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

Development Application for _____
Name of Applicant

Address of site 231 – 233 McCarrs Creek Road, Church Point

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 4/4/25 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 **231 – 233 McCarrs Creek Road, Church Point**
Report Date: 4/4/25

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 231 – 233 McCarrs Creek Road, Church Point

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 **231 – 233 McCarrs Creek Road, Church Point**

Report Date: 4/4/25

Author: BEN WHITE

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

Please mark appropriate box

- ☒ Comprehensive site mapping conducted **15/2/22** (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 **15/2/22**
- ☒ 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 at **231 – 233 McCarrs Creek Road, Church Point**

1. Proposed Development

1.1 Construct a new house by excavating up to a maximum depth of ~5.8m.

1.2 Construct a new driveway on the downhill side of the property by excavating to a maximum depth of ~1.1m.

1.3 Details of the proposed development are shown on 8 plans by S&E Design Studio, Job number SE2501, drawings numbered 00 to 07, dated 16.2.25.

2. Site Description

2.1 The site was inspected on the 15th February, 2022.

2.2 This vacant lot is on the high side of the road and has a NW aspect. It is located on the moderate to steeply graded lower reaches of a hillslope. The natural slope rises across the property at an average angle of ~17°. The slope above and below the property continues at similar angles.

2.3 The natural slope rises up a steep embankment above McCarrs Creek Road (Photo 1). The slope across and above the property is well vegetated (Photos 2 & 3). Sandstone joint blocks are embedded in stable positions in the slope (Photo 4). Densely vegetated bushland extends and continue beyond the upper boundary.

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

One hand Auger Hole (AH) was put down to identify soil materials. Six 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 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 be an issue for the testing on this site. However, excavation and foundation budgets should always allow for the possibility that the interpreted ground conditions in this report vary from those encountered during excavations. See the appended "Important information about your report" for a more comprehensive explanation. The results are as follows:

AUGER HOLE 1 (~RL26.5) **–** AH1 (Photo 5)

Depth (m)	Material Encountered
0.0 to 0.2	**TOPSOIL**, dark brown and black, clayey soil, medium grained, loose, fine trace of organic matter, dry.
0.2 to 0.8	**CLAY**, orange, fine grained, stiff to hard, dry.

End of test @ 0.8m. No water table encountered.

DCP RESULTS ON THE 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** (~RL28.0)	**DCP 2** (~RL29.5)	**DCP 3** (~RL26.5)	**DCP 4** (~RL27.0)	**DCP 5** (~RL22.0)	**DCP 6** (~RL23.0)
0.0 to 0.3	6	5	5	3	2	4
0.3 to 0.6	12	12	11	7	7	5
0.6 to 0.9	15	15	16	12	12	13
0.9 to 1.2	25	23	19	18	17	17
1.2 to 1.5	36	31	23	24	25	21
1.5 to 1.8	#	#	32	29	27	24
1.8 to 2.1			#	34	35	31
2.1 to 2.4				#	#	#
	End of Test @ 1.5m	End of Test @ 1.5m	End of Test @ 1.8m	End of Test @ 2.1m	End of Test @ 2.1m	End of Test @ 2.1m

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

DCP Notes:

DCP1 – End of test @ 1.5m, DCP still going down slowly, orange clay on dry tip.
DCP2 – End of test @ 1.5m, DCP still going down slowly, orange clay on dry tip.
DCP3 – End of test @ 1.8m, DCP still going down slowly, orange clay on dry tip.
DCP4 – End of test @ 2.1m, DCP still going down slowly, orange clay on dry tip.
DCP5 – End of test @ 2.1m, DCP still going down slowly, orange clay on dry tip.
DCP6 – End of test @ 2.1m, DCP still going down slowly, orange clay on dry tip.

5. Geological Observations/Interpretation

The slope materials are colluvial at the near surface and residual at depth. In the test locations, the ground materials consist of shallow soils over clays. The clay merges into the underlying weathered rock at depths of between ~0.9m to ~1.5m below the current surface. The weathered zone is interpreted to be Extremely Low Strength Shale. 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 slope and elevation of the block, the water table is expected to be many metres below the base of the proposed works.

