



CONSTRUCTION MANAGEMENT PLAN

for

STAGE 6 – 75 LOTS

at

Brooklyn Fields Estate

Brooklyn Drive

THURGOONA, NSW

Revision A - November 2024

1. Introduction

1.1 Purpose

This Construction Management Plan outlines the recommendation for all the works during the construction of Stage 6 – 75 lots of the subdivision of Lot 583 in DP 1289690, Brooklyn Drive, Thurgoona, NSW.

1.2 Scope of this Plan

This plan provides;

- Details on the proposed strategy for the construction phase
- Describes any specific constraints during the construction phase

1.3 Site Location and size

Brooklyn Fields Estate is located in Thurgoona. The main entrance to the Estate is located off Table Top Road, approximately 1200 meters from the intersection of Thurgoona Drive and Table Top Road.

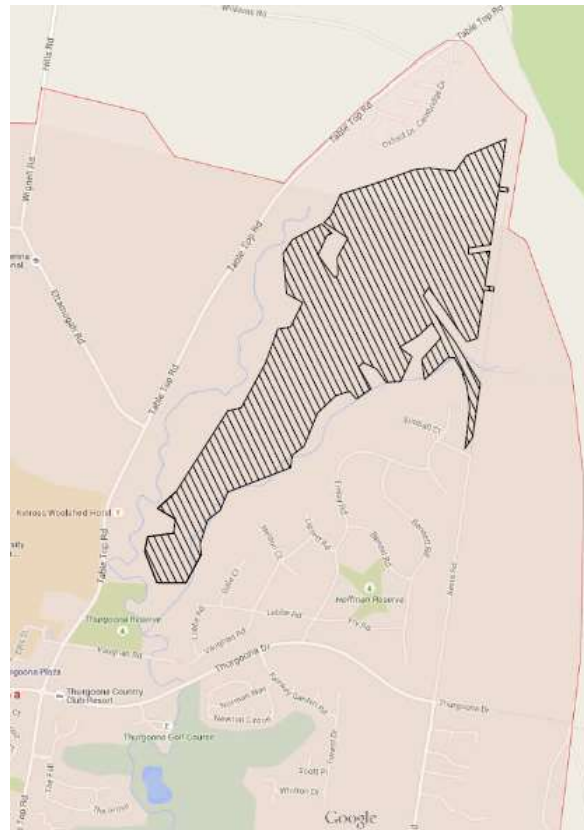


Figure 1- Locality of Brooklyn Fields Estate

Stages 6-7 of the Development cover approximately 15ha of land with the total Lot 583 consisting of approximately 72.8 ha of land. Neighbouring Lot 583 is, Eight Mile Creek (to the west) and Woolshed Creek (to the east) which are prominent watercourses through this area of Thurgoona.

Access to the Development site is through the previously developed Stages 1-5 along Brooklyn Drive. The main access to the Estate is Brooklyn Drive off Table Top Road and the temporary access is known as the Access Track off Kerr Road.

The land contained within Lot 583 has previously been used for agricultural grazing and cropping, with rural infrastructure including fencing and stock water supply. There is no significant existing infrastructure on the site.

1.4 Proposed Works

The next two stages of the development are Stage 6 & 7 which consists of 111 lots.

This part of the works, **Stage 6** includes the construction of 75 lots for the stage.

1.5 Construction Processes

Construction will follow on from previous Stages sequentially, although earthworks are required within future stages in order to achieve a cut/fill balance. The activities to be undertaken for **Stage 6** will be outlined within this section.

