From: Robert Story

Sent: 24/01/2024 4:34:54 PM

To: Council Northernbeaches Mailbox

Subject: TRIMMED 5 Portion DP 590990 Lovett Bay DA 2023/1832 Submi ion

against approval

Attachments: 5 PORTIONS - 24-1-2024.docx; Drg-01 effect on 3 portions.pdf; Drg-02

View from Lovett Bay.jpg; Drg-03 tower look over 3 portions.pdf; Drg-04 profile of ite pdf; Drg 05 boundary error appendi 1 pdf; Drg 06 Location EMA part of LB4.pdf; Drg-07 Shadow line section.pdf; Drg-08 estimated

shadow.pdf;

Dear Madam/Sir,

I with to submit a "Submission against approval" for DA 2023/1832, 5 Portions DP 590990, 5 Portions Lovett Bay as per the above attachments.

I am the husband of the owner of 3 Portions Lovett Bay.

My Details are-

Name – Robert Story
Address – 3 Portions Lovett Bay
Phone –
Email –

Please contact me if there is any queries.

Yours faithfully,

Bob Story

Sent from Mail for Windows

OBJECTIONS AND COMMENTS ON DA 2023/1832

By Robert Story and Susan Duncan, additional to Helen Monks, Town Planner

Objections:

- 1) Wastewater
- 2) Geotech
- 3) Shadow Line
- 4) General Comments

5 PORTIONS, LOVETT BAY NSW

1: Comments on on-site wastewater report number REF3258WW-A-01

By Broadcrest Consulting Pty Ltd

General Comment: The on-site wastewater report is based on incorrect neighbouring property boundaries, a disregard for the overall topography of the site, and a failure to factor in intermittent and semi-permanent water courses during heavy rain and storms.

Comments on individual sections of report

2.1 Site Information: Lot area is 5,500 square meters, useable building area approximately 1000 square meters.

2.4 Site Assessment Summary:

Climate. The block has a large, steep catchment area to the north. In heavy rain or storms, it causes major run-off. This effectively negates the *monthly evaporation exceeds rainfall* claim for the limited area of the building site. Lots 3 and 6 below Lot 5 have numerous intermittent springs during wet weather triggered by water flowing from the north (south facing) steep hillside.

Landform: Steep area to the north.

Buffer Distances and Available Land: Reduced buffer limits should not be approved due to conditions created by heavy rainfall and storms. Run-Off and Seepage major in storms and heavy rain. Springs erupt from hillside during wet weather and continue to flow in dry weather for long periods.

2.5 Climate: Although the average rainfall is 1337mm and evaporation 1424mm it does not take into account the heavy run-off loads the building area would encounter during rains

and storms. Water that does not run off during heavy rain, seeps into the sandstone and permeates out over time long after the rain has ceased. This is indicated by intermittent and two semi-permanent springs in Lot 3 and Lot 6.

- **2.7 Exposure:** Steep terrain (45 degrees) above Lot 5 means there is virtually no sun in winter (see drawing DRG-01). The absorption trench would be shadowed by the house for more than six months of the year. This makes 2.7.1 site exposure limitations moderate.
- **2.8 Slope:** The average slope from seashore to the back of Lot 5 building area is approximately 20 degrees which makes Lot 3 and Lot 6 vulnerable to significant leakage of the proposed absorption trench. Refer to drawing DRG 01 for trench location.
- **2.9.1 Land Configuration:** Limitations are **major** as average slope is 20 degrees.
- **2.11 Site Drainage:** No information supplied for handling of surface run-off from the steep rear area (45 degrees).
- **2.13 Bore locations** appear to be infill. Any effluent would drain to the underlying clay layer and seep down to Lot 3 and Lot 6.
- **2.17 Buffer Distance and Available Land Area:** EMA is on the upslopes of Lot 3 and Lot 6 and the **twelve-meter** set-back must be observed. The EMA as shown, is on a narrow strip above an average slope of 20 degrees slope.
- 2.18 Constraint Factors Associated with Proposed Reduced Buffers:

D Slope averages 20 degrees.

E Position of land application area in landscape: boundaries are incorrectly shown on Appendix 1 and are out by a distance of **7 meters.**

F Lot 3 has a planned vegetable garden near the boundary

- **3.2 Soil Landscape Map:** Bores were done in a long dry weather period and springs would not be evident.
- **4.2 Wastewater Loading:** The proposed tower with toilet facilities can be easily changed into accommodation, significantly increasing the equivalent population (persons).

Appendix 1: Boundaries of Lot 3 and Lot 6 incorrectly drawn and show a major discrepancy of 7 meters. See drawings 5 & 6.

CONCLUSIONS:

- 1) A major criticism of the report is that no consideration has been given to the runoff from the high ground behind the building site.
- 2) With Appendix 1, the drawing shows incorrect boundaries of approximately 7 meters. The absorption pit would cause major pathogen run-off into the neighbouring terraced vegetable garden and would cause health and environmental issues in that location.

