Construction Method Statement

Lot 3, 14 Mirrool St, North Narrabeen

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Introduction

This construction method statement (CMS) is for building a house on Lot 3 after subdivision approval by the council. The house will need to be approved by a separate development application. This CMS has been requested under current DA2023/1770, which is for subdivision and construction of a driveway on council land. The CMS does not cover driveway construction and is only for the house on Lot 3.

1. Site Description and Existing Conditions

The site is located in a steep elevated position with an outlook over Narrabeen Lake and slopes toward south-east. The site is adjacent to council land along the eastern boundary. Vehicle access will be provided by a new driveway constructed along the road reservation and details of this proposed driveway are provided on the plans prepared by Henry&Hymas.

Lot 3 measuring 1169.82 m² has a concept design for a dwelling over five levels that follow the slope of the land. The site is undeveloped and comprises exposed bedrock and dense vegetation.

Geotechnical Considerations and Site Stability

The earthworks will involve some excavation for the house structure and additional excavation for a storage room under the house, which will serve as access to the lift. As geotech report has identified a small risk of landslide within Lot 3 (less than 5 cubic metres) and due to the relatively limited excavation proposed, and the presence of anticipated fill residual soils in this area, the following action plan will be implemented:

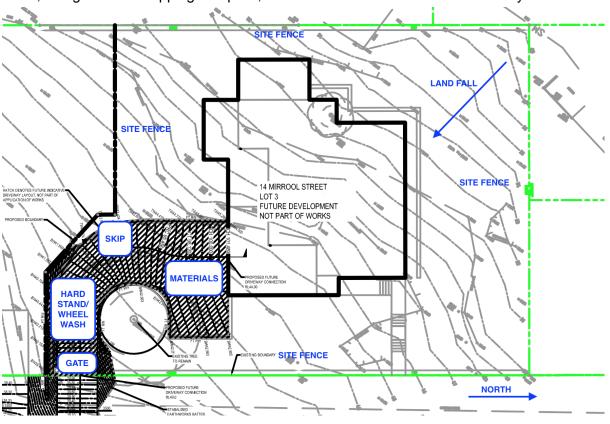
- A geotechnical engineer will be engaged to assess ground conditions following the commencement of earthworks to determine required retaining measures.
- Temporary shoring or other stabilisation measures will be used as needed during excavation to prevent any risk of soil movement or slumping.
- Regular inspections will be carried out, particularly after heavy rainfall, to ensure the stability of fill and excavation areas.

2. Construction Methodology and Detailed Sequence

Construction activities will proceed in a planned sequence to ensure compliance and minimal disruption at every stage. The key stages are as described below. Also refer to a concept plan of site set up on the next page.

Site Establishment and Clearance

Installation of perimeter fencing, site access points, tree protection measures, and signage. Temporary site services such as water, power, and sanitation facilities will be established. A secure compound will be set up for site office if necessary, materials storage, and parking of vehicles for site operatives. Removal of redundant fences, structures, and tree stumps will follow, along with the stripping of topsoil, which will be stored within the boundary for reuse.



Site Preparation and Earthworks

Clearing of vegetation (excluding protected trees), removal of topsoil for reuse, and establishment of erosion and sediment control measures, including silt fences, sediment traps, and coir logs. All works are confined within site boundaries, without encroaching on council land. Wheel wash facilities will be installed to prevent mud tracking onto public roads. The earthworks will involve some excavation for the house structure and additional excavation for a storage room under the house, which will serve as access to the lift.

Substructure Works

Construction of strip foundations, including footings, piers, and slabs, ensuring compliance with all council safety regulations. Drainage and services connections will be coordinated with relevant authorities to meet DA requirements.

Superstructure and Building Envelope

Erection of structural framing, including walls, floors, and roof components. Scaffolding will be erected to permit the raising of walls, roof installation, and completion of the building envelope. External cladding, doors, windows, and roofing will be installed to achieve a weather-tight structure. Coordination of trades will ensure timely completion with no adverse impact on health and safety standards.

Services Installation and Internal Fit-Out

Installation of utilities, including water, sewer, and electrical services, with appropriate measures to protect council land and infrastructure. Internal fit-out will progress through first fix, second fix, and finishing stages, with a focus on achieving a defect-free outcome. Wet trades such as floor screeds and plastering will be completed early to accommodate drying periods.

External Works and Landscaping

Completion of building works, followed by landscaping activities that align with council requirements for vegetation protection and reinstatement. Hard landscaping works will follow the dismantling of scaffolds, with soft landscaping, fencing, and gates being installed in the final stages of the project. Driveways, paths, and garden areas will be constructed, ensuring no impact on council land.