Clearing & grubbing

- Clearing & grubbing will occur before significant earthworks are to be conducted. This involves the removal of existing vegetation from the site (10 trees in Stage 6) and the stripping of topsoil & stockpiling at designated sites within the development site for later use spreading over areas effected by earthworks and not paved. **Refer Appendix A plans 800355-C01-05 Rev B.**

Earthworks

- The earthworks for Stage 6 will be conducted in the areas shown on the plans. Refer **Appendix A plans 800355-C01-05 and C49-51 Rev B.**

Drainage

- Internal drainage networks will be constructed to discharge lot and road runoff. The stormwater will require treatment and retention before being discharged at existing flows. Refer **Appendix A plans 800355-C03-05 & C26-34 Rev B.**

Drainage – Sediment Basins Existing

- Sediment basins are constructed at the end of the drainage pipes for the stormwater runoff to drain into. The sediment basin in the previous Stage 5 (Reserve 8) will be used as a sediment basin for majority of Stage 6. Reserve 7 will be used for the small part of Stage 6 on Brooklyn Drive. Refer to **Appendix A 800355-C03 Rev B.** Notes for temporary sediment basin management and monitoring are located on the plans.

Sewer

- The sewer components include the construction of the internal reticulation sewer network as detailed on the design plans and connecting into the existing Stages sewerage network. Refer **Appendix A 800355-C35-42 Rev B.**

Essential Services

- Essential services such as water, electricity, telecommunications and gas will be provided in Stage 6. Trenches will be dug at the required offsets and services provided throughout Stage 6. Refer **Appendix A 800355-C03-05 Rev B**.

Wash Down Bay

- A wash down bay will be provided within the sites compound as this area is already provided with a bund and drains to the sedimentation pond below this area. No run off will enter the waterways from this location. This bay will also be utilised before any machinery is used within Environmental Lands to ensure no weeds are transferred into Environmental Lands. **Appendix B 800355-C46 Rev B** for bay location.

Site Rehabilitation

- The site rehabilitation involves suitable measures to be implemented post disturbance to the site which include;
 - o Spreading of topsoil to establish grass cover;
 - o Hydro-seeding/spray-grass or similar treatment to establish a grass cover (if strike rate of topsoil is not successful);
 - o Permanent erosion and sediment controls;
 - o Landscaping;
 - o Weed management;
 - o Drainage systems and flow paths;
 - o Steps to be taken to ensure that the state of the land, while being rehabilitated and at the completion of the rehabilitation does not jeopardize public safety;
 - o Refer to landscaping and sediment control plans.
- Topsoil road reserve areas (back of kerb to boundary line excluding footpath) to be minimum 100m thickness, lightly wheel rolled and watered.
- Landscaping plans show details for rehabilitation of nature strips.
- Permanent erosion and sediment controls to be set up on fence line with Environmental Land.
- Pipes discharging into basins to have weed matting and/or rock beaching installed on discharge points.
- All work areas will be closed to the public while rehabilitation works are in progress.
- Reinstatement of areas where works have been carried out outside the property boundary in Environmental Land.
- Check weather forecast and no working within the creek when rain is likely.
- Stockpiles for the Stage 6 will be as per **plan 800355-C46 Rev B**.
- Refer **Appendix A** for **Sediment control plan 800355-C46-48 Rev B**, **Appendix B** for **Landscaping Plans L001-004**, [REDACTED]
- Refer Construction Management Plan for details on methods to manage construction impacts on E3 land.

1.6 Construction Works order

Works are to be constructed in the following order with erosion and sediment controls in place prior to and during each section of works;

1. Install barrier flagging along Construction Exclusion Zone boundary on Environmental Land as per Environmental Land Licence.
2. Install sediment and erosion control measures along boundary with Environmental Land as shown on Sediment and Erosion Control Plan.
3. Establish clean water diversion drains to divert clean water around work area.
4. Construct sediment basins as shown on plans.
5. Construct berms to direct dirty site water to sediment basins.
6. Proceed with topsoil stripping and stockpiling.
7. Undertake all other civil works.
8. Progressively rehabilitate disturbed ground as works are completed.

1.7 Vehicle access and egress from site

The vehicle access to the site will be via the Access Track that has been constructed off Kerr Road.