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 beside the property. The moderate to steeply graded slope that rises across the property and continues above and below is a potential hazard (**Hazard One**). The proposed excavations are a potential hazard until retaining walls are in place (**Hazard Two**).

RISK ANALYSIS ON THE NEXT PAGE

Risk Analysis Summary

HAZARDS	Hazard One	Hazard Two
TYPE	The moderate to steep slope that rises across the property and continues above and below failing and impacting on the proposed works.	The excavations for the new house and driveway (up to a maximum depth of ~5.8m) collapsing onto the work site before retaining structures are in place.
LIKELIHOOD	'Unlikely' (10^{-4})	'Possible' (10^{-3})
CONSEQUENCES TO PROPERTY	'Medium' (15%)	'Medium' (15%)
RISK TO PROPERTY	'Low' (2 x 10^{-5})	'Moderate' (2 x 10^{-4})
RISK TO LIFE	9.1 x 10^{-7}/annum	8.3 x 10^{-6}/annum
COMMENTS	This level of risk is 'ACCEPTABLE'.	This level of risk to life and property is 'UNNACEPTABLE'. To move risk to 'ACCEPTABLE' levels, the recommendations in **Section 13 and 14** 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 McCarrs Creek Road. 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

Two excavations will be required for the proposed development:

- An excavation to a maximum depth of ~5.8m for the proposed house.
- An excavation to a maximum depth of ~1.1m for the proposed driveway.

The excavations are expected to be through soil and clay with Extremely Low Strength Shale expected at depths of between ~0.9m and ~1.5m. It is envisaged that excavations through soil, clay, and Extremely Low Strength Shale can be carried out with an excavator and bucket.

12. Vibrations

No excessive vibrations will be generated by excavation through soil, clay, and Extremely Low Strength Shale. Any vibrations generated by a domestic machine and bucket up to 20 ton carrying out excavation works will be below the threshold limit for infrastructure or building damage.

13. Excavation Support Advice

The excavation for the proposed house will reach a maximum depth of ~5.8m. The excavation for the proposed driveway will reach a maximum depth of ~1.1m. Allowing 0.5m for back wall drainage, the setbacks from the proposed excavation to the existing structures/boundaries are as follows:

- ~1.5m from the N common boundary.
- ~3.5m from the S common boundary.
- ~4.1m from the E common boundary.

As such, only the N common boundary will lie within the zone of influence of the proposed excavations. In this instance, the zone of influence is the area above a theoretical 45° line through clay and shale from the base of the excavation towards the surrounding structures and boundaries. This line reduces to 30° through the fill and soil.

No structures or boundaries are expected to lie within the zone of influence of the proposed driveway.

Due to the depth of the excavations, we recommend heavy ground support be installed in areas where the excavation exceeds 2.5m in depth prior to the commencement of the excavations to ensure the safety of any workers below the cut.

See the site plan attached for the minimum required extent of the shoring shown in blue.

A spaced piled retaining wall is a suitable method of support. Pier spacing for the wall is typically ~2.0m but can vary between 1.6 to 2.4m depending on the design. To drill the pier holes for the wall, a mini piling rig or similar that can excavate through Medium to High Strength Rock is recommended as the ground testing did not extend to the likely required depth of the piles. If a machine of this type is not available, we recommend carrying out core drilling before the construction commences to confirm the strength of the rock and to ensure the excavation equipment is capable of reaching the required depths. As the excavation is lowered in 1.5m lifts, infill sprayed concrete panels or similar are added between the piers to form the spaced wall. Drainage is installed behind the panels. The piers can be temporarily supported by embedment below the base of the excavation, or by a combination of embedment and temporary propping. Upon completion, the piled walls are to be tied into the concrete floor and ceiling slabs of the house to provide permanent bracing.

