GEOTECHNICAL INVESTIGATION:

New Dual-Occupancy House at **54 Gardere Avenue, Curl Curl**

1. Proposed Development

1.1 Demolish the existing house and construct a new two-story dual-occupancy house with basement below by excavating to a maximum depth of ~3.3m.

1.2 Construct two new pools by excavating to a maximum depth of ~2.1m.

1.3 Construct a new driveway and crossing at the Gardere Avenue frontage and alter the permeable driveway at the Cooksey Avenue frontage.

1.4 Other minor external additions and alterations.

1.5 Details of the proposed development are shown on 25 drawings prepared by Alex Bryden, Project 24011, drawings numbered 001 to 003, 010, 050, 100 to 103, 200 to 203, 210 to 211, 300 to 304, 400, 500, 700, and 800. All revision C. All dated 11.04.25.

2. Site Description

2.1 The site was inspected on the 12th March, 2025.

2.2 This residential property is on the corner of Gardere Avenue and Cooksey Avenue; it is on the high side of Gardere Ave and is level with Cooksey Ave. The property has a N aspect. It is located on the gently graded upper reaches of a hillslope. The natural slope falls/rises across the property at an average angle of <5°. The slope above the property eases at the crest of the hill, the slope below the property gradually increases in grade.

2.3 At the Cooksey Avenue frontage, a concrete and permeable driveway run to a stable two-storey timber clad garage on the uphill side of the property (Photo 1). Fill

for the driveway and a cut for a level area between the garage and the house is supported by a stable low brick retaining wall (Photo 2). The single-story timber clad and brick house (Photo 3) is supported on brick and sandstone block walls and brick piers. No significant signs of movement were observed in the visible supporting walls, and the supporting piers stand vertical. Between the downhill side of the house and the lower common boundary fill has been laid for a level lawn and garden beds. The fill is supported by a stable low sandstone log retaining wall which approximates the lower boundary (Photo 3). A stable brick and concrete block retaining wall runs along the W common boundary. It reaches a height of ~1.3m and supports a cut for the W neighbouring property (Photos 4 & 5).

3. Geology

The Sydney 1:100 000 Geological Sheet indicates the site is underlain by Hawkesbury Sandstone. It is described as a medium to coarse grained quartz sandstone with very minor shale and laminite lenses.

4. Subsurface Investigation

One hand Auger Hole (AH) was put down to identify the soil materials. Six Dynamic Cone Penetrometer (DCP) tests were put down to determine the relative density of the overlying soil and the depth to bedrock. The locations of the tests are shown on the site plan attached. It should be noted that a level of caution should be applied when interpreting DCP test results. The test will not pass through hard buried objects so in some instances it can be difficult to determine whether refusal has occurred on an obstruction in the profile or on the natural rock surface. This is not expected to have been an issue for this site. But due to the possibility that the actual ground conditions vary from our interpretation there should be allowances in the excavation and foundation budget to account for this. We refer to the appended "Important Information about Your Report" to further clarify. The results are as follows:

AUGER HOLE 1 (~RL40.4) **–** AH1 (Photo 6)

Depth (m)	**Material Encountered**
0.0 to 0.4	**FILL**, sandy fill, brown, Medium Dense, dry, fine to coarse grained, crushed sandstone at base of auger.

Refusal @ 0.4m, auger grinding in fill. No water table encountered.

DCP TEST RESULTS – Dynamic Cone Penetrometer

Equipment: 9kg hammer, 510mm drop, conical tip. Standard: AS1289.6.3.2 - 1997

Depth(m) Blows/0.3m	**DCP 1** (~RL41.2)	**DCP 2** (~RL41.1)	**DCP 3** (~RL41.1)	**DCP 4** (~RL40.7)	**DCP 5** (~RL40.4)	**DCP 6** (~RL40.6)
0.0 to 0.3	3	15	7	4	5	4
0.3 to 0.6	5	12	12	9	7	6
0.6 to 0.9	9	14	18	12	9	6
0.9 to 1.2	19	14	47	19	18	14
1.2 to 1.5	53	23	#	#	47	13
1.5 to 1.8	46	16			28	39
1.8 to 2.1	#	#			#	#
	Refusal on Rock @ 1.8m	Refusal on Rock @ 1.6m	Refusal on Rock @ 1.2m	Refusal on Rock @ 1.1m	Refusal on Rock @ 1.6m	Refusal on Rock @ 1.7m

#refusal/end of test. F = DCP fell after being struck showing little resistance through all or part of the interval.

DCP Notes:

DCP1 – Refusal on Rock @ 1.8m, DCP bouncing off rock surface, clean dry tip, grey clay in collar above tip.

DCP2 – Refusal on Rock @ 1.6m, DCP bouncing off rock surface, red and white impact dust on dry tip.

DCP3 – Refusal on Rock @ 1.2m, DCP bouncing off rock surface, maroon impact dust on dry tip, grey clay in collar above tip.

DCP4 – Refusal on Rock @ 1.1m, DCP bouncing off rock surface, maroon impact dust on dry tip, grey clay in collar above tip.

DCP5 – Refusal on Rock @ 1.6m, DCP bouncing off rock surface, white and maroon impact dust on dry tip.
DCP6 – Refusal on Rock @ 1.7m, DCP bouncing off rock surface, maroon clay on dry tip, maroon and grey clay in collar above tip.