1.8 Site Compound

The site office, accommodation and storage of major materials related to the project will be located in the stage being developed. For the Stage 6 construction the site office will be located on Stage 6. Refer to plan **Appendix A 800355 C03-05 Rev B** for details.

2 Construction Management

2.1 Public Safety, Amenity and Site Security

- Construction site to be kept neat and tidy to maintain public safety and local amenity throughout the construction process.
- Fencing of all excavations so that they do not pose a danger to life or property.
- Location storage and shutdown of plant/site equipment at the completion of a day's work. Locks, permanent barriers, surveillance systems security lighting.
- Fuel and dangerous chemical storage locations to be secure and located away from exits and high-risk areas. Specified to minimize site congestion and avoid public accessing machinery when site is not operational.
- Limit entry and exit points to those specified on the plan
- Site plan to be displayed at the perimeter of the construction site specifying security measures and key contact details.
- All persons shall be inducted to site to ensure awareness of site hazards and compliance with site safety requirements and location of first aid cabinet and amenities and responsibility whilst on site.
- All visitors shall report to the site office or construction supervisor prior upon entry to site and record time and purpose of entry.
- All injuries and incidents shall be recorded in site incident log book.
- The site shall have toilets, washbasins, site office with first aid cabinet, and lunchroom.

- All workers shall wear appropriate reflective clothing, boots and hard hats where appropriate on site.
- All machinery shall have warning lights and reversing warning beepers operating when working on site.

2.2 Cultural Heritage

As Part of the Development Application an Aboriginal Cultural Assessment Report has been prepared by AECOM, along with the Aboriginal Heritage Impact Permit (OEH letter and General Terms of Approval (GTA) are attached).

Any known sites in close proximity to the works area will not be affected as the Construction Exclusion Zone boundary is the limit of works and no works will be performed past this boundary. The Construction Exclusion Zone will have flagging installed along the boundary.

The Construction Exclusion Zone will remain in place for the duration of the works.

Site personal are instructed to not go beyond the Construction Exclusion Zone and only enter the Construction Exclusion Zone if needed.

2.3 Sloane's Froglet

Construction of the wetland habitats will occur as follows;

- Civil works expected to commence in 2025.
- Cut and Fill works including wetlands will take 2 months – N/A
- Drainage works to commence including water stop and inlet and outlet structures – 2 months for the estate and 1 month for the wetlands – N/A

Re- Planting (if required) for these wetlands will occur in the planting season as per the ***Sloane's Froglet Habitat Management, Revegetation and Sedimentation Plan***.

2.4 Operating Hours, Noise and Vibration Controls

The site is not in close proximity to sensitive noise areas. Noise arising from the works to be in accordance with the requirements of the protection of the Environment Act 1997 and guidelines contained in the New South Wales environmental noise control manual.

Plant equipment to operate within the designated hours, these are as set out by the NSW Interim Construction Noise Guideline for normal construction work as;

- Monday to Friday 7am to 6pm

- Saturday 8am to 1pm
- No work on Sundays or Public holidays or outside hours.
- Seeking requests for adjustment to the working hours set by the conditions of the consent and its justification, duration and purpose will be done in writing to Council.
- Wet weather days (including flooding) no works on site.

2.5 Air and Dust Management

- Large scale dust suppression is dependent on weather conditions.
- Construction process to ensure dust suppression controls are implemented. These could include minimizing soil disturbance, use of water sprays, erecting screens and not carrying out dusty works during windy conditions. Dust control measures must be utilised during work, to control the emission of dust from the site during work.
- Loose material stockpiles to be top soiled, placed in protected areas (wind) and minimal in size to avoid dust and other airborne matter impacting the surrounding area.
- Regular Maintenance of plant machinery to limit exhaust pollutants
- The water source for any water carts used for dust suppression will be from a temporary hydrant fitted to the water main in Kerr Road, near the intersection of Hopwood Road and Kerr Road. If the water in the temporary sediment basins is at capacity this water will be used for dust suppression.
- Refer **plan 800355-C46-48 Rev B** for stockpile sites.