The geotechnical consultant is to inspect the drilling process of the entire first pile and the ground materials at the base of all pier holes/excavations for ground support purposes.

For ease of design and construction, it might be desirable to continue the spaced piled wall around the entire perimeter of the entire house and driveway. Alternatively, any excavations between 1.5m and 2.5m will require the installation of temporary or other permanent shoring installed as the excavation is progressed so the cut face is not left unsupported.

The remaining fill and soil portions of the excavation faces are to be battered temporarily at 1.0 Vertical to 1.7 Horizontal (30°) until the retaining walls are in place. Excavations through natural clay and weathered rock are expected to stand unsupported for a short period of time

at near vertical angles until the retaining walls are in place, provided they are kept from becoming saturated.

During the excavation process, the geotechnical consultant is to inspect the cuts in 1.5m intervals as they are lowered, while the machine/excavation equipment is on site, to ensure the ground materials are as expected and no additional temporary support is required.

Upslope runoff is to be diverted from the cut faces by sandbag mounds or other diversion works. All unsupported cut batters through fill, soil, and clay 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 cannot blow off in a storm. The materials and labour to construct the 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.

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

14. Retaining Walls

For cantilever or singly-propped retaining walls, 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 Walls

Unit	Earth Pressure Coefficients			
	Unit weight (kN/m^3)	**'Active' K_a**	**'At Rest' K_0**	**Passive Pressure 'Ultimate'**
Soil and Residual Clays	20	0.40	0.55	N/A
Extremely Low Strength Shale	22	0.25	0.35	Kp 2.5 ultimate

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 walls are fully drained. It should be noted that passive pressure is an ultimate value and should have an appropriate safety factor applied. No passive resistance should be assumed for the top 0.4m to account for any disturbance from the excavation. Rock strength and relevant earth pressure coefficients are to be confirmed on site by the geotechnical consultant.

All retaining walls 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 walls, the likely hydrostatic pressures are to be accounted for in the structural design.

15. Foundations

The house can be supported on a thickened edge/raft slab with piers taken to Extremely Low Strength Shale where necessary. This ground material is expected to be exposed across the majority of the base of the excavations. Where it is not exposed, and where this material drops away with the slope, piers will be required to maintain a uniform bearing material across the structure. This ground material is expected at depths of between ~0.9m to ~1.5m below the current surface in the area of the proposed works.

A maximum allowable bearing pressure of 600kPa can be assumed for footings on Extremely Low Strength Shale. It should be noted that this material is a soft rock and a rock auger will cut through it so the builders should not be looking for refusal to end the footings.

The proposed driveway can be supported off the natural surface after any organic matter has been stripped. A maximum allowable bearing pressure of 100kPa can be assumed for soil of the natural surface.

As the bearing capacity of clay and shale reduces when it is wet, we recommend the footings be dug, inspected, and poured in quick succession (ideally the same day if possible). If the

footings get wet, they will have to be drained and the soft layer of wet clay or shale on the footing surface will have to be removed before concrete is poured.

If a rapid turnaround from footing excavation to the concrete pour is not possible, a sealing layer of concrete may be added to the footing surface after it has been cleaned.

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. Geotechnical Review

The structural plans are to be checked and certified by the geotechnical engineer as being in accordance with the geotechnical recommendations. On completion, a Form 2B will be issued. This form is required for the Construction Certificate to proceed.

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

- The geotechnical consultant is to inspect the ground materials while the first pier for the ground support is being dug to assess the ground strength and to ensure it is in line with our expectations.

- All finished pier holes for piled wall/excavations for ground support are to be inspected and measured before concrete is placed.

- During the excavation process, the geotechnical consultant is to inspect the cuts in 1.5m intervals as they are lowered, while the machine/excavation equipment is on

site, to ensure the ground materials are as expected and no additional temporary support is required.

- 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.

Tyler Jay Johns
BEng (Civil)(Hons),
Geotechnical Engineer.

Reviewed By:

Ben White M.Sc. Geol.,
AIG., RPGeo Geotechnical & Engineering.
No. 10306
Engineering Geologist.