5. Geological Observations/Interpretation

The site is underlain by topsoil and clay over sandstone bedrock. Fill has been laid across the property to a height of ~0.5m for landscaping. In the test locations, the rock was encountered at depths of between 1.1 to 1.8m below the current surface, being deeper due to the presence of fill and a variable weathering profile. The sandstone underlying the property is estimated to be medium strength or better as the DCP bounced at the end of every test. It is interpreted that a thin layer of Very Low Strength Sandstone overlies the buried rock in some locations as the DCP ended after a high blow count for some tests. The Very Low Strength Rock is expected to be encountered at depths of between 0.9m and 1.5m below the current surface. See Type Section attached for a diagrammatical representation of the expected ground materials.

6. Groundwater

Normal ground water seepage is expected to move over the buried surface of the rock and through the cracks. Due to the elevation of the block, the water table is expected to be many metres below the base of the proposed excavation.

7. Surface Water

No evidence of surface flows were observed on the property during the inspection. It is expected that normal sheet wash will move onto the site from above the property during heavy down pours.

8. Geotechnical Hazards and Risk Analysis

No geotechnical hazards were observed above, below, or beside the property. The vibrations from the proposed excavations are a potential hazard (**Hazard One**). The proposed excavations are a potential hazard until retaining structures are in place (**Hazard Two**). The proposed excavations undercutting the footings for the W neighbouring brick and block retaining wall is a potential hazard (**Hazard Three**).

Risk Analysis Summary

HAZARDS	Hazard One	Hazard Two	Hazard Three
TYPE	The vibrations produced during the proposed excavations impacting on the surrounding structures.	The excavations collapsing onto the work site before retaining structures are in place.	The proposed excavations undercutting the footings for the W neighbouring brick and block retaining wall (Photo 4 & 5) causing damage or failure.
LIKELIHOOD	'Possible' (10^{-3})	'Possible' (10^{-3})	'Possible' (10^{-3})
CONSEQUENCES TO PROPERTY	'Minor' (10%)	'Medium' (25%)	'Medium' (35%)
RISK TO PROPERTY	'Moderate' (5×10^{-4})	'Moderate' (2×10^{-4})	'Moderate' (2×10^{-4})
RISK TO LIFE	5.3×10^{-7}/annum	5.9×10^{-5}/annum	5.3×10^{-5}/annum
COMMENTS	This level of risk to property is 'UNACCEPTABLE'. To move risk to 'ACCEPTABLE' levels, the recommendations in **Section 12** are to be followed.	This level of risk to life and property is 'UNACCEPTABLE'. To move risk to 'ACCEPTABLE' levels, the recommendations in **Section 13 and 14** are to be followed.	This level of risk to life and property is 'UNACCEPTABLE'. To move risk to 'ACCEPTABLE' levels, the recommendations in **Section 13** are to be followed.

(See Aust. Geomech. Jnl. Mar 2007 Vol. 42 No 1, for full explanation of terms)

9. Suitability of the Proposed Development for the Site

The proposed development is suitable for the site. No geotechnical hazards will be created by the completion of the proposed development provided it is carried out in accordance with the requirements of this report and good engineering and building practice.

10. Stormwater

The fall is to Gardere Avenue. Roof water from the development is to be piped to the street drainage system through any tanks that may be required by the regulating authorities.

11. Excavations

Four excavations are required for the proposed development:

- An excavation to a maximum depth of ~3.3m is required for the Lot 1 basement.
- An excavation to a maximum depth of ~3.1m is required for the Lot 2 basement.
- An excavation to a maximum depth of ~2.1m for the Lot 1 pool.
- An excavation to a maximum depth of ~1.7m for the Lot 2 pool.

The excavations are expected to be through shallow fill, soils, clays, and Very Low Strength Rock, with Medium Strength Sandstone, expected at depths of between ~1.1m and ~1.8m below the surface in the area of the proposed excavations.

It is envisaged that excavations through fill, soil, clay, and Very Low Strength Rock can be carried out with an excavator and bucket, and excavations through rock will require grinding or rock sawing and breaking.

12. Vibrations

Possible vibrations generated during excavations through fill, soil, clay, and Very Low Strength Rock will be below the threshold limit for building damage utilising a domestic-sized excavator up to 16 tonnes. It is expected that the excavations will be through Medium Strength Sandstone or better.

Excavations through Medium Strength Rock or better should be carried out to minimise the potential to cause vibration damage to the uphill neighbouring house and garage, the W neighbouring house, and a sewer main that runs below the subject property. Allowing ~0.5m for backwall drainage, the setbacks from the proposed excavations to the existing structures are as follows:

The basement excavation for the Lot 1 house will be set back:

- ~3.1m from the W neighbouring house.
- ~6.9m from the sewer main.

The basement excavation for the Lot 2 house will be set back:

- ~7.5m from the uphill neighbouring garage.
- ~9.0m from the uphill neighbouring house.

Dilapidation reporting carried out on the uphill and W neighbouring properties is recommended prior to the excavation works commencing to minimise the potential for spurious building damage claims.

Close controls by the contractor over rock excavation are recommended so excessive vibrations are not generated.

