40 Bassett Street, Mona Vale

Geotechnical Comments for Section 4.55.

We have reviewed the existing geotechnical report, the original plans, and the 9 amended plans by Gartner Trovato, project number 2102, drawings numbered A.00 to A.08, dated 8/2/22.

The changes include:

- Minor alterations to the footprint of the proposed house and terrace.

The changes to the plans are minor from a geotechnical perspective. The changes do not alter the recommendations or the risk assessment in the report carried out by this firm numbered J3490 and dated the 22nd December, 2021.

White Geotechnical Group Pty Ltd.

Ben White M.Sc. Geol.,
AusIMM., CP GEOL.
No. 222757
Engineering Geologist.

GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO. 1 – To be submitted with Development Application

Development Application for _____
Name of Applicant

Address of site 40 Bassett Street, Mona Vale

The following checklist covers the minimum requirements to be addressed in a Geotechnical Risk ***Declaration made by geotechnical engineer or engineering geologist or coastal engineer (where applicable) as part of a geotechnical report***

I, Ben White *on behalf of* White Geotechnical Group Pty Ltd
(Insert Name) (Trading or Company Name)

on this the 22/12/21 certify that I am a geotechnical engineer or engineering geologist or coastal engineer as defined by the Geotechnical Risk Management Policy for Pittwater - 2009 and I am authorised by the above organisation/company to issue this document and to certify that the organisation/company has a current professional indemnity policy of at least $10million.

I:
Please mark appropriate box

☒ have prepared the detailed Geotechnical Report referenced below in accordance with the Australia Geomechanics Society's Landslide Risk Management Guidelines (AGS 2007) and the Geotechnical Risk Management Policy for Pittwater - 2009

☒ am willing to technically verify that the detailed Geotechnical Report referenced below has been prepared in accordance with the Australian Geomechanics Society's Landslide Risk Management Guidelines (AGS 2007) and the Geotechnical Risk Management Policy for Pittwater - 2009

☐ have examined the site and the proposed development in detail and have carried out a risk assessment in accordance with Section 6.0 of the Geotechnical Risk Management Policy for Pittwater - 2009. I confirm that the results of the risk assessment for the proposed development are in compliance with the Geotechnical Risk Management Policy for Pittwater - 2009 and further detailed geotechnical reporting is not required for the subject site.

☐ have examined the site and the proposed development/alteration in detail and I am of the opinion that the Development Application only involves Minor Development/Alteration that does not require a Geotechnical Report or Risk Assessment and hence my Report is in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009 requirements.

☐ have examined the site and the proposed development/alteration is separate from and is not affected by a Geotechnical Hazard and does not require a Geotechnical Report or Risk Assessment and hence my Report is in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009 requirements.

☐ have provided the coastal process and coastal forces analysis for inclusion in the Geotechnical Report

Geotechnical Report Details:

Report Title: Geotechnical Report **40 Bassett Street, Mona Vale**
Report Date: 22/12/21

Author: BEN WHITE

Author's Company/Organisation: **WHITE GEOTECHNICAL GROUP PTY LTD**

Documentation which relate to or are relied upon in report preparation:

Australian Geomechanics Society Landslide Risk Management March 2007.

White Geotechnical Group company archives.

I am aware that the above Geotechnical Report, prepared for the abovementioned site is to be submitted in support of a Development Application for this site and will be relied on by Pittwater Council as the basis for ensuring that the Geotechnical Risk Management aspects of the proposed development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure, taken as at least 100 years unless otherwise stated and justified in the Report and that reasonable and practical measures have been identified to remove foreseeable risk.

Signature _____

Name Ben White

Chartered Professional Status MScGEOLAusIMM CP GEOL

Membership No. 222757

Company White Geotechnical Group Pty Ltd

GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO. 1(a) - Checklist of Requirements for Geotechnical Risk Management Report for Development Application

Development Application for _____
Name of Applicant

Address of site 40 Bassett Street, Mona Vale

The following checklist covers the minimum requirements to be addressed in a Geotechnical Risk Management Geotechnical Report. This checklist is to accompany the Geotechnical Report and its certification (Form No. 1).