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5 (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 and minimum extent of required shoring

LEGEND

WATER MAIN
TELSTRA PILLAR
TELSTRA MARKER POST
TELSTRA PIT
TELEGRAPH POLE
POWER POLE
ELECTRICAL PILLAR
POWER LIGHT POLE
LIGHT POLE
HYDRANT
RECYCLED WATER
WATER METER
STOP VALVE
WATER TAP
GAS METER
GAS DIRECTION MARKER
GAS INSPECTION POINT
SEWER MANHOLE
STREET SIGN
PRAM CROSSING
VEHICLE CROSSING
SEWER VENT
SEWER LAMPHOLE
SEWER INSPECTION POINT
SUBSOIL DRAIN
STORMWATER PIT
STORMWATER GRATE
SURFACE INLET PIT
LINTEL-KERB INLET PIT
LINTEL-KERB INLET PIT WITH GRATE
STORMWATER PIPE INCLUDING PIPE SIZE
HEADWALL
CLOTHES LINE
TREE: D DIAMETER S SPREAD H HEIGHT
E — OVERHEAD ELECTRICITY LINE
T — OVERHEAD TELECOM LINE
S — SEWER LINE

AREA LOT 34
VIDE DP 20097: 417.3 m²
BY CALC : 422.7 m²

AREA LOT 35
VIDE DP 20097: 316.2 m²
BY CALC : 322.1 m²

DIAL 1100 BEFORE YOU DIG
www.1100.com.au

ORIGIN OF LEVELS :
PM 53844 RL= 15.027 (AHD) FOUND ADJACENT TO No.214 MCCARRS CREEK ROAD, CHURCH POINT
ACCURACY OF ORIGIN : ± 0.001m

DIAGRAM N.T.S.

FOR BASIX PURPOSES

ENG'S DETAILS

BUSHFIRE ATTACK LEVEL (BAL)
FLAME ZONE CONSTRUCTION REQUIRED
(BAL IN ACCORDANCE WITH AS3959-2009)

TRADES & SUPPLIERS TO COMPLY WITH BAL LEVEL IN ACCORDANCE WITH AS3959-2009

Minimum extent of required piling shown in blue

Minimum extent of recommended piling or required shoring shown in green

DCP1 DCP2 DCP3 DCP4 DCP5 DCP6

AH 1

GARAGE FFL 22.109 FGL 21.874

MID LEVEL B & J FFL 25.944 FGL 25.194

ENTRY LEVEL FFL 23.109 FGL 22.799

McCARRS CREEK ROAD

RL 14.46

8M NAIL IN EDGE OF BITUMEN RL = 14.45 AHD

39 DP12164 RESERVE FOR ACCESS

FSR CALCULATIONS

SITE AREA:	744.84m2
HOUSE AREAS:	
INTERNAL ENTRY FLOOR LIVING:	=10.81m2
INTERNAL MIDDLE FLOOR LIVING:	=108.92m2
INTERNAL FIRST FLOOR LIVING:	= 93.24m2
INTERNAL TOTAL:	212.97m2
FLOOR SPACE RATIO:	0.28.6:1

NOTE:
FSR CALCULATED TO INTERNAL FACE OF EXTERNAL WALLS AS PER LEP DEFINITION

SITE DETAILS

LOT NUMBER:	34 & 35
DP NUMBER:	20097
SITE AREA:	**744.84m2**

BUILDING AREAS

MIDDLE LEVEL	133.09 m²
FIRST FLOOR	104.86 m²
GARAGE	41.80 m²
MIDDLE BALCONY	24.33 m²
ENTRY LEVEL	15.63 m²
PORCH	2.85 m²
Grand total	322.54 m²

SITE COVERAGE:	246.26m2 = 33.06
PRIVATE OPEN SPACE:	192.22m2

LANDSCAPE:
TOTAL AREA OF VEGETATION: 503.72m2 = 67.63%

STORMWATER:
RAINWATER TANK SIZE: = ... litre

ROOF AREA CONNECTED TO RAINWATER TANK: (...) % MIN MIN- .....m2 **(to eng's details)**

