

CONSTRUCTION AND SITE MANAGEMENT PLAN
96-104 CABARITA ROAD AVALON BEACH
NOVEMBER 2018

1.0 GENERAL REQUIREMENTS

1.1 OBJECTIVES

The objectives of this plan are to ensure safety on site, to minimise disruption to the local neighbourhood, and to encourage waste minimisation in demolition and construction.

1.2 THE SITE

The site address is 96-104 Cabarita Road Avalon Beach.

1.3 DEVELOPMENT CONDITIONS OF CONSENT

Council requirements are set out in detail in Conditions of Consent. A copy of the Conditions and approved stamped plans are to be kept on site at all times.

1.4 RESTRICTED WORKING HOURS

Building and demolition work shall only be carried out between the hours:

- 7.00am to 6.00pm Monday to Friday, inclusive
- 7.00am to 3.00pm Saturday

These hours are to be verified with the Council prior to commencing work.

Approved hours for building and demolition work shall be prominently displayed at all times on the building site. Consent does not extend to the use of appliances which emit noise of a highly intrusive nature (such as pipe-drivers and hydraulic hammers) or those prohibited by the Local Council Building Sites Noise Code. A separate application for approval to use any of these appliances must be made to the Local Council.

1.5 CONSTRUCTION ACTIVITIES

The demolition of existing structures, excavation for and construction of the new works as specified and shown in Contract documents.

2.0 CONSTRUCTION MANAGEMENT AND PROGRAM

2.1 CONSTRUCTION PROGRAM

Contractor is to provide a detailed construction program, showing critical path items, at tender submission. This document may be updated for Contract or detail negotiations/clarification of the project delivery.

2.2 CONSTRUCTION DOCUMENTATION VALIDITY

Refer to Construction Specification for the validity and priority of documentation to be relied upon. Contractor to ensure all Construction Documents are held on site and are the current issue of each document.

3.0 PEDESTRIAN AND GENERAL TRAFFIC MANAGEMENT

3.1 GENERALLY: The site will be out of bounds for all unauthorised persons. Barricades and hoardings will be erected to protect the public. All traffic onto the site will be via the designated entry.

3.2 CONSTRUCTION TRAFFIC MANAGEMENT: While constrained by trees and the existing entry driveway, the overall site is significantly large enough that vehicle manoeuvring and offloading materials can happen on the site. Construction vehicles will be able to enter and exit the site in a forward direction from Cabarita Road. Refer to the Construction Traffic Management Plan prepared by Urban Research and Planning for details.

3.3 DESIGNATED ENTRY: The designated entry for all work to the Construction Zone is through the existing driveway and right of carriageway through the adjacent lots.

3.4 SITE TOILETS: Contractor is to provide and maintain portable site toilets. Existing bathrooms/toilets on site are not to be used by contractors or sub-constructors.

3.5 VEHICLE PARKING: Contractors are not permitted to use the remainder of the on-site carparking during construction.

4.0 HEALTH PROTECTION/SAFETY

4.1 WORK HEALTH AND SAFETY ACT

The contractor shall implement all requirements of the Work Health and Safety Act 2011 as amended for all matters relating to the contract for the works.

The Contractor shall take all precautions necessary to protect the health of persons where demolition works may expose workmen and other persons on or within the vicinity of the site to conditions which are dangerous to health, including the noxious effects of fumes, dust, liquids, infection, fire, explosion, radiation or other hazards.

Take suitable precautions where the following are encountered:

- Asbestos insulation or sprayed asbestos coatings
- Fibreglass or rockwool insulation
- Flammable or explosive liquids or gases
- Toxic, infective or contaminated materials

The Contractor shall provide protective devices appropriate to the type of hazardous materials and conditions encountered (such as protective clothing, masks, screens, shielding, decontaminating equipment, seals, coverings and the like) and ensure that they are used correctly while such works are in progress and while health risks remain.

4.2 PROHIBITED: Smoking is not permitted on site or any part of the Works which have been given over to the possession of the Proprietor and similarly alcohol shall not be brought to or consumed on the site.

4.3 SAFETY REQUIREMENTS: In addition to the requirements of the Work Health and Safety Act 2011 and all associated acts or regulations which require employers to ensure the health, safety and welfare of employees, the following conditions shall apply:

Safety Helmets and Personal Protection Equipment: Ensure helmets to comply to AS1801 Occupational Protective Helmets are worn by all Contractor's employees, agents or visitors on site. Ensure all appropriate Personal Protection Equipment (PPE) is available for all workers.