Geotechnical Report Details:

Report Title: Geotechnical Report **40 Bassett Street, Mona Vale**

Report Date: 22/12/21

Author: BEN WHITE

Author's Company/Organisation: WHITE GEOTECHNICAL GROUP PTY LTD

Please mark appropriate box

☒ Comprehensive site mapping conducted **7/6/21**
(date)

☒ Mapping details presented on contoured site plan with geomorphic mapping to a minimum scale of 1:200 (as appropriate)

☒ Subsurface investigation required
- ☐ No Justification _____
- ☒ Yes Date conducted **7/6/21**

☒ Geotechnical model developed and reported as an inferred subsurface type-section

☒ Geotechnical hazards identified
- ☐ Above the site
- ☒ On the site
- ☐ Below the site
- ☐ Beside the site

☒ Geotechnical hazards described and reported

☒ Risk assessment conducted in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009
- ☒ Consequence analysis
- ☒ Frequency analysis

☒ Risk calculation

☒ Risk assessment for property conducted in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009

☒ Risk assessment for loss of life conducted in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009

☒ Assessed risks have been compared to "Acceptable Risk Management" criteria as defined in the Geotechnical Risk Management Policy for Pittwater - 2009

☒ Opinion has been provided that the design can achieve the "Acceptable Risk Management" criteria provided that the specified conditions are achieved.

☒ Design Life Adopted:
- ☒ 100 years
- ☐ Other _____
specify

☒ Geotechnical Conditions to be applied to all four phases as described in the Geotechnical Risk Management Policy for Pittwater - 2009 have been specified

☒ Additional action to remove risk where reasonable and practical have been identified and included in the report.

☐ Risk assessment within Bushfire Asset Protection Zone.

I am aware that Pittwater Council will rely on the Geotechnical Report, to which this checklist applies, as the basis for ensuring that the geotechnical risk management aspects of the proposal have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure, taken as at least 100 years unless otherwise stated, and justified in the Report and that reasonable and practical measures have been identified to remove foreseeable risk.

Signature _____

Name Ben White

Chartered Professional Status MScGEOLAusIMM CP GEOL

Membership No. 222757

Company White Geotechnical Group Pty Ltd

GEOTECHNICAL INVESTIGATION:

New House and Pool at **40 Bassett Street, Mona Vale**

1. Proposed Development

1.1 Demolish the existing house and garage.

1.2 Construct a new two storey house with garage attached.

1.3 Install a new pool by excavating to a maximum depth of ~2.8m.

1.4 Details of the proposed development are shown on 9 drawings prepared by Gartner Trovato, project number 2102, drawings numbered S4.55-00 and A.01 to A.08, Revision B, dated 15/12/21.

2. Site Description

2.1 The site was inspected on the 7th June, 2021.

2.2 This residential property is on the high side of the road and has a NE aspect. It is located on the gently graded lower reaches and toe of a hillslope. The ground surface from the downhill property boundary to the uphill side of the house is near level. The natural slope rises from the uphill side of the house to the uphill property boundary at an average angle of ~4°. The ground surface on the downhill side of the property is near level. The slope above the property continues at gentle angles.

2.3 At the road frontage, a gravel and concrete driveway runs along the E side of the house to a rendered masonry garage on the uphill side of the house (Photos 1 & 2). Between the road frontage and the house is a near level lawn area (Photo 1). The single storey rendered brick house is supported by brick walls and brick piers (Photos 3 & 4). The supporting walls and piers stand vertical and show no significant signs of movement (Photo 5). A gently sloping lawn extends from the uphill side of the house and garage to the uphill property boundary (Photo 6).

3. Geology

The Sydney 1:100 000 Geological sheet indicates the site is underlain by the Newport Formation of the Narrabeen Group. This is described as interbedded laminite, shale, and quartz to lithic quartz sandstone.

4. Subsurface Investigation

Three Auger holes were put down to identify the soil materials. Five Dynamic Cone Penetrometer (DCP) tests were put down to determine the relative density of the overlying soil and the depth to weathered rock. The locations of the tests are shown on the site plan. 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 be an issue for the testing on 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 (~RL6.7) **–** AH1 (Photo 7)

Depth (m)	**Material Encountered**
0.0 to 0.4	**TOPSOIL**, sandy soil, dark brown, damp, fine to medium grained.
0.4 to 0.7	**CLAY**, brown orange, firm to stiff, moist.

End of Hole @ 0.7m in firm to stiff clay. No watertable encountered.