RAINWATER USES: GARDEN/TOILET/LAUNDRY

- **ALL CONSTRUCTION WORK TO COMPLY WITH THE NCC AND ALL RELEVANT AUSTRALIAN STANDARDS**
- HOUSE LEVELS ARE APPROXIMATE ONLY AND MUST BE DETERMINED ON SITE BY BUILDER PRIOR TO CONSTRUCTION.
- DRIVEWAY GRADIENT SHALL COMPLY WITH COUNCILS SPECIFICATIONS - GARAGE LEVEL MUST BE CHECKED ON SITE SO AS TO COMPLY WITH COUNCILS DRIVEWAY SPECIFICATIONS

MARINE RATING "R4"

ALL TRADES & SUPPLIERS TO COMPLY WITH THE BCA & ALL RELEVANT AUST STANDARDS

ACID SULFATE EFFECTED SITE REQUIREMENTS (CLASS 5)

PROVIDE 32 MPa CONCRETE TO PIERS AND SLAB WITH SULFATE RESISTING CEMENT
PROVIDE 0.3mm HIGH IMPACT VAPOUR MEMBRANE

EXTERNAL A/C UNIT, A/C VENTS AND DROPPERS ARE APPROX. ONLY AND MAY BE RE-POSITIONED ON SITE TO SUIT DIFFERENT CONSTRUCTION OR NOISE REQUIREMENTS. FINAL POSITION TO BE DETERMINED BY A/C CONTRACTOR

All dimensions shown are to frame, underside of roof trusses and FFL (concrete to the underside of floor joist
FFL denotes - concrete level
floor joist + selected flooring
All construction work to comply with the NCC and all relevant Australian standards

All previous issues are to be discarded only these plans are to be read

rev	amendment	date	rev	amendment	date
A	FD	16.02.25			
B	AMENDMENT	07.03.25			
C	AMENDMENT	18.03.25			