- 3) Because of the wet nature of the ground, which can last for months after rain, a minimum setback distance of 12 meters should be mandatory given the building site is set above Lot 3 and Lot 6. Adjoining property, Lot 2 has allegedly experienced sewerage leakage from Lot 4.
- 4) The site should be revisited and the report amended.

2: Geotech

3.1 Slope

Figure 3.1 profile cross-section is misleading. The elevation and chainage are different scales, giving a shallower appearance of the slope of the land.

Refer to DRG-04 The block is steeply sloping from the water's edge, starting at 20 degrees and increasing to 45 degrees.

There are several horizontal benches or terraces cut into this slope but they do not affect the overall steepness of the block.

The statement that the evaporation exceeds rainfall is correct if it is a level block but the steepness and resulting run-off concentrates the water on the benched areas.

After a rain period has ceased, water still permeates from the higher sandstone areas resulting in intermittent and semi-permanent springs. This is evident in 3 & 6 Portions.

3: Shadow Lines

There is a fundamental error in the shadow lines provided. See DRG 01, 07,08.

Analysis does not take into account that the land between 5 Portions and 3 Portions, falls steeply away at around 20 degrees. The shadow lines chase the sloping land until the shadow line catches up. Shadow length is around 11 metres, whereas I have calculated a shadow of approximately 25 metres. **See DRG 07**.

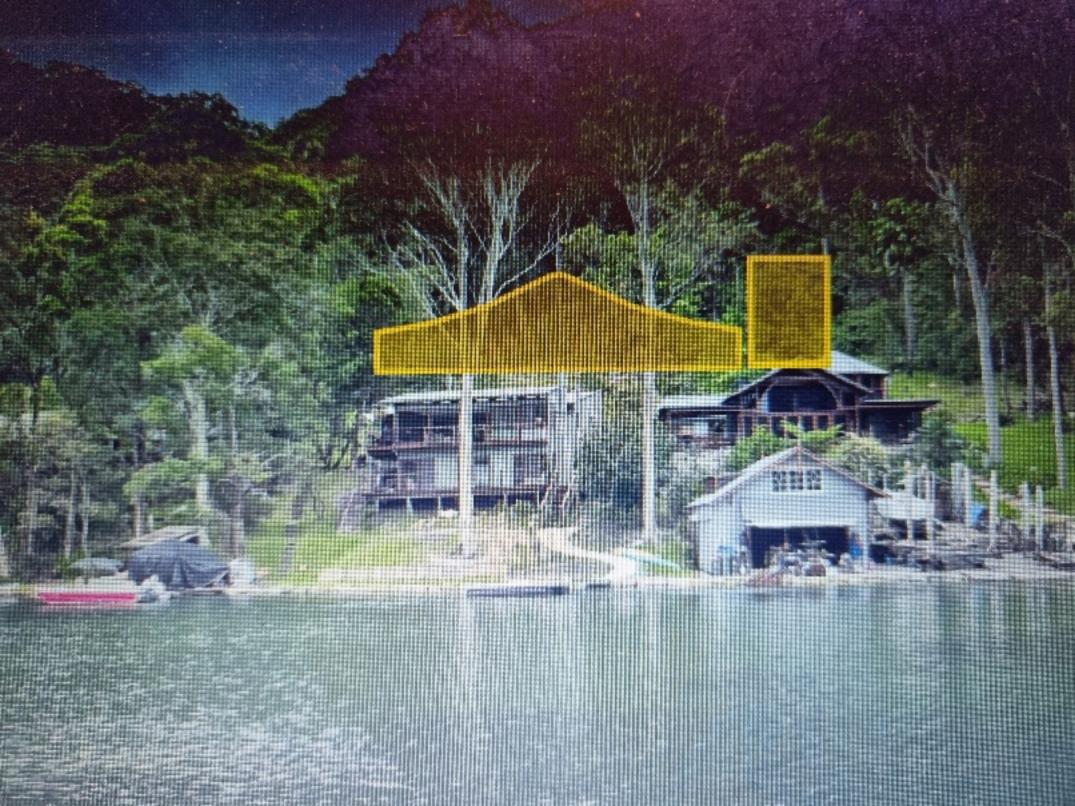
We can argue the correct shadow length, but the simplest solution is to carry out a site measurement. A theodolite can be set up at the Duncan House to sight a measuring staff at the Leplastrier designed building at the front elevation. Knowing the distance and the angle, an accurate drawing can be compiled. See **DRG -07.** No surveyor is required as I have a theodolite and can do a full and accurate check with a representative of the Leplastrier family.

If my analysis of the above is correct, a similar check for accuracy should be done on the proposed tower where the shadow will fall onto 6 Portions.

4: General Comments

- 1. EMA is far too close to 3 Portions boundary and must be located at least 12 meters off this boundary.
- 2. Appendix 1 of the wastewater report shows the Portion 3 property boundary to be approximately 7 metres south of the actual location.

- 3. 5 Portions site is subject to high moisture content especially in heavy rains resulting in intermittent and semi-permanent springs.
- 4. Geotech report misrepresents the steepness of the site and the problems with water run-off.
- 5. Shadow lines are grossly understated and need to be reinvestigated. The shadow of the house would come to the back door of 3 Portions, which means that main building and the tower would dominate the view from that position.