TEST RESULTS CONTINUE ON NEXT PAGE

AUGER HOLE 2 (~RL5.6) **–** AH1 (Photo 8)

Depth (m)	Material Encountered
0.0 to 0.6	**TOPSOIL**, sandy soil, dark brown, damp, fine to medium grained.
0.6 to 0.9	**CLAYEY SOIL**, dark brown, damp, fine
0.9 to 1.1	**SANDY CLAY**, grey and orange brown, firm to stiff, damp.

End of Hole @ 1.1m in firm to stiff sandy clay. No watertable encountered.

AUGER HOLE 3 (~RL4.0) **–** AH1 (Photo 9)

Depth (m)	Material Encountered
0.0 to 0.1	**TOPSOIL**, sandy soil, dark brown, moist, fine to medium grained.
0.1 to 0.7	**SAND**, dark grey, orange/brown, moist, medium grained.
0.7 to 1.1	**SANDY PEAT**, black, moist.
1.1 to 1.2	**SAND**, brown, medium dense, moist.

Refusal @ 1.2m in medium dense sand. No watertable encountered.

DCP TEST RESULTS ON NEXT PAGE

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** (~RL4.0)	**DCP 2** (~RL4.3)	**DCP 3** (~RL4.9)	**DCP 4** (~RL5.6)	**DCP 5** (~RL6.7)
0.0 to 0.3	5	5	5	5	3
0.3 to 0.6	5	5	5	7	7
0.6 to 0.9	7	5	5	8	12
0.9 to 1.2	16	10	12	14	22
1.2 to 1.5	18	11	16	23	32
1.5 to 1.8	7	12	28	32	50
1.8 to 2.1	12	21	37	50	#
2.1 to 2.4	19	21	30	#	
2.4 to 2.7	17	8	50		
2.7 to 3.0	22	#	#		
3.0 to 3.3	#				
	Refusal on rock @ 3.0m	Refusal on rock @ 2.5m	End of Test @ 2.7m	End of Test @ 2.0m	End of Test @ 1.8m

#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 @ 3.0m, DCP bouncing off rock surface, brown sandy soil on wet tip.
DCP2 – Refusal on rock @ 2.5m, DCP thudding, dark brown soil and orange/brown clay on wet tip.
DCP3 – End of test @ 2.7m, DCP still going down, light and dark brown sandy soil on wet tip.
DCP4 – End of test @ 2.0m, DCP still going down, dark brown soil on damp tip.
DCP5 – End of test @ 1.8m, DCP still going down, dark brown soil on damp tip.

5. Geological Observations/Interpretation

The geology across the site is variable as the site is located on the toe and lower reaches of a hillslope. In the test locations at the near level portion of the property (DCP 1 to 3 & AH3), the ground materials consist of a sandy topsoil, Medium Dense Sand and sandy peat over Medium Dense Sand and firm to stiff sandy clays, with Extremely Low Strength Rock or better encountered at depths from between ~1.8m to ~3.0m below the current surface, being

progressively shallower as the slope rises from the toe of the slope. For the ground tests at the location of the proposed pool near the uphill property boundary (DCP4 & 5, AH1 & 2), the ground materials consist of a sandy topsoil over clayey soil and clays/sandy clays, with Extremely Low Strength Rock or better encountered at depths from between ~1.5m to ~1.8m below the current surface. See the 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 weathered rock and through the cracks in the rock.

From work done previously by this firm on Bassett Street, the watertable is expected at or above ~RL1.8. If the house is to be supported on rock the foundations will be taken below the watertable. See '**Section 16** Foundations'.

It is expected that the watertable will be below the base of the pool and any piers required to support the pool (~RL3.9).

It should be noted the watertable fluctuates slightly with the tide and climatic changes.

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 proposed excavation for the pool is a potential hazard until retaining structures are in place (**Hazard One**).

RISK ANALYSIS SUMMARY ON NEXT PAGE

Geotechnical Hazards and Risk Analysis - Risk Analysis Summary

HAZARDS	Hazard One
TYPE	The proposed excavation for the pool collapsing onto the work site and impacting the neighbouring properties before retaining structures are in place.
LIKELIHOOD	'Possible' (10^{-3})
CONSEQUENCES TO PROPERTY	'Medium' (15%)
RISK TO PROPERTY	'Moderate' (2×10^{-4})
RISK TO LIFE	8.3×10^{-6}/annum
COMMENTS	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 Bassett Street. All stormwater from the proposed development is to be piped to the street drainage system through any tanks that may be required by the regulating authorities.