S&E Design Studio
Email - suljobr@hotmail.com Mob - 0422 461 767

for / client: MR AND MRS WANG

location: LOT34/35, 231-233 McCARRS CREEK RD CHURCH POINT NORTHERN BEACHES COUNCIL

SITE PLAN

DO NOT SCALE DRAWINGS

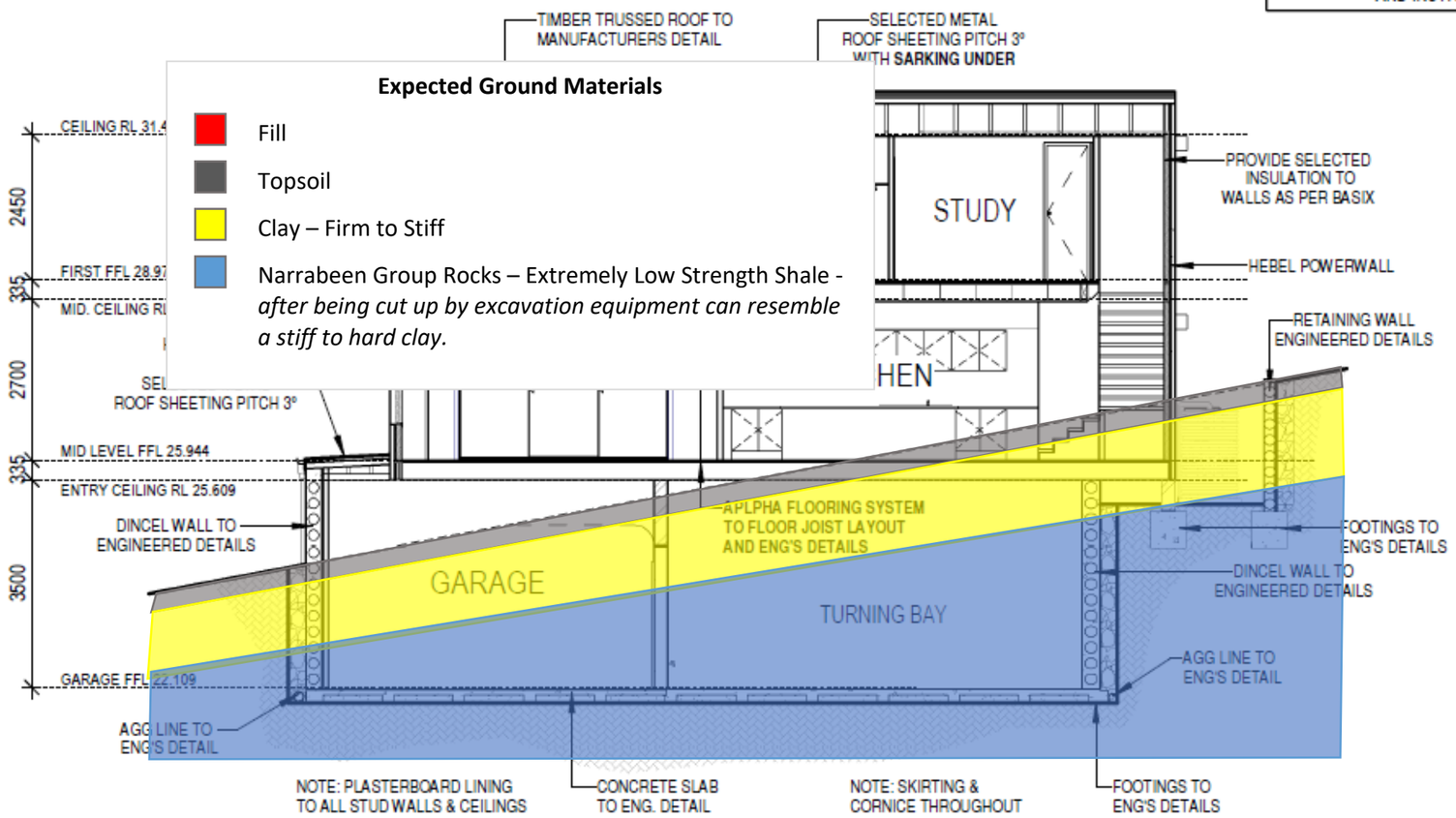
stage:	project no:	dwg no:
FD	SE2501	01 /
drawn - SB	date: 16.02.25	scale: 1 : 200
checked - SB		

LOCATION: D:\work\WINCREST\17491_Wang&Mei\Drawings\WORKING DRAWINGS\WORKING 18.03.25\WANG&MA - working - 18.03.25.rvt

NOTE: SECTIONS ARE DIAGRAMATIC ONLY

TYPE SECTION – Diagrammatical Interpretation of expected Ground Materials

IN ACCORDANCE TO MANUFACTURES DETAILS AND INSTRUCTIONS



SECTION A -A

1 : 100

Window and Sl . door Schedule

wt	Window No.	Height	Width	Window Style	Glazing
W	1	2300	2200	FIXED	CLEAR
W	2	2400	2650	FIXED	CLEAR
W	3	1800	1500	FIXED	CLEAR
W	4	1800	1500	FIXED	CLEAR
W	5	857	610	SLIDING	OBSCURE / TG
W	6	1200	1450	SLIDING	CLEAR
W	7	2057	850	AWNING	CLEAR
W	8	1200	2410	SLIDING	CLEAR
W	9	1200	2410	SLIDING	CLEAR
W	10	1200	2410	SLIDING	CLEAR
W	11	1200	1450	SLIDING	CLEAR
W	12	1372	1810	SLIDING	CLEAR
W	13	1200	1450	SLIDING	OBSCURE / TG
SSD	1	2400	3580	STACKER SL.DOOR	CLEAR
SSD	2	2400	3580	STACKER SL.DOOR	CLEAR
SD	1	2400	2200	SLIDING DOOR	CLEAR