Excavation methods are to be used that limit peak particle velocity to 5mm/sec at the neighbouring house walls and sewer main. Vibration monitoring will be required to verify this is achieved. Vibration monitoring must include a light/alarm so the operator knows if vibration limits have been exceeded. The equipment is to log and record vibrations throughout the excavation works.

In Medium Strength rock or better techniques to minimise vibration transmission will be required. These include:

- Rock sawing the excavation perimeter to at least 1.0m deep prior to any rock breaking with hammers, keeping the saw cuts below the rock to be broken throughout the excavation process.
- Limiting rock hammer size.
- Rock hammering in short bursts so vibrations do not amplify.
- Rock breaking with the hammer angled away from the nearby sensitive structures.
- Creating additional saw breaks in the rock where vibration limits are exceeded, as well as reducing hammer size as necessary.
- Use of rock grinders (milling head).

Should excavation induced vibrations exceed vibration limits after the recommendations above have been implemented, excavation works are to cease immediately and our office is to be contacted.

It is worth noting that vibrations that are below thresholds for building damage may be felt by the occupants of the subject and neighbouring houses.

13. Excavation Support Requirements

Bulk Excavation for Basements

Allowing 0.5m for back wall drainage, the depths and setbacks for the proposed excavations for the basements are as follows:

- The basement excavation for Lot 1 will reach a maximum depth of ~3.3m and be set back ~0.4m from the W common boundary and the low brick retaining wall which supports a cut for the W neighbouring property (Photo 5).
- The basement excavation for Lot 2 will reach a maximum depth of ~3.1m and be set back ~0.4m from the W common boundary and the brick and concrete block retaining wall which supports a cut for the W neighbouring property (Photo 4).

As such, the W common boundary and W brick and block retaining wall will lie within the zone of influence of the proposed excavation. In this instance, the zone of influence is the area above a theoretical 45° line (from horizontal) from the base of the excavation or top of Medium Strength Rock, whichever is encountered first, towards the surrounding structures and boundaries. This line reduces to 30° through the fill and soil.

Where the W boundary wall falls within the zone of influence of the excavations, exploration pits along the wall will need to be put down by the builder to determine the foundation depth and material. These are to be inspected by the geotechnical consultant.

If the foundations are confirmed to be supported on rock or extend below the zone of influence of the proposed excavation, the excavations may commence. If they are not, the wall will need to be underpinned to rock prior to the excavations commencing. See the site plan attached for the minimum extent of the required exploration pits/underpinning.

Underpinning is to follow the underpinning sequence 'hit one miss two'. Under no circumstances is the bulk excavation to be taken to the edges of the walls and then underpinned. Underpins are to be constructed from drives that should not exceed 0.6m in width along strip footings and should be proportioned according to footing size for other foundation types. Allowances are to be made for drainage through the underpinning to prevent a build-up of hydrostatic pressure. Underpins that are not designed as retaining walls are to be supported by retaining walls. The void between the retaining walls and the underpinning is to be filled with free-draining material such as gravel.

During the excavation process, the geotechnical consultant is to inspect the excavations as they approach no less than 1.0m horizontally from foundations of the W boundary retaining wall/underpins to confirm the stability of the cut to go flush with the footings.

Due to the depth of the excavation through fill, soil, clay, and Very Low Strength Rock, the cut faces will need to be temporarily or permanently supported prior to the commencement of the excavation through rock, or during the excavation process in a staged manner, so cut

batters are not left unsupported. See the site plan attached for the minimum extent of the required shoring. The support will need to be designed / approved by the structural engineer in consultation with the Geotechnical Consultant.

During the excavation process, the geotechnical consultant is to inspect the cuts in 1.5m intervals as they are lowered to ensure the ground materials are as expected and no wedges or other geological defects are present that could require additional support. Should additional ground-support be required, this will likely involve the use of mesh, sprayed concrete, and rock bolts.

Bulk Excavation for Pools

For ease of excavation and construction, and to prevent a pillar of fill, soil, clay, and Very Low Strength Rock from remaining between the cuts for each pool it is recommended they be carried out as one cut.

The fill, soil, clay, and rock up to Very Low Strength Rock portions of the proposed pool excavation is expected to stand at near-vertical angles for short periods of time until the pool structures are installed, provided the cut batters are kept from becoming saturated. If the cut batters through fill soil and clay remain unsupported for more than a day before pool construction commences, they are to be supported with typical pool shoring until the pool structures are in place. Excavations through Low to Medium Strength Rock or better are expected to stand at vertical angles unsupported subject to approval by the geotechnical consultant.

Advice applying to Both Excavations

Upslope runoff is to be diverted from the cut faces by sandbag mounds or other diversion works. The materials and labour to construct the pool structure/retaining walls are to be organised so on completion of the excavations they can be constructed as soon as possible. The excavations are to be carried out during a dry period. No excavations are to commence if heavy or prolonged rainfall is forecast.

Upon completion of the excavation for the basement/driveway, it is recommended all cut faces be supported with retaining walls to prevent any potential future movement of joint blocks in the cut face that can occur over time, when unfavourable jointing is obscured behind the excavation face. Additionally, retaining walls will help control seepage and to prevent minor erosion and sediment movement.