11. Excavations

An excavation to a maximum depth of ~2.8m is required to install the proposed pool. The excavation is expected to be through topsoil, clayey soil and clay, with Extremely Low Strength Rock expected at depths from between ~1.5m to ~1.8m below the current surface. It is envisaged that excavations through soil, clay and Extremely Low Strength Rock can be carried out with an excavator and bucket.

12. Vibrations

Possible vibrations generated during excavations through soil, clay and Extremely Low Strength Rock will be below the threshold limit for building damage.

13. Excavation Support Requirements

An excavation to a maximum depth of ~2.8m is required to install the proposed pool. The excavation is set back ~1.3m from the E common boundary. The E common boundary will be within the zone of influence of the excavation. In this instance, the zone of influence is the area above a theoretical 30° line through soil and a theoretical 45° line through clay/weathered rock from the base of the excavation towards the surrounding structures and boundaries.

The E common boundary fence is to be braced prior to the excavation commencing.

The E cut is to be temporarily supported with typical pool shoring such as braced form ply until the pool structure is in place.

Where shoring is not required, the cut batters through soil, clay and Extremely Low Strength Rock will stand at near vertical angles for a short period of time until the pool structure is in place, provided the cut batters are kept from becoming saturated.

During the excavation process, the geotechnical consultant is to inspect the cut face in 1.5m intervals as it is lowered to ensure ground materials are as expected and that additional support is not required.

Upslope runoff is to be diverted from the cut faces by sandbag mounds or other diversion works. All unsupported cut batters are to be covered to prevent access of water in wet weather and loss of moisture in dry weather. The covers are to be tied down with metal pegs or other suitable fixtures so they can't blow off in a storm. The materials and labour to construct the pool structure are to be organised so on completion of the excavation it can be constructed as soon as possible. The excavation is to be carried out during a dry period. No

excavations are to commence if heavy or prolonged rainfall is forecast. If the cut batters remain unsupported for more than a few days before the commencement of pool construction they are to be temporarily supported with typical pool shoring such as braced form ply until the pool structure is in place.

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 pressure 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
Topsoil and Clayey Sand	20	0.40	0.55
Residual Clays	20	0.35	0.45
Extremely Low Strength Rock	22	0.25	0.35

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. Ground materials 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 likely hydrostatic pressures are to be accounted for in the structural design.

15. Site Classification

The site classification in accordance with AS2870-2011 for footings supported on Extremely Low Strength Rock is Class S.

16. Foundations

It is recommended the house foundations be supported on Extremely Low Strength Rock or better. This ground material is expected at depths from between ~2.5m to ~3.0m below the current surface. A maximum allowable bearing pressure of 600kPa can be assumed for footings on Extremely Low Strength Rock or better. Due to the presence of sand up to ~2m thick and the watertable expected above the weathered rock on the downhill side of the house it is recommended screw piles be utilised as the foundation system.

Note that we do not certify screw pile foundations. Screw pile design varies between contractors and we are not privy to the details of individual design or how the screw pile contractor converts torque to bearing pressure. As such, the screw pile contractor is totally responsible for ensuring the screw piles can support the loads on the piles and that these are within acceptable settlement limits.

The proposed pool is expected to be seated in Extremely Low Strength Rock on the uphill side. This is a suitable foundation material. On the downhill side where the rock drops away with the slope, piers taken to Extremely Low Strength Rock will be required to maintain a uniform bearing material across the structure. The watertable is expected to be below the base of the pool (~RL3.9) and below the base of any piers required on the downhill side of the pool. As such, screw piles will not be required and the uphill side of the pool can be supported off the exposed weathered rock with the downhill side supported by conventional piers.

17. 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 Occupation Certificate if the following inspections have not been carried out during the construction process.

- During the excavation process, the geotechnical consultant is to inspect the cut face in 1.5m intervals as it is lowered to ensure ground materials are as expected and that additional support is not required.

- All footings (excluding screw pile foundations) are to be inspected and approved by the geotechnical consultant while the excavation equipment is still onsite and before steel reinforcing is placed or concrete is poured.

White Geotechnical Group Pty Ltd.

Ben White M.Sc. Geol.,
AusIMM., CP GEOL.
No. 222757
Engineering Geologist.

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

Photo 7: AH1 – downhole is from left to right.

Photo 8: AH2 – downhole is from left to right.