Accident Reports: Immediately advise the Superintendent of:

- All accidents involving death or personal injury
- All accidents involving loss of time or incidents with accident potential such as equipment failure, slides, cave-ins and the like.

If requested, furnish a written report.

5.0 SOIL AND WATER MANAGEMENT DURING CONSTRUCTION

5.1 GENERALLY: Soil and water management measures are to be implemented on site for the project. These works are to be maintained and/or varied as required during the Contract period. The Contractor is to undertake these works before any demolition, cleaning, scrub removal, bulk earthworks and excavation for services. Comply with the Protection of the Environment Operations Act 1997 and other relevant legislation.

Throughout the demolition, excavation, remediation, and construction period, a warning sign for soil and water management must be displayed on the most prominent point of the building site, visible both from the street and site.

5.2 PROTECTION OF WATERWAYS: Particular attention should be paid to ensure soil and water management measures are implemented to protect the adjacent waterway during construction.

5.3 REFERENCE DOCUMENT: *Managing Urban Stormwater: Construction Activities* by NSW Environmental Protection Authority

5.4 SOIL AND WATER MANAGEMENT PLAN: A Soil and Water Management Plan has been prepared by Northern Beaches Consulting Engineers. The Contractor shall undertake these works prior to any clearing, bulk earthworks and excavation for services.

5.5 GEOFABRIC SILT FENCING: Construct "silt" fencing where shown on the Soil and Water Management Plan and Civil/Hydraulic Engineer's documents.

Repair "silt" fencing when required or directed. Replace damaged sections, straighten and/or redrive pickets and retie when the mesh or fabric comes adrift.

5.6 TEMPORARY STRAW BALE BUNDS: In accordance with the Soil and Water Management Plan straw bales may be used in temporary situations, i.e. while installing control measures or when a control measure has been partially or fully dismantled to permit building works to proceed.

Use only bales bound with wire and placed lengthwise in twin rows with straws parallel to the ground surface. Lay the bale flat and embed 100mm minimum into the downslope side. Secure each bale by driving two wooden stakes or steel pickets through the centre. The soil immediately upslope from the bale is to be compacted to prevent piping. Replace bales where deterioration or straw loss occurs.

- 5.7 EARTHWORKS: Earthworks are to be carried out in stages. Protect the immediate work areas with temporary straw bale bunds.
- 5.8 BUILDING WORKS: Building operations such as brick cutting, washing tools or brushes and mixing mortar must not take place on public roadways or footways or in any other location which could lead to the discharge of materials into the stormwater drainage system or waterway.
- Footpaths, gutters and roadways must be swept regularly to keep them free from sediment.
- 5.9 STOCKPILES: Stockpiles of topsoil, sand, aggregate, soil or other material must not be located on any drainage line or easement, natural watercourse, footpath or roadway, or within the dripline of any street tree. Stockpiles within the construction site must be protected with adequate sediment controls, in accordance with Council's Code for Sediment Control.
- 5.10 MATERIAL RECEPTORS: Provide acceptable receptors for concrete and mortar slurries, paints, acid washings, lightweight waste material and litter. Empty as necessary and dispose of in an acceptable manner.
- 5.11 SITE WATER: Site water discharged to the stormwater system must have a level of suspended solids of less than 50 mg/L. This may require treatment such as transfer to settling ponds, use of approved chemicals to settle out sediment, or passing the contaminated water through a treatment device. Site water may also be disposed of through the services of a licensed liquid waste transporter.

6.0 CONSTRUCTION REFUSE

6.1 SORT: Maximise recycling and reuse, sort all refuse accordingly.

6.2 REUSE: Undertake to reuse or recycle as much construction wastage as possible. The following guide is suggested:

- Excavation Material: Re-use excavation material for areas requiring fill for slab-on ground.
- Brickwork: Clean and re-use bricks for areas where bricks are to be rendered painted. Re-use remainder for blocking.
- Concrete: Crushed concrete to be used for bulk back-filling.
- Metal: Demolished metal sheet can be used as lost formwork.

6.3 REMOVAL: Regularly clear and remove all construction refuse from site as it accumulates and on completion. Keep site tidy at all times and minimise safety hazards associated with building rubbish. During demolition/building work the public way shall not be obstructed by building materials, refuse skips or in any way whatsoever.