All excavation spoil is to be removed from site following the current Environmental Protection Agency (EPA) waste classification guidelines.

14. Retaining Structures

For cantilever or singly propped retaining structures it is suggested the design be based on a triangular distribution of lateral pressures using the parameters shown in Table 1.

Table 1 – Likely Earth Pressures for Retaining Structures

Unit	Earth Pressure Coefficients		
	Unit weight (kN/m^3)	'Active' K_a	'At Rest' K_0
Fill and Topsoil	20	0.40	0.55
Residual Clays	20	0.35	0.45
Very Low Strength Rock	22	0.22	0.35
Medium Strength Rock	24	0.00	0.01

For rock classes refer to Pells et al "Design Loadings for Foundations on Shale and Sandstone in the Sydney Region". Australian Geomechanics Journal 1978.

It is to be noted that the earth pressures in Table 1 assume a level surface above the structure, do not account for any surcharge loads and assume retaining structures are fully drained. Rock strength and relevant earth pressure coefficients are to be confirmed on site by the geotechnical consultant.

All retaining structures are to have sufficient back-wall drainage and be backfilled immediately behind the structure with free draining material (such as gravel). This material is to be wrapped in a non-woven Geotextile fabric (i.e. Bidim A34 or similar), to prevent the drainage from becoming clogged with silt and clay. If no back-wall drainage is installed in retaining structures the full hydrostatic pressures are to be accounted for in the retaining structure design.

As the basements are embedded a minimum of 2.9m below the current surface, it is suggested that the basements be tanked to minimise the use of pumps over the life of the building. Tanking the basement will also result in less impact on soil moisture levels around the development.

15. Foundations

The proposed basement excavations are expected to be entirely seated in Medium Strength Sandstone or better. This is a suitable foundation material. Where the footprint of the proposed houses do not fall over the footprint of the excavations, piers taken to rock will be required to maintain a uniform foundation material across the structure. Medium Strength Sandstone is expected at depths of between ~1.1m to ~1.8m below the current surface.

A maximum allowable bearing pressure of 1000kPa can be assumed for footings on Medium Strength Sandstone.

The proposed pool excavations are expected to be partially seated in Medium Strength Sandstone or better. This is a suitable foundation material. Where it is not exposed, shallow piers taken to rock will be required to maintain a uniform foundation material across the structure. Provided the pools are taken to this material, no additional surcharge loads will be imparted on the adjacent walls of the basement

Naturally occurring vertical cracks (known as joints) commonly occur in sandstone. These are generally filled with soil and are the natural seepage paths through the rock. They can extend to depths of several metres and are usually relatively narrow but can range between 0.1 to

0.8m wide. If a footing falls over a joint in the rock, the construction process is simplified if, with the approval of the structural engineer, the joint can be spanned or, alternatively, the footing can be repositioned so it does not fall over the joint.

NOTE: If the contractor is unsure of the footing material required, it is more cost effective to get the geotechnical consultant on site at the start of the footing excavation to advise on footing depth and material. This mostly prevents unnecessary over-excavation in clay like shaly rock but can be valuable in all types of geology.

16. Inspections

The client and builder are to familiarise themselves with the following required inspections as well as council geotechnical policy. We cannot provide geotechnical certification for the owner or the regulating authorities if the following inspections have not been carried out during the construction process.

- The exploration pits to determine the foundation material along the W boundary wall (Photos 4 & 5) are to be inspected by the geotechnical consultant to determine if underpinning is necessary. This is to occur before the bulk excavation for the basements commence.
- During the excavation process, the geotechnical consultant is to inspect the basement excavations as they approach no less than 1.0m horizontally from foundations of the W boundary retaining wall/underpins to confirm the stability of the cut to go flush with the footings.
- During the excavation process, the geotechnical consultant is to inspect the cuts for the basements in 1.5m intervals as they are lowered to ensure the ground materials are as expected and no wedges or other geological defects are present that could require additional support. Should additional ground-support be required, this will likely involve the use of mesh, sprayed concrete, and rock bolts.

- All footings are to be inspected and approved by the geotechnical consultant while the excavation equipment and contractors are still onsite and before steel reinforcing is placed or concrete is poured.

White Geotechnical Group Pty Ltd.

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REGISTERED PROFESSIONAL GEOSCIENTIST
AUSTRALIAN INSTITUTE OF GEOSCIENTISTS
BENJAMIN WHITE
RPGeo No:
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Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 6 – downhole is top to bottom

Important Information about Your Report

It should be noted that Geotechnical Reports are documents that build a picture of the subsurface conditions from the observation of surface features and testing carried out at specific points on the site. The spacing and location of the test points can be limited by the location of existing structures on the site or by budget and time constraints of the client. Additionally, the test themselves, although chosen for their suitability for the particular project, have their own limiting factors. The testing gives accurate information at the location of the test, within the confines of the test's capability. A geological interpretation or model is developed by joining these test points using all available data and drawing on previous experience of the geotechnical consultant. Even the most experienced practitioners cannot determine every possible feature or change that may lie below the earth. All of the subsurface features can only be known when they are revealed by excavation. As such, a Geotechnical report can be considered an interpretive document. It is based on factual data but also on opinion and judgement that comes with a level of uncertainty. This information is provided to help explain the nature and limitations of your report.

With this in mind, the following points are to be noted:

- If upon the commencement of the works the subsurface ground or ground water conditions prove different from those described in this report, it is advisable to contact White Geotechnical Group immediately, as problems relating to the ground works phase of construction are far easier and less costly to overcome if they are addressed early.

- If this report is used by other professionals during the design or construction process, any questions should be directed to White Geotechnical Group as only we understand the full methodology behind the report's conclusions.

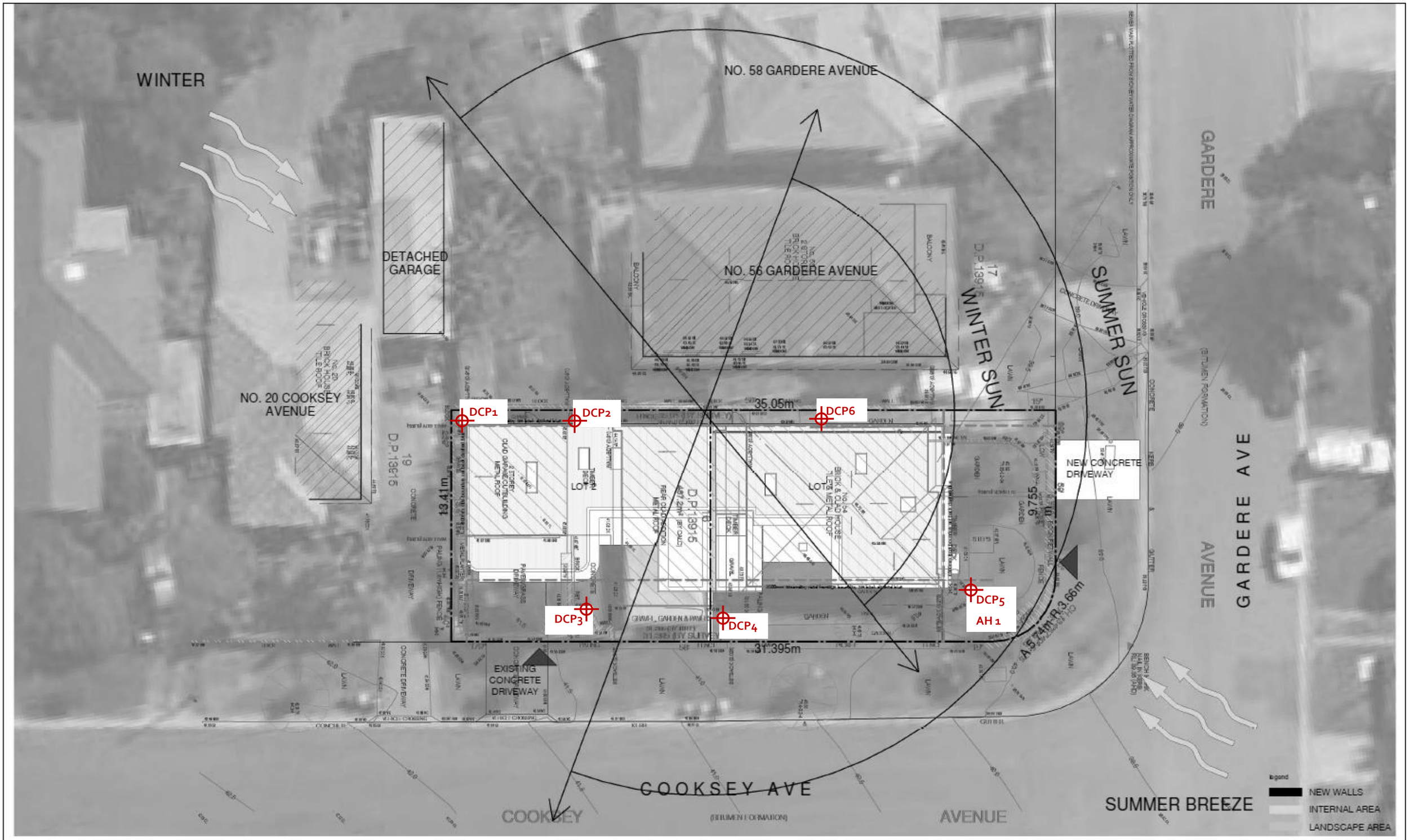
- The report addresses issues relating to your specific design and site. If the proposed project design changes, aspects of the report may no longer apply. Contact White Geotechnical if this occurs.

- This report should not be applied to any other project other than that outlined in section 1.0.

- This report is to be read in full and should not have sections removed or included in other documents as this can result in misinterpretation of the data by others.

- It is common for the design and construction process to be adapted as it progresses (sometimes to suit the previous experience of the contractors involved). If alternative design and construction processes are required to those described in this report, contact White Geotechnical Group. We are familiar with a variety of techniques to reduce risk and can advise if your proposed methods are suitable for the site conditions.

SITE PLAN – showing test locations



Issue	date	revision
C	11.04.25	FOR DEVELOPMENT APPLICATION
B	02.04.25	FINAL COORDINATION
A	19.02.25	FOR CONSULTANT COORD.

Notes

Use figured dimensions only - do not scale from this drawing. All dimensions to structure - confirm all dimensions on site.

This drawing is to be read in conjunction with all relevant consultant documentation, schedules and specifications.

BASIX
Showerheads, toilets and taps to be min. 4* water rating.
Min. 2500L water tank connected to landscape, toilet, pool.
Hot water: Gas instantaneous 5* rating.
Ducted fans to kitchens, bathrooms, laundries. Manual switch.
1-phase AC, 2.5* rating. Natural light to bathrooms + kitchens.
Gas heating to pool, pool pump min. 6* rating.
Gas cooktop, electric oven. Outdoor clothes line.
1.7kW photovoltaic panels.
Lighting: Min. 40% fluro or LED lights.
R2.7 insulation to all external walls.
R2.7 ins. to internal framed walls in basement.
R4.0 ins. to conc. floor over basement.
R4.0 ins. to timber floor where open below.
R5.0 ins.to ceiling & 60mm anticon R1.3 ins. to roof.
Metal roof to be medium colour.
Windows
Group A-Double clear, alum. framed Uw 3.03, SHGC 0.40
Group B-Double clear, alum. framed Uw 1.79, SHGC 0.31
Group A-Double clear, alum. framed Uw 2.6, SHGC 0.55
Group B-Double clear, alum. framed Uw 2.6, SHGC 0.6
Group B-Singe low-E, alum. framed Uw 4.9 SHGC 0.53
Skylights-Double fixed, Uw 2.6, SHGC 0.53

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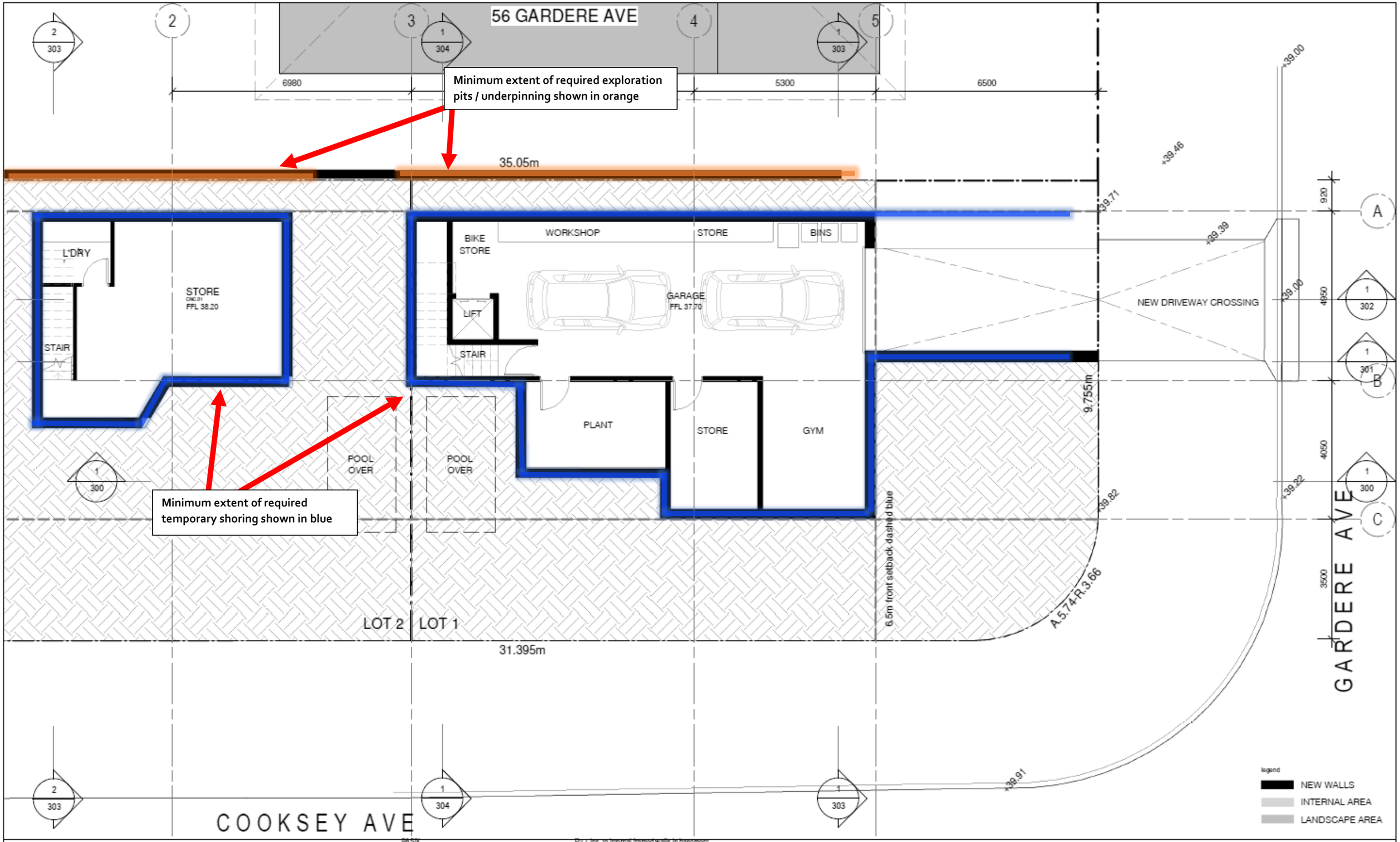
PROJECT
NEW DUAL OCCUPANCY
54 GARDERE AVENUE, CURL CURL NSW 2096

CLIEN
MR & MRS BRYDEN

DRAWIN
SITE PLAN

project 24011
scale As@ A3 indicated
draw AB
date 11.04.25
drawing no. DA 001
issue / C

BASEMENT PLAN – showing minimum extent of required shoring / exploration pits / underpinning



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This drawing is copyright and is not to be replicated or used for any purpose without the written consent of Alex Bryden Architecture.