Photo 9: AH3 Downhole is from 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

BASIX NOTES:

Shingle roof + sarking (roof dark colour)
- R4.0 insulation batts to all ceilings & internal walls adjacent to roof space
- R3.0 insulation to raked ceilings & flat ceiling/flat roof
- Sarking plus R2.5 batts to all external walls
- R2.0 insulation batts to all internal walls
- GF suspended concrete slab (minimum 150mm thickness) + R2.0 underslab insulation
- Framed first floor to include R2.0 underfloor insulation
- Louvre windows U= 5.4 SHGC=0.58 (+/-10%)
- All other windows/glass doors are aluminium thermally broken frames/DG/clear U= 3.6 SHGC=0.47 +/-10% (hinged) SHGC=0.54 +/-10% (fixed)
- All windows/door are weather sealed
- All recessed downlights are sealed and to allow for uninterrupted ceiling insulation
- All exhaust fans sealed
- Fireplaces sealed

42 BASSETT ST
1 STOREY DWELLING
LOT 25 SEC A, DP 8768

38 BASSETT ST
2 STOREY APARTMENT BUILDING
SP 15697

2A ORANA ST
2 STOREY DWELLING +
2 STOREY GRANNY FLAT
LOT 1, DP 315949

BASSETT ST

BDY 72.255

BDY 68.605

BDY 15.24

DCP1
AH 3

DCP2

DCP3

DCP4
AH 2

DCP5
AH 1

GARAGE
RW TANK
GARDEN
OUTLINE OF APPROVED DA
ENS.
GUEST
FAMILY ROOM
FOYER
STORAGE
ORIGINAL DA HOUSE OUTLINE
LDY
PANTRY
KITCHEN
DINING
LIVING
TERRACE
BBQ
POOL
8 x 3.0m
V: 24m³
POOL EQUIP.
SHED