TG - DENOTES TOUGHENED GLASS

NOTE: ALL WINDOW FRAMES AND GLASS TO COMPLY WITH BASIX CERTIFICATE

NOTE:
ALL BED ROOM WINDOW OPENINGS HIGHER THAN 2.0m FROM FINISHED GROUND LEVEL TO BE PROTECTED IN ACCORDANCE WITH CLAUSE 3.9.2.6 VOLUME 2 OF THE BUILDING CODE OF AUSTRALIA

GENERAL NOTES:

- PROVIDE PEST CONTROL SYSTEM TO PERIMETER OF HOME AS REQUIRED BY CERTIFYING AUTHORITY.
- AS/NZS 3000-2000 ELECTRICAL REQUIREMENTS: SAFETY SWITCH TO FRIDGE & LIGHT CIRCUITS; ISOLATING SWITCH FOR WALL OVEN.
- PROVIDE GLASSWOOL CEILING INSULATION TO ROOF SPACE OF LIVING AREAS. AS PER BASIX
- PROVIDE GLASSWOOL WALL INSULATION TO EXTERNAL WALLS OF LIVING AREAS. AS PER BASIX
- PROVIDE SHOWERHEAD MINIMUM RATING AS PER BASIX
- KITCHEN, LAUNDRY & VANITY BASIN TAPS AS PER BASIX
- TOILET CISTERNS AS PER BASIX
- PROVIDE..... LITRE RAIN WATER TANK
- ARTIFICIAL LIGHT REQUIREMENTS TO BE AS PER BASIX
- GAS INSTANTANEOUS HOT WATER SERVICE AS PERR BASIX
- 75mm GAP BETWEEN FRIDGE & WALL TO BE MAINTAINED.
- MANHOLE POSITION IS APPROXIMATE ONLY AND MAY BE RE-POSITIONED ON SITE TO SUIT CONSTRUCTION CONSTRAINTS OR REQUIREMENTS

ALL BUILDING WORK SHALL BE CARRIED OUT IN ACORDANCE WITH THE NCC AND ALL RELEVANT STANDARDS

ALL WORK TO COMPLY WITH CDC, COUNCIL REQUIREMENTS AND ALL OTHER AUTHORITES

BUILDER TO CHECK ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORK

ALL DIMENSIONS, SIZES ect ARE IN MILIMETERS

NOTE:
PROVIDE ENG'S DETAILS FOR ALL:
CONCRETE SLABS
FOOTINGS
STEEL BEAM

BASIX

ALL PLANS TO BE READ IN CONJUCTION WITH THE BASIX CERTIFICATE AND ITS SCHEDULE OF COMMITMENTS, WHICH ARE TO BE COMPLIED WITH IN FULL

MARINE RATING "R4"

ALL TRADES & SUPPLIERS TO COMPLY WITH THE BCA & ALL RELEVANT AUST STANDARDS

BUSHFIRE ATTACK LEVEL (BAL)
FLAME ZONE CONSTRUCTION REQUIRED
(BAL IN ACCORDANCE WITH AS3959-2009)
TRADES & SUPPLIERS TO COMPLY WITH BAL LEVEL IN ACCORDANCE WITH AS3959-2009

All dimensions shown are to frame, underside of roof trusses and FFL (concrete) to underside of floor joist

FFL denotes - concrete level
floor joist + selected flooring

All construction work to comply with the NCC and all relevant Australian standards

All previous issues are to be discarded only these plans are to be read

rev	amendment	date	rev	amendment	date
A	FD	16.02.25			
B	AMENDMENT	07.03.25			
C	AMENDMENT	18.03.25			