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BASIX
Showerheads, toilets and taps to be min. 4* water rating.
Min. 2500L water tank connected to landscape, toilet, pool.
Hot water: Gas instantaneous 5* rating.
Ducted fans to kitchens, bathrooms, laundries. Manual switch.
1-phase AC, 2.5* rating. Natural light to bathrooms + kitchens.
Gas heating to pool, pool pump min. 6* rating.
Gas cooktop, electric oven. Outdoor clothes line.
1.7kW photovoltaic panels.
Lighting: Min. 40% fluro or LED lights.
R2.7 insulation to all external walls.
R2.7 ins. to internal framed walls in basement.
R4.0 ins. to conc. floor over basement.
R4.0 ins. to timber floor where open below.
R6.0 ins.to ceiling & 60mm anticon R1.3 ins. to roof.
Metal roof to be medium colour.
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Group B-Singe low-E, alum. framed Uw 4.9 SHGC 0.53
Skylights-Double fixed, Uw 2.6, SHGC 0.53

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PROJECT
NEW DUAL OCCUPANCY
54 GARDERE AVENUE, CURL CURL NSW 2096

CLIEN
MR & MRS BRYDEN

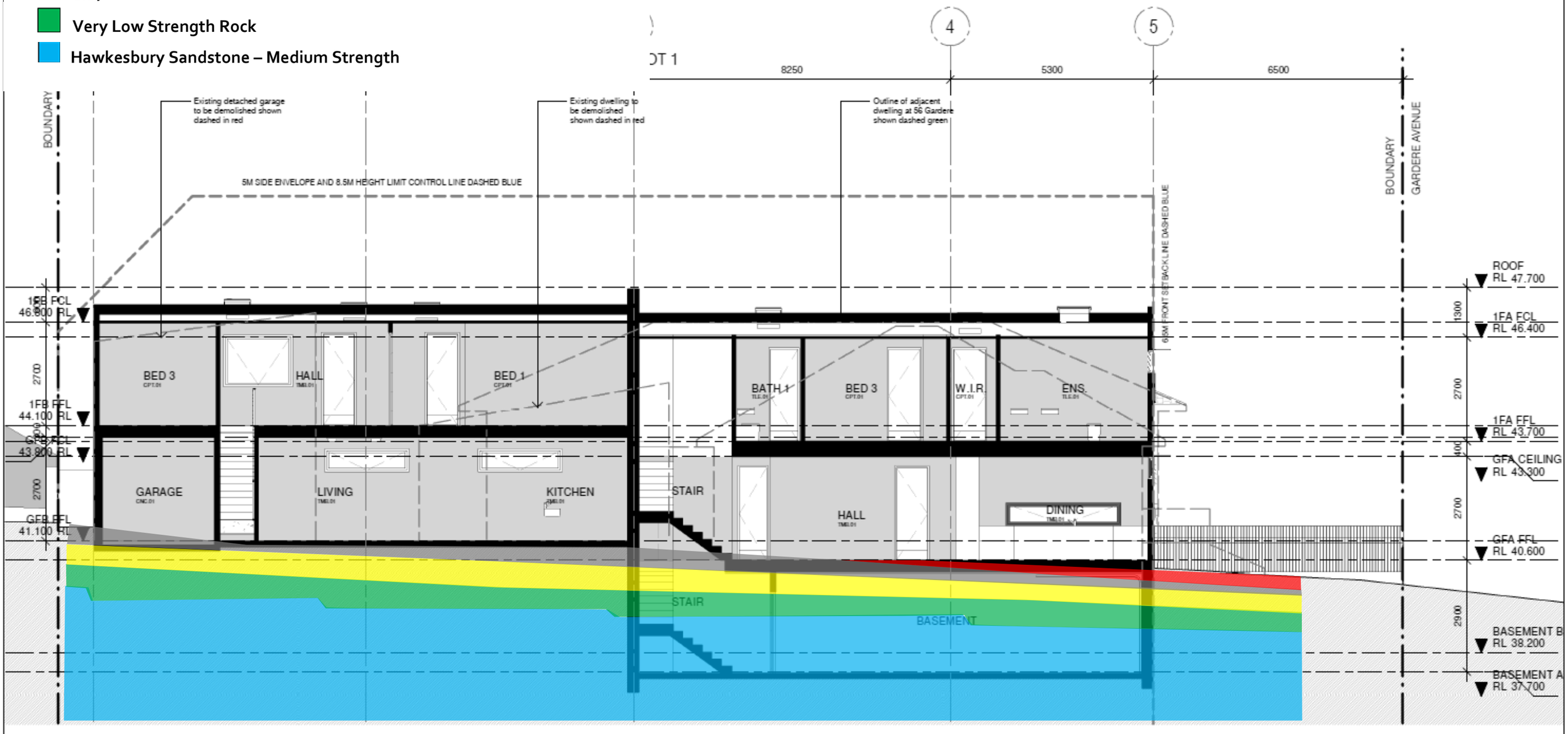
DRAWIN
BASEMENT PLAN

project 24011
scale 1 : 100@ A3
draw Author
date 11.04.25
drawing no. DA 100
Issue / C

TYPE SECTION – Diagrammatical Interpretation of expected Ground Materials

Expected Ground Materials

- Fill
- Topsoil
- Clay
- Very Low Strength Rock
- Hawkesbury Sandstone – Medium Strength



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KEY (SEE SCHEDULES FOR DETAILS)

AL.01 - ALUM. FRAMED GLAZING
AL.02 - ALUM. FRAMED GLAZING
BR.01 - PAINTED BRICKWORK
CL.01 - VERTICAL CLADDING 1
CL.02 - PANEL CLADDING
CL.03 - VERTICAL CLADDING 2
DR.0x - VARIOUS DOORS
PF.01 - POOL FENCE
ST.01 - STONE CLADDING
VF.01 - VERTICAL FENCE 1
VF.02 - VERTICAL FENCE 2

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PROJECT
NEW DUAL OCCUPANCY
54 GARDERE AVENUE, CURL CURL NSW 2096

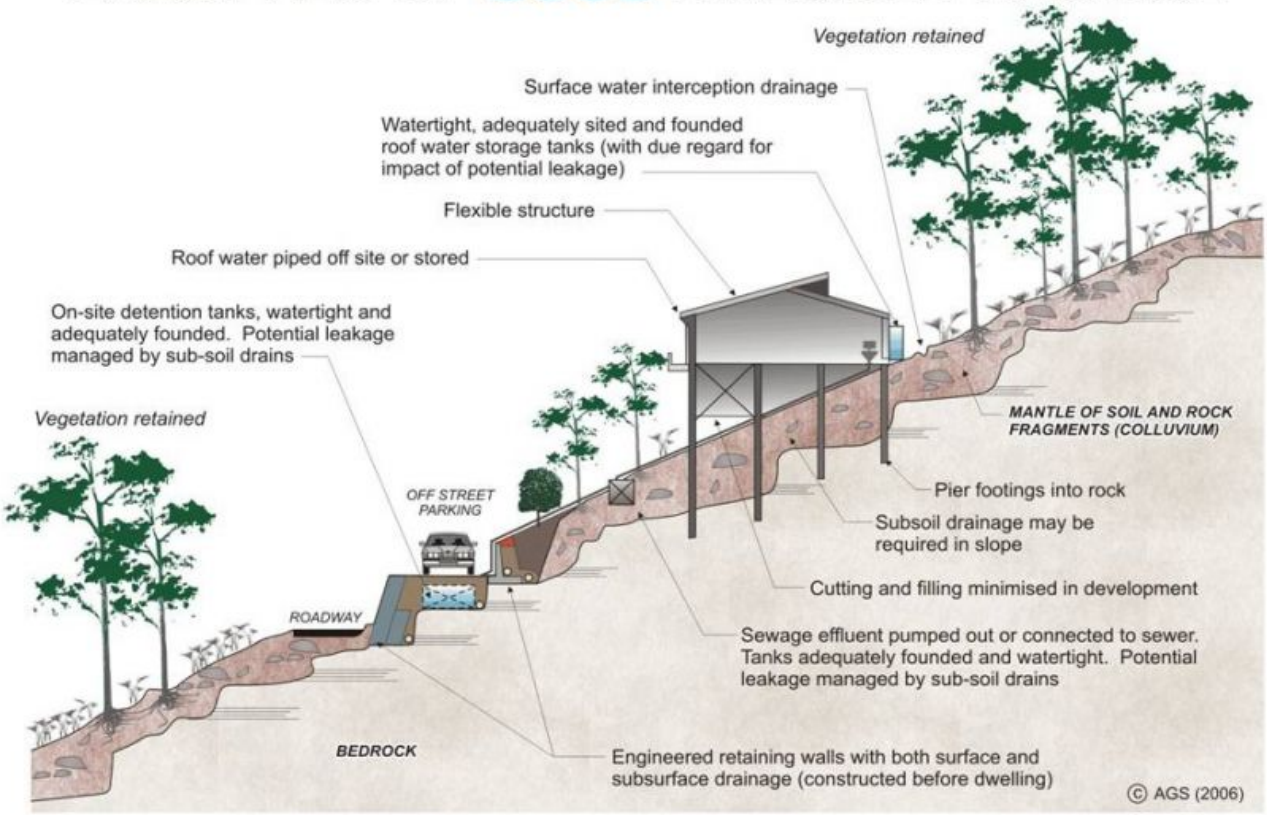
CLIEN
MR & MRS BRYDEN

DRAWIN
LONG SECTION 2

project 24011
scale 1 : 100@ A3
draw AB
date 11.04.25

drawing no. DA 301
Issue / C

EXAMPLES OF **GOOD** HILLSIDE PRACTICE



EXAMPLES OF **POOR** HILLSIDE PRACTICE