2.6 Stormwater and Sediment Control

Onsite stormwater and sediment control shall be provided in accordance with the sediment control and storm-water plans detailed for each stage of construction as to minimize erosion, contamination and sedimentation of the site, adjoining areas, watercourses and streams. This will include works to manage site excavation and stockpiling of soil in future stages for Cut & Fill purposes. The performance of these controls will be determined by the adequacy of the control design, adequacy of the control implementation, ongoing monitoring and maintenance.

- The contractor shall limit areas disturbed strictly to those necessary to carry out the works.
- All stockpiles are to be fully contained within the approved area applicable to the Development Application.
- Topsoil shall be carefully stripped of areas effected by works and stockpiled for re-use over completed works areas.
- Topsoil stockpile to have sediment fencing installed around toe of batter and diversion drain constructed.
- Topsoil stockpile height not to exceed two (2) meters.
- Fill material stockpile height no to exceed four (4) meters.
- Stockpiles should be located away from areas subject to concentrated overland flows and 40m away from waterways and areas identified as proposed Sloane's Froglet habitat basins.
- All stockpile areas should be rehabilitated as soon as reasonable and practicable after the material has been removed.
- Ongoing management through use of spray grass, covering and compaction of stockpiles.
- Where earthworks are located below land sloping in excess of 5% topsoil berms shall be formed around the high side of the works to shed clean run-off water around and clear off works area.
- At completion of earthworks areas not sealed shall have topsoil spread evenly over the finished surface.

- As part of the CAA approval requirements all machinery shall be cleaned of mud and loose materials, degreased and maintained whilst carrying out works under the CAA and prior to leaving the site at specified entry and exit points.
- Vehicles carrying loose materials off site shall be securely covered before leaving site.
- All disturbed areas not in current construction stage to have batters graded at 1 in 4, spread with topsoil lightly rolled and watered.
- Rumble strips or temporary washing station to be in place to prevent tracking of dirt/mud exiting the site.
- Storm water runoff originating from the stockpile must be directed to and/or controlled by suitable sediment traps, e.g., silt fences or berms.
- Check the weather forecast and no working within the creek when rain is likely.
- Stockpiles for Stage 6 will be as per plan **800355-C46-48 Rev B**.
- Refer **Appendix A** for sediment control plan **800355-C46-48 Rev B** for Stage 6.
- Batter to be top soiled as soon as possible to provide stabilisation.
- Any storm water discharge from site to be in accordance with Managing Urban Storm Water Soils and Construction volume 1 2004.
- Regular inspection to be carried out including weekly during construction hours and prior to rainfall of 10mm or more in 24hours. Items for repair, maintenance or improvement works to be recorded. Refer Section 10.2 of EMP and rehabilitation plan.

2.7 Waste and Materials Re-use

- Minimal material waste is expected from the site. Skip bin to be provided for storage and removal of any waste generated.
- No fuel to be stored on site, stop work immediately for any spill, as per Environmental Management Plan.
- Refueling will be carried out within the site compound which has a bund around it and fuel will be trucked in via tanker. No storage on site.
- Excess topsoil material to be stockpiled on-site to be utilized in batters and if required in future earth berms.