S&E Design Studio
Email - suljobr@hotmail.com Mob - 0422 461 767

for / client: MR AND MRS WANG

SECTION/SCHEDULES

location: LOT34/35, 231-233 McCARRS CREEK RD CHURCH POINT NORTHERN BEACHES COUNCIL

DO NOT SCALE DRAWINGS

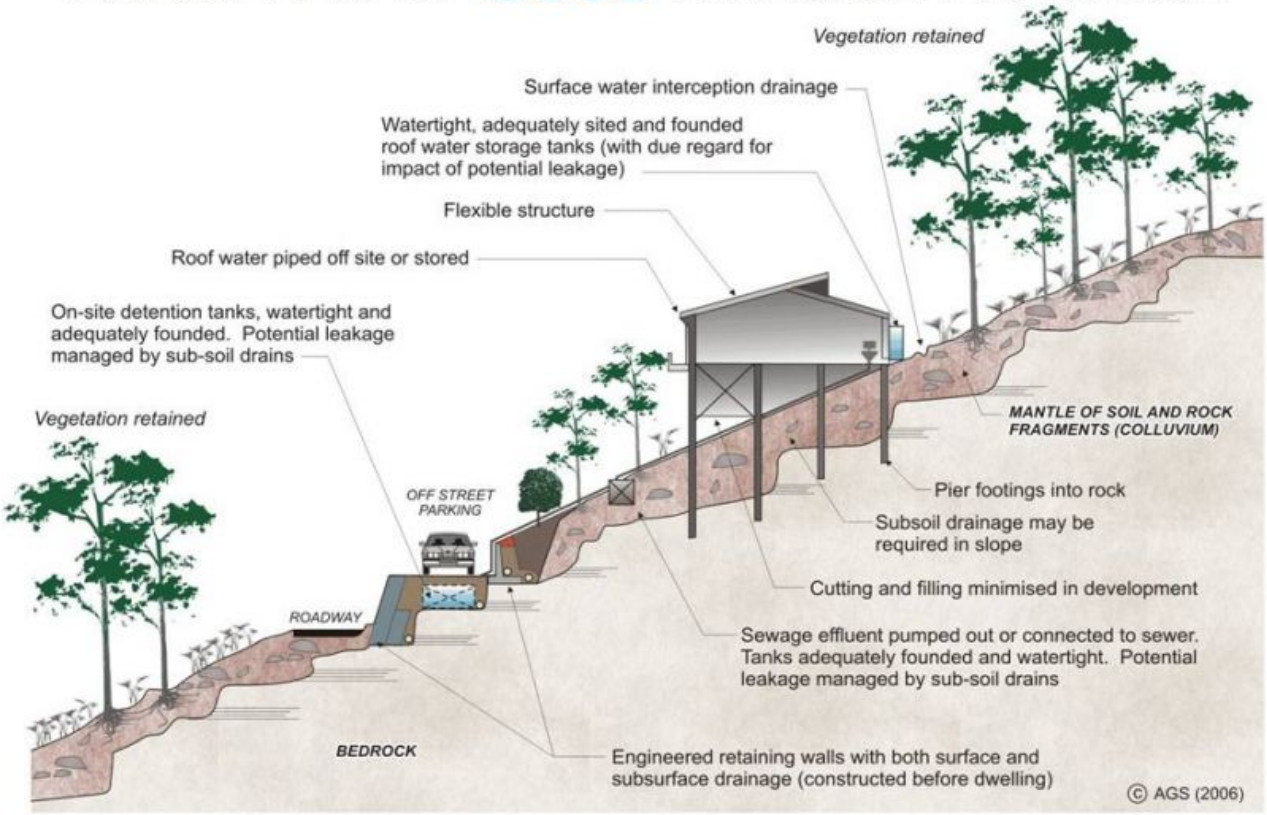
stage: FD | project no: SE2501 | dwg no: 07 /

drawn - SB | date: 16.02.25 | scale: 1 : 100

checked - SB

LOCATION: D:\work\WINCREST\17491_Wang&Mel\Drawings\WORKING DRAWINGS\WORKING 18.03.25\WANG&MA - working - 18.03.25.rvt

EXAMPLES OF **GOOD** HILLSIDE PRACTICE



EXAMPLES OF **POOR** HILLSIDE PRACTICE