ORG-03 TOWER LOOK OVER BUNCAN HOUSE

3.1 Slope

DRG-04 ACTUAL SLOPE

The inclination of a slope is the biggest consideration when determining the type(s) of landslide and likelihood. It is closely related to the landform (Section 3.2). Lidar data with a $1m^2$ resolution has been used for the terrain analysis. The slope profile is based on 3.0m elements which reveals an average slope of 38.6° and a maximum slope of 50.7° above the building envelope. Within the building envelope, the average slope is 4.7° .

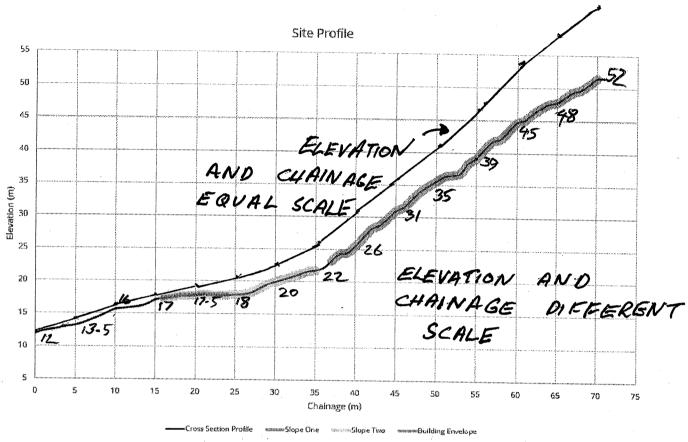


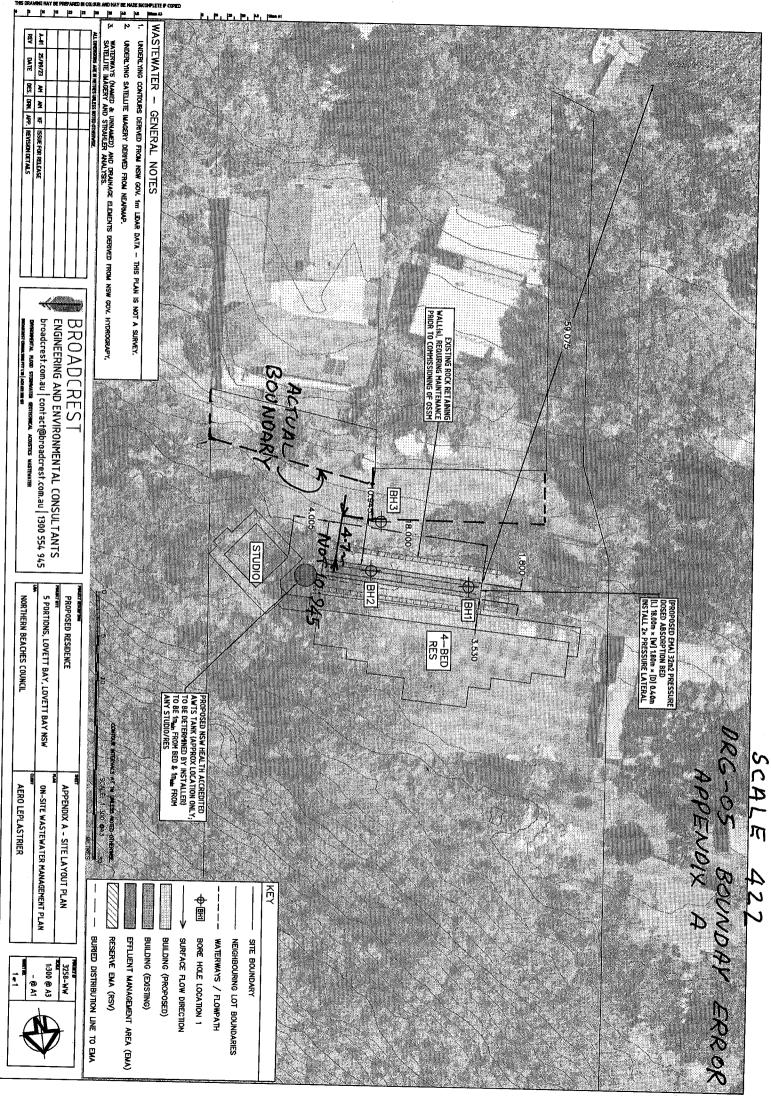
Figure 3.1: Profile Cross-section south to north (site building envelope in blue)

3.2 Landform morphology

A landform is a natural feature of land. Each landform is made unique by its slope, shape, vegetation, and soil among other features. Neighbouring Landforms collectively make up the terrain of a landscape. In respect to landslide, the landform morphology provides insight into the types of movement which can be expected on a site. Table 3.3 shows the site's landforms at different positions on the slope which can be cross referenced with Table 3.4 for correlated movement types.

Table 3.3: Site landforms

Landform Feature	Morphological Type	Slope Configuration	Diagram
Upper slope Mid Slope Lower Slope	Linear	Planar	





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