6.4 SKIPS: Building waste containers (skips) shall not be placed on the roadway or footway under any circumstances. Non-compliance with this condition will result in the issue of Notice by Council to stop all work on the site until the 'skip' is removed.

6.5 FOOD: Provide adequately sealed receptacles for food and empty when full.

7.0 TRUCKING

- 7.1 GENERALLY: Convey soils, earth, sand, loose debris, and the like loose materials to or from the site in a manner that will prevent dropping of materials on streets. Ensure that the wheels, tracks and body surfaces of all vehicles and plant leaving the site are free of mud and that mud is not carried on to adjacent paved streets or other areas. Provide protection to Council property and right of carriageway, street trees and other structures situated in areas affected by the Works.

8.0 PROTECTION OF MATERIALS AND WORK/DUST CONTROL

- 8.1 STORE: All perishable materials, all fragile materials, fittings and fixtures and specially plated, glazed, vitreous, and enamelled surfaces shall be effectively stored, handled and protected from damage through any cause including vandalism and theft during the progress of the works.

- 8.2 COVERS: Temporary covers of sufficient extent and strength shall be used to protect finishing materials etc. in position on the works from damage of any kind through any cause.

- 8.3 PROTECTION: Contractor to provide all necessary protection, wire enclosures, dust coverings to scaffolding, in accordance with the relevant Authorities requirements, and as directed on site by the Architect. Protect where necessary all undisturbed areas, street trees and all other building features and natural features specified to remain in situ.

Provide and fix protection for on-going work from weather or damage and staining from timbers, stone dust, oil, washings from steelwork or scaffolding and other injurious or disfiguring substances. Ensure that temporary coverings are installed at close of work and are in place at all times outside building hours or when inclement weather may reasonably be expected.

- 8.4 DUST CONTROL: Restrict dust caused by demolition works to a minimum. Do not throw or drop dust-creating materials in a manner which releases dust. Provide approved material handling chutes or hoisted containers for handling such materials.

Spray chutes, containers, materials and affected areas with water as necessary to control dust.

9.0 TREE AND ECOLOGY PROTECTION

- 9.1 GENERALLY: Tree protection measures are to be undertaken as described in Arborist and Ecologist reports.

10.0 CONSTRUCTION METHODOLOGY

- 10.1 **GENERALLY:** Construction is to be undertaken with care to ensure the ecology of the site and surrounding area is protected. Significant items identified for protection include the Environment Protection Area as nominated by the Ecologist, trees to be retained as described in the Arborist Report, and Careel Bay and the waterway. Strategies for the protection of these items are described in the corresponding reports and addressed above.

The works are to be flexible to allow for staged construction of the houses. Subdivision infrastructure (access driveway, stormwater system, services, etc.) is to be completed first, or concurrently with the first houses constructed.

- 10.2 **SITE PREPARATION AND EARTHWORKS:** Following the implementation of site protection measures, trees nominated to be removed will be done with care and overseen by the project arborist to ensure trees to be retained are unaffected. Similarly, earthworks are to proceed with care. The project arborist is to inspect any earthworks that may affect trees to be retained, as described in their report.

- 10.3 **ACCESS DRIVEWAY:** Earthworks will include the preparation of the new access driveway through the middle of the site. This driveway will be brought up to levels to connect with the existing access driveway. The existing access driveway including surface is to remain intact until the entire access driveway, new and existing, is resurfaced at once. Access to lot 11 is to be maintained throughout construction.

The access driveway is ideally located in the existing clearing where the demolished house once stood. This area is generally clear of significant trees to be retained. While the designated entry is constrained as a single entry/exit point, the access driveway area is level, open and clear of trees to allow for vehicles passing and for materials handling to each lot. The driveway is designed to allow for easy manoeuvring of an 8.5m truck, allowing access for compact mobile cranes when required.

- 10.4 **ACCESS DRIVEWAY, INFRASTRUCTURE & SERVICES:** Construction of infrastructure and services is to be done concurrently with the construction of the houses. Care is to be taken with works affecting trees to be retained (stormwater infrastructure, resurfacing the existing driveway, etc.). The project arborist is to inspect any works that may affect trees to be retained, as described in their report. Existing services to lot 11 are to be maintained, or if relocation is necessary it is done with a minimum of disruption.

- 10.5 **HOUSES:** The houses are designed as concrete framed structures with masonry/cladding infill. This form of construction allows for relatively quick erection of the concrete structure to provide level and covered area within the houses for working and materials storage.