2.8 Traffic Management

Traffic Management for works will;

- Conduct operations to offer the least possible obstruction and inconvenience to the public
- Designate removal periods for large scale haulage in off-peak hours

The design, selection and implementation of traffic control will reflect those measures detailed in the RTA's manual (Traffic control at worksites) which is based on Australian Standard AS 1742.3, Traffic control devices for works on roads. Contractors are required to adopt the RTA manual for works undertaken on Council controlled roads

- ACC Standard specification Revision A (For subdivisions)

2.9 Native Vegetation, Weeds and Tree Removal

Native vegetation removal will be required on site as part of Stage 6 (10 trees for removal). The following measures will be implemented:

- Tree Protection Zone fencing to be installed prior to construction works commencing.
- Provide site specific information on flora within the Environmental Induction.
- Ensure no activities outside the works zone through clear delineation of the works area, and communication in site inductions. Ensure traffic is restricted to established tracks and roads, and speed limits observed. Ensure effective sediment and erosion control to reduce potential impacts to non-disturbance zone. Ensure all plant and equipment coming to site has been cleaned for site access (weeds and seeds). No fires on-site. Site fencing for vegetation to be retained on site, to be installed as per the Tree Protection Zones (TPZs). Fencing will not be removed on site until all works have been completed. E3 zone land will remain fenced as it currently stands. Works completed within the E3 zone for the creek crossings will also ensure the construction foot print is fenced. (The TPZ for individual trees is calculated based on trunk (stem) diameter (DBH), measured at 1.4 metres up from ground level. The radius of the TPZ is calculated by multiplying the tree's DBH by 12.) If required "No Go" signs can be installed along the Tree Protection Zoning fencing.
- Provision of protective fencing to protect the root zone of the trees to be retained, extending to the dripline of each tree. No pruning of trees, damage or removal of vegetation, stockpiling, storage, excavation is to occur within the E3 zoned land. Tree protection fencing must remain in place until the end of construction.
- Flagging (bunting) with star pickets will be installed along limit of works boundary to ensure no vehicle movement outside designated areas.

3.0 Emergency Response Plan

Emergency Response Plan – fuel, chemical spills, and pollution controls, flooding, accidents etc. will be provided by the Contractor as part as their Quality Assurance System and will be located in the site office. Refer to **Stage 6 CMP** emergency response plan.

For additional information please also refer to the Environmental Management Plan completed by SJE Consulting and the Contractors Environmental Management Plan.

3.1 Environmental Lands

The 6m zone approved via an Environmental Land licence will only be utilised as required (to prevent continual access and disturbance to Environmental Lands). The 6m exclusion fencing will be put in place to ensure no encroachment beyond what has been approved under the licence. Contractor will only use this 6m zone if absolutely necessary during the construction process. Rehabilitation of all disturbed areas is required following the works.

3.2 DPI Water

Not Applicable to this stage but these comments will still be followed

Conditions of the license must be met these include:

All erosion and sediment control works must be decommissioned using a suitably qualified person on completion of the controlled activity once the site has stabilised.

All materials must be stored away from the water source that materials do not:

- i. obstruct water flow, or
- ii. wash into the water source, or
- iii. cause damage to riverbanks. When the controlled activity authorised by this approval has been completed, surplus materials must be removed from waterfront land.

As part of the CAA approval requirements all machinery shall be cleaned of mud and loose materials, degreased and maintained whilst carrying out works under the CAA and prior to leaving the site at specified entry and exit points.

The controlled activity authorised by this approval must only be constructed within the water source:

- A. during periods of low flow, or
- B. at low tide.

A. An inspection of the rock beaching and vegetation plan area downstream of the culvert on Eight Mile Creek must be undertaken within 2 day(s) after each flow event to ensure there is no increase in bed or bank instability.

B. If erosion is observed the approval holder must:

- i. submit a Rehabilitation Plan to DPI Water, Dubbo Office, within 30 days of erosion being identified, and
- ii. implement the Rehabilitation Plan once it has been approved by DPI Water, Dubbo Office.

The controlled activity authorised by this approval must be carried out in accordance with Managing Urban Stormwater: Soils and Construction, Volume 1 (Landcom, 2004), as amended or replaced from time to time.

A copy of the approval must be kept at the site where the controlled activity is taking place. A copy of the approval must be provided to all personnel working on the controlled activity.

Appendix A – Plan set

Appendix B – Landscape Plans