3. Safety Protocols Near Council Land

Given the proximity of the site to council land, specific safety measures will be implemented to protect both the construction team and council property. These measures will include:

- Barriers and Signage: Installation of barriers and clear signage along council land to prevent unauthorised access or accidental encroachment.
- **Monitoring and Compliance Checks:** Regular monitoring and compliance checks to ensure that all safety protocols are adhered to throughout the construction process.
- **Noise and Work Hours:** Construction activities will be limited to approved working hours as per development consent to minimise noise impact on neighbouring properties and council land.

4. Clear Use of Site-Only Boundaries

To ensure compliance with council requirements, all construction activities will be restricted to the site boundaries. Key measures include:

- Waste Management: All waste generated during construction will be managed on-site, with disposal carried out in accordance with council guidelines. No council land will be used

for waste storage or disposal. A recycling scheme for construction waste will be implemented.

- **Earthworks Containment:** Excavation and grading activities will be carefully managed to ensure that no soil, sediment, or materials are deposited on council land.
- **Equipment Parking and Loading:** All construction equipment will be parked and stored within the site boundaries, with no use of council land for equipment storage. Loading and deliveries will be coordinated to avoid any use of council land.
- Construction Traffic Routing: Delivery vehicles will follow designated routes to minimise disruption to the community. Vehicles will park on-site, and idling will be restricted to avoid nuisance.

5. Arborist Recommendations Condensed Methodology

To protect existing vegetation, tree protection measures will be implemented throughout the construction phase. The key actions include:

- **Tree Protection Zones:** Fencing and signage will be installed around trees to create exclusion zones, ensuring no disturbance occurs to these protected areas. Measures will be taken to prevent soil compaction and damage to root systems.
- Pathogen Protection: Strict adherence to the Bushland Hygiene Protocols for Phytophthora (Hornsby Council Recommendations) will be followed. All tools, equipment, vehicles, and footwear will be cleaned and disinfected before entering the site and moving between different areas of the site. Dedicated cleaning stations will be established with disinfectant solutions to ensure no spread of Phytophthora or other pathogens. Vehicle access will be restricted to designated areas, and machinery will be inspected and cleaned thoroughly before use. Mulch and other materials used around trees will be certified as pathogen-free, and soil movement will be minimised to prevent contamination. All workers will receive training on bushland hygiene protocols, and compliance will be closely monitored.
- **Weed Management:** Manual weed removal will be prioritised to minimise chemical use and protect native species. Weed removal will take place before and during construction, followed by replanting with native shrubs to maintain habitat continuity. Flame weeding may be used in specific areas where herbicide use is not permitted, ensuring minimal impact on native vegetation.
- **Erosion and Runoff Control:** Erosion and runoff control measures, such as sediment fencing, jute matting, and coir logs, will be installed to prevent sediment and silt from affecting areas of vegetation to be retained. Sediment controls will be inspected and adjusted as needed, particularly after significant rainfall events.

6. Temporary Services and Site Security

- **Temporary Services:** Temporary water, power, and sanitation facilities will be established on-site to support construction activities. These services will be installed in a manner that minimises impact on council land and existing vegetation. Isolation points will be clearly marked for quick and effective management in case of emergencies.
- Site Security and Lighting: The site will be secured with perimeter fencing. As the development is likely to be under tight constraints with regards to working hours, there is no requirement for external lighting to be installed during construction.

7. Storage, Dust, Noise, Parking, Loading, and Deliveries

- Storage of Plant and Materials: The location of the store and plant materials will be carefully selected to minimise noise disruption to local residents by placing it at the entry to the site. Stockpiles will be managed to avoid long-term storage wherever possible. Measures include keeping stockpiles for the shortest time, avoiding steep sides, and locating them away from sensitive receptors, watercourses, and drains.
- **Parking of Vehicles:** All site operatives and visitors must park their vehicles on-site. It will be strictly prohibited for any vehicles to park on council property.
- Loading and Unloading of Plant and Materials: Delivery vehicles will be provided with directions to the site and will be required to turn off engines to avoid nuisance upon arrival. A delivery vehicle lay-by and wash-down area will be provided at the entrance of the site compound. Strictly no delivery vehicles will be allowed to park on council property.
- Wheel Wash Facilities: During construction, a wheel-washing system will be provided to remove mud, stones, and other materials from vehicles exiting the site. The exit from the wheel washing system will be constructed from a hard, nonporous surface and will be maintained to prevent debris from leaving the site. Wastewater from the wheel washing system will be treated and disposed of on-site.
- **Dust Emission Control:** The main area of concern is the spread by vehicles entering and leaving the site. Methods of dust suppression during manual works will be implemented, including using dust suppression kits with water where applicable to minimise dust.
- **Noise Emission Control:** General measures to control noise during construction will include limiting activities to approved working hours, minimising vehicle idling, and using noise dampening methods where possible to reduce the impact on surrounding residents and council land.

8. Fire Prevention and Emergency Procedures

Emergency procedures will be developed as part of the construction phase health and safety plan. Designated fire call points will be established around the site, supported by an

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