



Traffic



TaylorThomsonWhitting



Preliminary Construction Management Plan Byron Shire Central Hospital

for Health Infrastructure

12 August 2014

141233

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Revision Register

| Rev | Date | Prepared By | Approved By | Remarks |
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1.0 INTRODUCTION

This Preliminary Construction Management Plan provides guidance to the potential construction activities associated the proposed Byron Shire Central Hospital. This report is subject to review and updated upon engagement of the contractors for the works.

Final Construction Management Plans will be prepared by the contractor, which may vary the internal location of the activities outlines, but will not be permitted outside of the site without approval of the Authorities.

2.0 EXISTING SITE CONDITIONS

2.1 The Site

The objective of this project is to provide a development for the new Byron Health Facility will combine both facilities that currently are available at Byron Bay District and Mullumbimby Hospitals.

The proposed site is located south of Ewingsdale Road and west of McGettigans Lane. Refer to **Figure 1**.

The site will be accessed by Ewingsdale Road for construction works. This road is a dual carriageway accommodating eastbound and westbound traffic and providing access to Pacific Highway at its western end. The eastern section of the road is a link to Byron Bay Town Centre and its environs. The land is undulating to hilly rural property.

Ewingsdale Road lanes are typically 3.2m wide with a grassed verge.

The posted speed limit along the site frontage is 80km/h, however this changes to 60km/h immediately west of the site on approach to the Pacific Highway junction (roundabout).

East of the site is an existing ambulance facility that utilises a single entry/exit driveway (7m wide). West of the site is an electrical substation and small industrial complex. Access to electrical substation is via a nominally 10m wide driveway with an informal deceleration and acceleration area located along the verge. Access to the industrial complex is via William Flick Lane to the east.

Refer to **Figure 1** for Site Location.



Figure 1: Site Location

(Source: www.nearmap.com.au)

2.2 Existing Parking

There is no street designated street parking available along Ewingsdale Road. The rural location of this site does not attract parking in roadways. No parking is proposed along Ewingsdale Rd for the construction works.

2.3 Pedestrian Movements

There are no pedestrian facilities provided along Ewingsdale Road within vicinity of the site. Due to the site's rural location there is very little pedestrian movement.

2.4 Cyclist Facilities

The existing bicycle routes within close proximity of the site are shown in **Figure 2**. The immediate area surrounding the site does not have a designated bike path. It should be noted that currently due to the location of the site, bicycle access to the site is limited. The existing bike route path from the Byron Bay town centre along Ewingsdale road ceases at the intersection with McGettings Lane (some 330m east of the site).



Figure 2: Bicycle Route

(Source: www.bicycleinfo.nsw.gov.au)

2.5 Other Facilities

Bus Stop

Regional bus routes 640, 641 and 645 provide services to the site with connection to Byron Bay, Mullumbimby, Bangalow and Ballina. There is a designated bus stop on McGettingans Lane east of the site. The bus operators also operate on a hail a ride system and will stop in a safe location if required.

3.0 PROPOSED CONSTRUCTION, TRAFFIC AND ASSOCIATED WORKS

The proposed works are anticipated to be undertaken over approximately an 18 month period in the following stages:

- Site Establishment
- Early works (Excavation, road preparation, stormwater works)
- Main Site Works (building and road construction)
- External Road Works

3.1 Access To/From the Worksite

Access to the worksite for construction/delivery vehicles is proposed to be via Ewingsdale Road. Site access will be via a single entry exit location to the western end of the site. This is positioned away from the existing Ambulance access to minimise impact on the existing ambulance access.

Access to the site will be via the following designated route (refer **Figure 3**).

From/To the East

- From Byron Bay CBD
- Ewingsdale Road
- Left into Site
- Site
- Left onto Ewingsdale Road
- U-Turn at the Pacific highway Roundabout
- Return to Byron Bay

From/To the North/South/East

- From Pacific Highway interchange
- Right into Site
- Site
- Left onto Ewingsdale Road
- Pacific Highway Interchange

This proposed route minimises right turn movements from the site to minimise traffic disruptions

Suitable traffic control signage will be erected to advise motorists of the works area as outlined in the detailed Traffic Control Plans to be developed prior to commencement of construction

At the site access, it is proposed that temporary widening will be provided to improve safety and traffic movement along Ewingsdale Road. These modifications to the Ewingsdale will include:

- Provision an temporary acceleration lane (min 25m) west of the access driveway
- Provision of a temporary deceleration lane (50m) east of the access driveway.
- Alteration to the existing verge to provide a passing lane for east bound traffic
- Provision of a right turn lane into the site for eastbound traffic. (50m equivalent to store up to 2 articulated vehicles

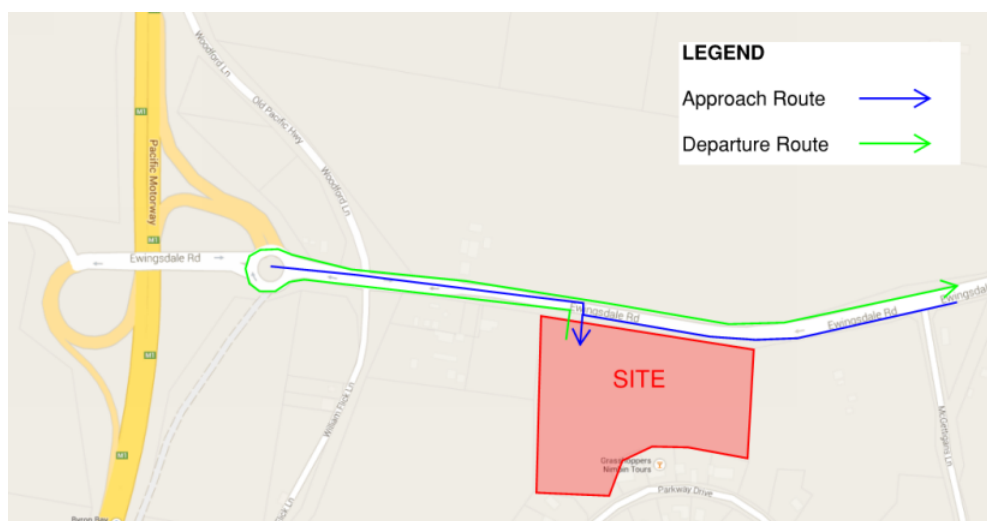


Figure 3: Construction Vehicle Routes

(Source: www.google.com.au)

3.2 Truck and Vehicle Volumes and Queuing Arrangements

Trucks will access the site via the designated route outlined in **Section 2.1**.

During all construction works vehicles will enter and exit the site in a forward direction. Turning manoeuvres will occur within the site.

All vehicles are to queue on site. It is expected that sufficient area would be available within the site to prevent queuing on public roadways.

It is anticipated that typical vehicle operation would be via the use of Heavy Rigid Vehicles (12.5m). However during building construction activity Heavy Articulated Vehicles will be utilised (19.5m).

It is anticipated that the site works would typically generate approximately 30 truck movements per day during day to day activities.

During the early works stage, vehicle movements will be relatively low (estimate approximately 20 truck movements per day) as there will be minimal export of material from the site, with most truck movements being generated with the deliveries associated stormwater installation. During the main site works, traffic volumes are expected to increase to an estimated approximate of 50 truck movements per day, particularly in relation to concrete pours.

During the high delivery days (eg concrete pours) communication between the site, concrete batching plant and truck deliveries will be maintained to stagger the arrival of vehicles in order for them to be accommodated within the site and minimise traffic disruptions.

All deliveries will be within the approved work hours, with emphasis made on deliveries to be outside heavy traffic periods where possible in order to reduce impact on traffic flows.

It is anticipated that the above truck vehicle movements can be accommodated within the road network.

3.3 Work Zone

There is no proposal to install any works zone along Ewingsdale Rd for works associated with the Main Hospital construction works.

3.4 Speed limit

It is proposed to extend the current speed limit of 60km/h located west of the site to encompass the site frontage. This will provide improved safety and traffic management for public and construction vehicles.

3.5 Pedestrian Movements

Due to the rural location of the site, it is anticipated that pedestrian activity will be low. The provision of a single entry/exit point from the site minimises pedestrian/vehicle conflicts.

The site will be bounded by Type A fencing to prevent unauthorised access.

3.6 Impact and Changes to Parking

There is no proposal to alter parking arrangements as a result of the works, as all vehicle movements and parking will occur on site.

3.7 Road Closures

The proposed works will not require any full road closures. However during the proposed roadwork, temporary modifications to the road alignment will need to be completed to maintain traffic flow during the roadworks. Details of the traffic management for these works will be developed prior to construction commencement and be outlined in Traffic Control Plans.

3.8 Access to adjoining properties

Access to adjoining properties will be maintained throughout the site and roadworks.

The provision of a single access point off Ewingsdale Rd minimises impact on the adjoining properties. The ambulance facility current access arrangement will remain unchanged throughout the works, with the exception of the future driveway upgrade. The driveway upgrade will be staged to maintain necessary access for emergency vehicles.

Property owners will be made aware of the works via notification of a direct letterbox drop to the household/business prior to the works in addition to the general work notifications provided throughout the project as outlined in **Section 2.12**.

3.9 Construction Cranes

It is proposed that construction works will take place using mobile cranes around the site. If the Building Contractor proposes to use a tower crane for materials handling, it is proposed to be located fully within the work site to facilitate the loading and unloading of materials.

3.10 Construction Employee Traffic Generation

It is anticipated that at peak times approximately 200 staff will be required each day to complete the works. To minimise the required parking contractors will be encouraged to assist in the transportation of workers to the site.

Workers parking will be accommodated on site as not to affect the public road system. Employees will be asked to park in the designated area as part of the site induction.

As part of site induction the site employees will be encourage to use these facilities or car pooling arrangements to decrease the number of employee vehicles.

3.11 Signposting

Temporary construction traffic related signposting is to be developed in accordance with AS 1742.3 – Traffic Control Devices for Works on Roads.

3.12 Methods of Communicating Traffic Changes

Prior to the commencement of the works, notification of the works will need to be distributed to neighbourhood of the upcoming works to include information on the access restrictions and contact numbers should access be required. Monthly updates of work progress, construction works and vehicle movements will be provided to the building managers to be passed to resident/business owners. Alternatively letterbox drop of the information direct to resident/business owners could be provided if required

During the works signs are to be erected warning motorists of construction traffic exiting and entering the site.

Traffic Control advance warning signage in accordance with RMS guidelines is to be in place to notify motorists of roadworks and when traffic controllers are present. Traffic Control Plans are to be developed prior to commencement of works

Sign size is to be size “A” and is to be monitored throughout the works to ensure they are clearly visible.

As part of the Site Induction procedures all contractors will be made aware of the Construction Traffic Management Plan and their responsibility to adhere to the plan.

3.13 Environmental Control

Vehicles are not to transport dust, dirt, or gravel from the worksite onto the sealed road networks. Vehicle wash areas in accordance with industry standards will be applied. Loads are to be covered.

A proposed Soil Erosion and Sediment Control Plan is attached in Appendix A.

Materials and spoil storage areas will be within the site for collection. Details of the site storage areas are outlined in the Site Management Plans. Refer to **Appendix A**.

3.14 Monitoring of Traffic Control Plans (TCP)

During construction the contractor shall each morning, prior to work commencing, ensure all signage is erected in accordance with the TCP and clearly visible. Each evening, upon completion of work, the contractor is to ensure signage is either covered or removed as required.

Any variation to the layout of the TCP on site is to be recorded and certified by authorised RMS accredited personnel.

A review of TCP's can be undertaken as required in order to determine any potential need for future amendments.

3.15 Certificates and Approvals

Approval is to be obtained from Byron Shire Council and other relevant authorities.

Approval needs to be obtained for items such as but not limited to:

- Extension of speed limit to 60km/h along site frontage
- Modification to Ewingsdale Road alignment to include the temporary deceleration/acceleration and turning lane at the site entry/exit
- Road occupancy approvals
- Traffic control Plan Approvals
- Hoarding approvals

Coordination will need to be undertaken with neighbouring properties to maintain access.

Only certified personnel will be used on site to implement, monitor and carry out the Traffic Control Plan.

3.16 Hours of Work

The site works will be undertaken during the times as specified in the conditions of consent for the works. We anticipate these will be:

- 7.00am to 5.00pm Monday to Friday
- 8.00am to 1.00pm Saturday

Works outside the specified times will need approval by the relevant authorities. Works will be carried out in accordance with the Conditions of Approval.

3.17 Contact of Emergency Services

In the event of an emergency related construction traffic incident on the public road network it will be the responsibility of the Site Manager to ensure that Emergency Services are notified. The emergency services includes but are not limited to:

- Fire
- Ambulance
- Police

Phone “000” in cases of emergency.

Furthermore, it is the responsibility of the Site Manager to advise the Emergency Services of any restriction of vehicular access to the public and private areas (1) one week prior to its implementation.

3.18 Responsibilities

The Site Manager will be responsible for, but not limited to:

- Implementing the Traffic and Pedestrian Management Plan and TCP's
- Informing contractors of the requirements of the Traffic and Pedestrian Management Plan
- Undertaking site inspections to ensure all signage is clearly visible and not damaged
- Monitoring the Traffic and Pedestrian Management Plan
- Report on Incidents
- Obtaining permits

3.19 Construction Site

Proposed Site Management Plans are shown in **Appendix A**

All site compounds for builders, truck turning, construction vehicle parking, storage and waste material handling will occur within the site.

Final Construction Management Plans will be prepared by the contractor, which may vary the internal location of these activities, but will not be permitted outside of the site without approval of the Authorities.

APPENDIX A: SITE MANAGEMENT PLANS



EROSION AND SEDIMENT CONTROL LEGEND

- Batter
- Siltation fence
- Stormwater pit with Geotextile filter surround
- Hay bale barriers
- Sandbag sediment trap
- Catch drain
- Overland flow path

EROSION AND SEDIMENT CONTROL NOTES

1. All work shall be generally carried out in accordance with
 - (A) Local authority requirements,
 - (B) EPA - Pollution control manual for urban stormwater,
 - (C) LANDCOM NSW - Managing Urban Stormwater: Soils and Construction ("Blue Book").
2. Erosion and sediment control drawings and notes are provided for the whole of the works. Should the Contractor stage these works then the design may be required to be modified. Variation to these details may require approval by the relevant authorities. The erosion and sediment control plan shall be implemented and adapted to meet the varying situations as work on site progresses.
3. Maintain all erosion and sediment control devices to the satisfaction of the superintendent and the local authority.
4. When stormwater pits are constructed prevent site runoff entering the pits unless silt fences are erected around pits.
5. Minimise the area of site being disturbed at any one time.
6. Protect all stockpiles of materials from scour and erosion. Do not stockpile loose material in roadways, near drainage pits or in watercourses.
7. All soil and water control measures are to be put back in place at the end of each working day, and modified to best suit site conditions.
8. Control water from upstream of the site such that it does not enter the disturbed site.
9. All construction vehicles shall enter and exit the site via the temporary construction entry/exit.
10. All vehicles leaving the site shall be cleaned and inspected before leaving.
11. Maintain all stormwater pipes and pits clear of debris and sediment. Inspect stormwater system and clean out after each storm event.
12. Clean out all erosion and sediment control devices after each storm event.

Sequence Of Works

1. Prior to commencement of excavation the following soil management devices must be installed.
 - 1.1. Construct silt fences below the site and across all potential runoff sites.
 - 1.2. Construct temporary construction entry/exit and divert runoff to suitable control systems.
 - 1.3. Construct measures to divert upstream flows into existing stormwater system.
 - 1.4. Construct sedimentation traps/basin including outlet control and overflow.
 - 1.5. Construct turf lined swales.
 - 1.6. Provide sandbag sediment traps upstream of existing pits.
2. Construct geotextile filter pit surround around all proposed pits as they are constructed.
3. On completion of pavement provide sand bag kerb inlet sediment traps around pits.
4. Provide and maintain a strip of turf on both sides of all roads after the construction of kerbs.

EROSION

- DRAWING TO BE READ IN CONJUNCTION WITH ENABLING WORKS STORMWATER CONCEPT PLAN
- DRAWING TO BE READ IN CONJUNCTION WITH ENABLING WORKS EROSION AND SEDIMENT CONTROL PLAN
- ENSURE EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO COMMENCEMENT OF DRAINAGE WORKS

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|---------------------|-------------|-----|----------|
| P2 FOR COORDINATION | KH | KH | 21.07.14 |
| P1 FOR COORDINATION | KH | KH | 18.07.14 |
| Rev | Description | Eng | Draft |
| Project | | | |

Byron Shire Central Hospital
54 Ewingsdale Road,
Ewingsdale

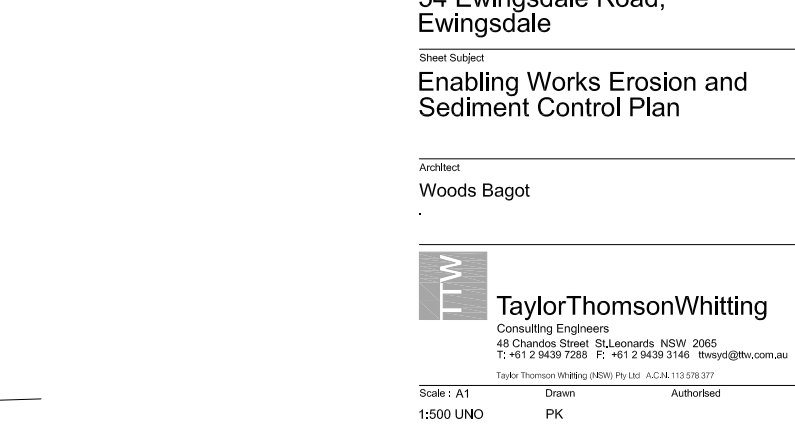
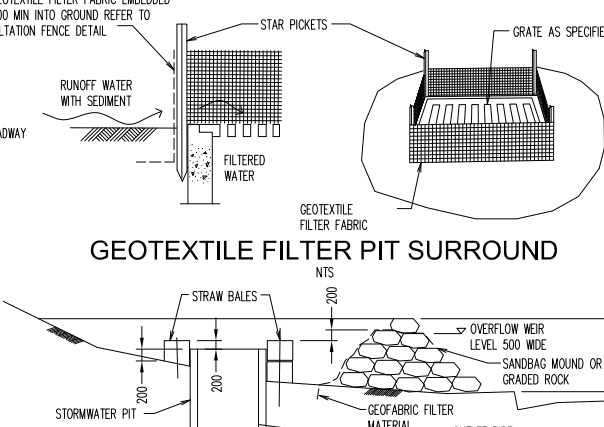
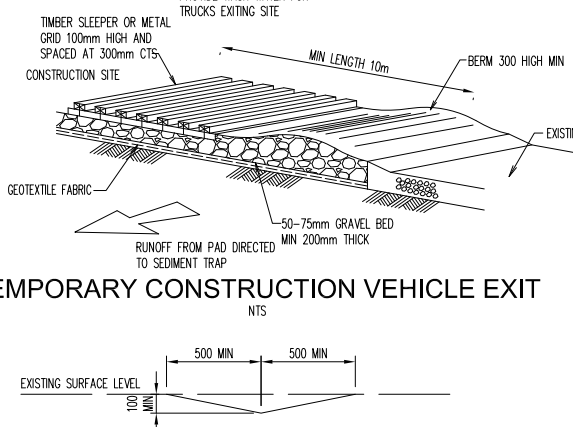
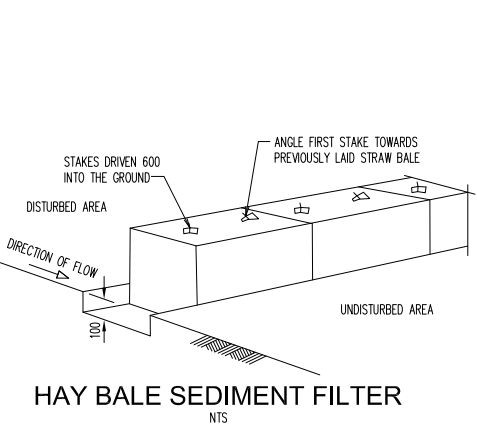
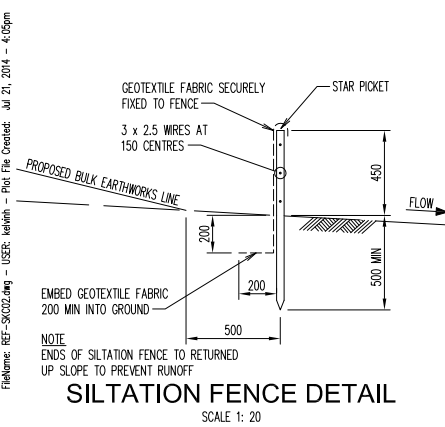
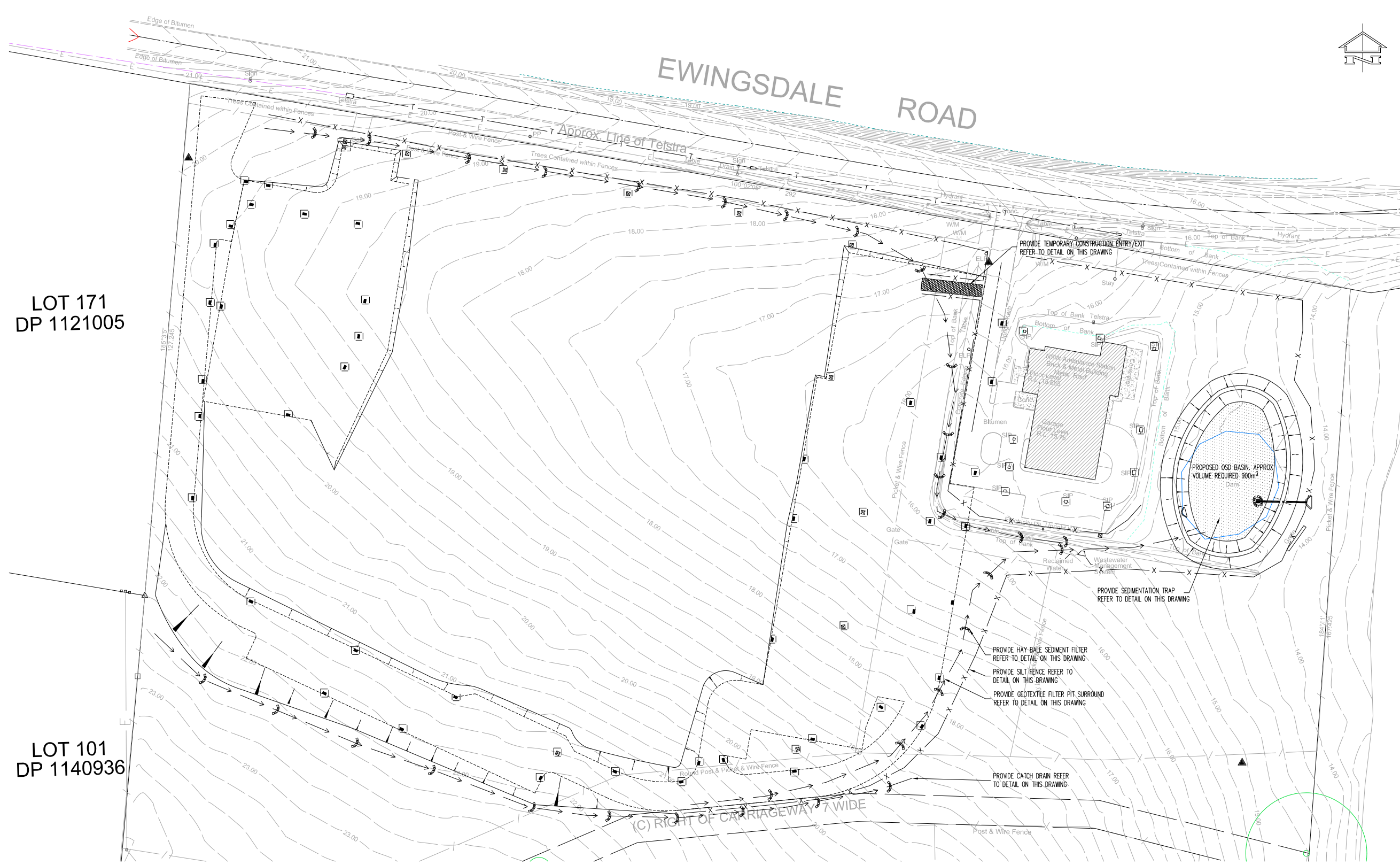
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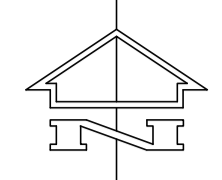
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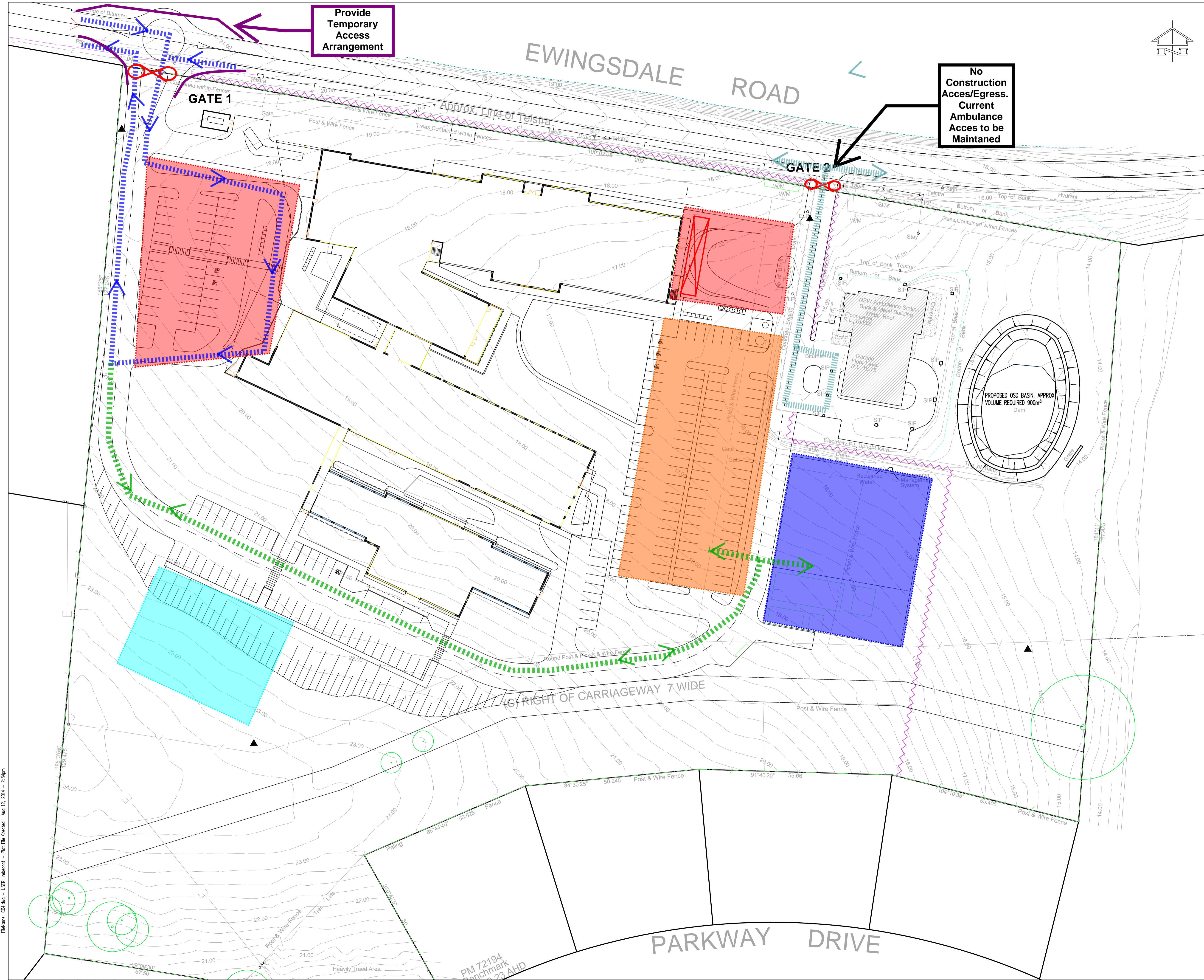
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- LEGEND**
- Vehicle Turning Area
 - Construction Access Path
 - Construction Car parking
 - Potential Additional Construction Car Parking (if required)
 - Site Storage & Builders Compound
 - Site Fence
 - Temporary access arrangement
 - Waste Material Handling/Storage Area
 - Temporary Site Access Route
 - Security Gate
 - Emergency Access



No Construction Access/Egress. Current Ambulance Access to be Maintained

Provide Temporary Access Arrangement

| Rev | Description | Eng | