		
Catchment Name	Area (m ²)	Co-efficient
Impervious	50	0.900
Pervious	962	0.700
Total Area	1012	
	Adopted C ₁₀ :	0.710

; Co-efficient of Run-Off

T _c (min.) :	10
Area (ha) :	0.1012

(10,000m² = 1 ha) ; QUDM Table 5.05.1
 ; QUDM Table 5.05.5

PROPOSED USE		
Co-efficient of Run-Off Calculation		
Catchment Name	Area (m ²)	Co-efficient
Impervious	667	0.900
Pervious	346	0.700
Total Area	1013	
	Adopted C ₁₀ :	0.832

; Co-efficient of Run-Off

T _c (min.) :	6
Area (Ha) :	0.1013

(10,000m² = 1 ha) ; QUDM Table 5.05.1
 ; QUDM Table 5.05.5

Flood Event ARI	Existing	Post Development	RAINFALL INTENSITY		Peak Outflow Capacity	Peak Inflow Rate	Difference
	C _y = F _y x C ₁₀	C _y = F _y x C ₁₀	Existing	Post Development	Q _o (Existing)	Q _i (Post Development)	Q _i -Q _o (Post - Pre)
1	0.568	0.665	90 mm / hr	105 mm / hr	0.014	0.020	0.005
2	0.603	0.707	102 mm / hr	120 mm / hr	0.017	0.024	0.007
5	0.674	0.790	140 mm / hr	164 mm / hr	0.027	0.036	0.010
10	0.710	0.832	165 mm / hr	194 mm / hr	0.033	0.045	0.012
20	0.745	0.873	189 mm / hr	222 mm / hr	0.040	0.055	0.015
50	0.816	0.956	220 mm / hr	260 mm / hr	0.050	0.070	0.019
100	0.852	0.998	244 mm / hr	289 mm / hr	0.058	0.081	0.023

Where Coefficients of Runoff calculated from the above equation exceed 1.00, they should be arbitrarily set to 1.00. QUDM Table 4.05.2

Rational Method Q = CIA / 360	Rational Method Q = CIA / 360
----------------------------------	----------------------------------