DATE	REV	DESCRIPTION
29/4/21	A	DA
15/12/2021	B	DA - Revised

GARTNERTROVATO ARCHITECTS

PROJECT
SECTION 4.55
40 BASSETT STREET, MONA VALE
LOT 26, SECT E, DP 6195

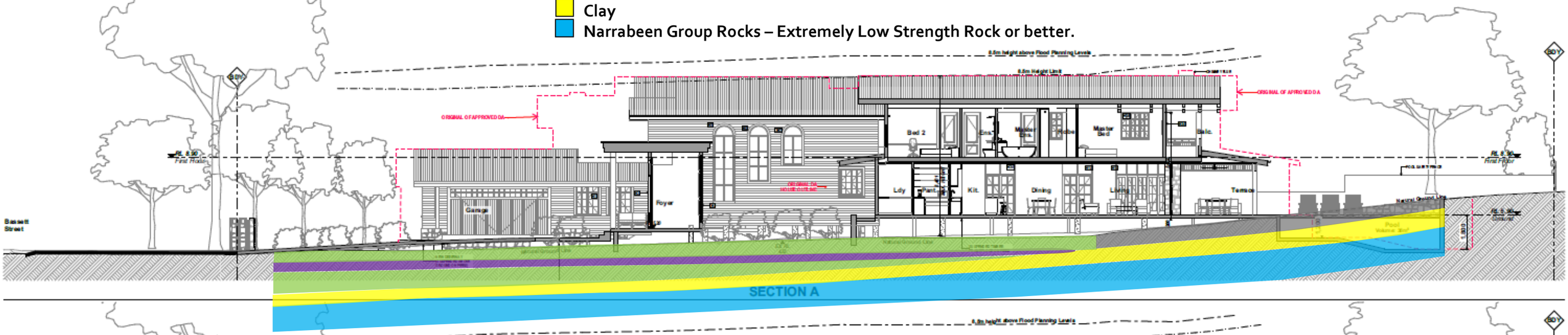
FOR SIMON EDWARDS

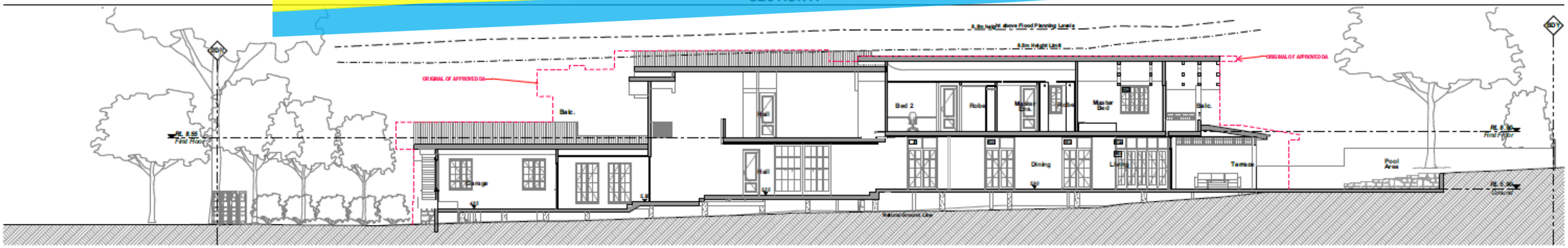
DRAWING TITLE
GROUND FLOOR PLAN

PROJECT NO.	DRAWN BY	PLOT DATE
2102	LT / AB	15/12/2021
SCALE	DRAWING NO.	REVISION
1:100 @ A1	A.02	B

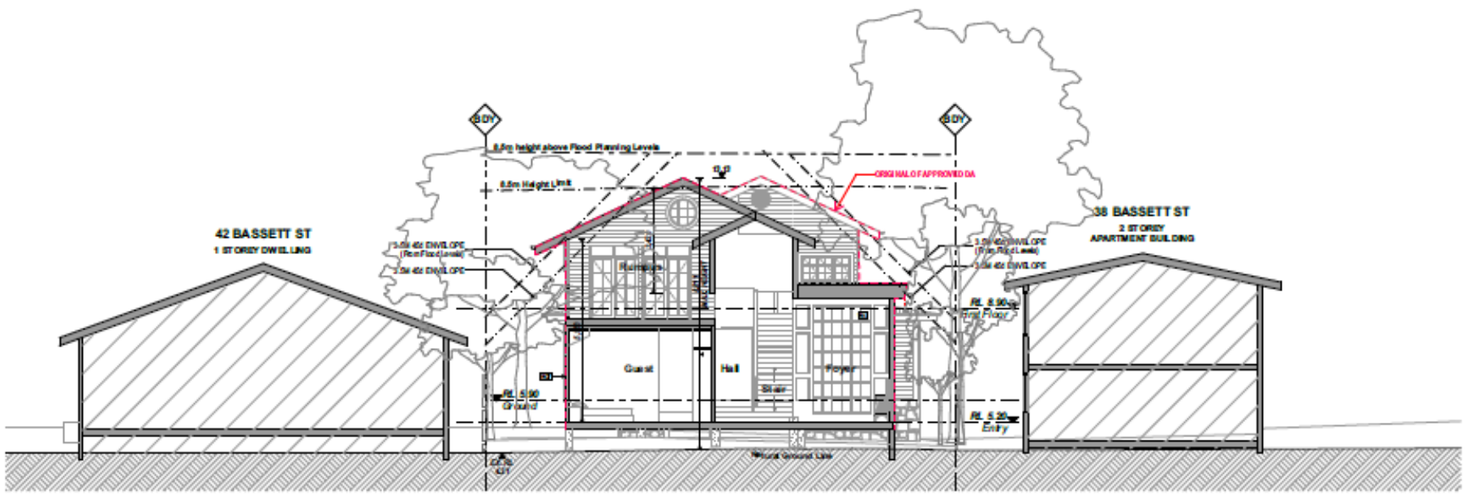
TYPE SECTION – Diagrammatical Interpretation of expected Ground Materials

- Sandy Soil and Sand
- Topsoil and Clayey Soil
- Sandy Peat
- Clay
- Narrabeen Group Rocks – Extremely Low Strength Rock or better.





SECTION C



SECTION B

BASIX NOTES:

Shingle roof + sarking (roof dark colour)
- R4.0 insulation batts to all ceilings & internal walls adjacent to roof space
- R3.0 insulation to raked ceilings & flat ceiling/flat roof
- Sarking plus R2.5 batts to all external walls
- R2.0 insulation batts to all internal walls
- GF suspended concrete slab (minimum 150mm thickness) + R2.0 underslab insulation
- Framed first floor to include R2.0 underfloor insulation
- Louvre windows U=5.4 SHGC=0.58 (+/-10%)
- All other windows/glass doors are aluminium thermally broken frames/DG/ clear U=3.6 SHGC=0.47 +/-10% (hinged) SHGC=0.54 +/-10% (fixed)
- All windows/door are weather sealed
- All recessed downlights are sealed and to allow for uninterrupted ceiling insulation
- All exhaust fans sealed
- Fireplaces sealed

GARTNERTROVATO
ARCHITECTS

DATE	REV	DESCRIPTION
DRAFT	A	DA
15/12/2021	B	DA - Revised

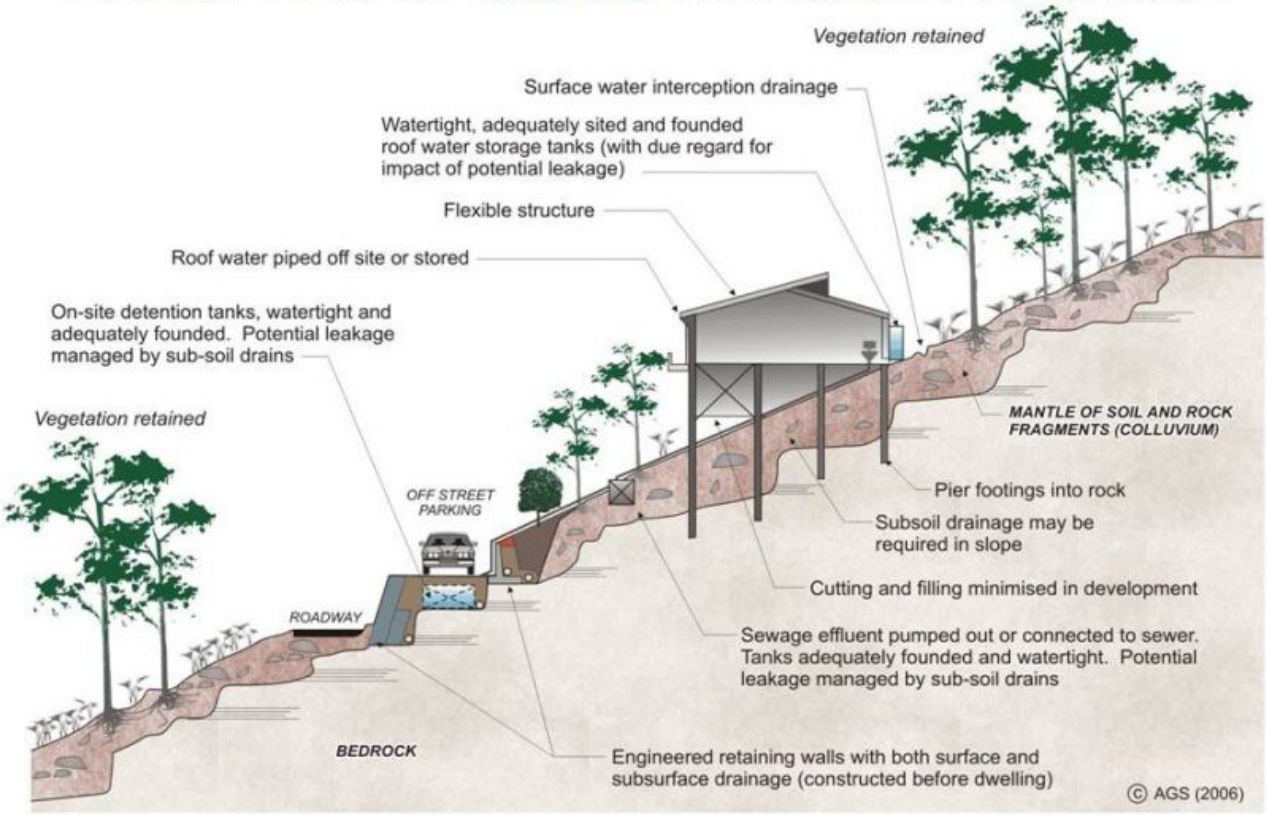
PROJECT
SECTION 4.55
40 BASSETT STREET, MONA VALE
LOT 26, SECT E, DP 6195

FOR SIMON EDWARDS

DRAWING TITLE
SECTIONS

PROJECT NO.	DRAWN BY	PLOT DATE
2102	LT / AB	15/12/2021
SCALE	DRAWING NO.	REVISION
1:100 @ A1	A.05	B

EXAMPLES OF **GOOD** HILLSIDE PRACTICE



EXAMPLES OF **POOR** HILLSIDE PRACTICE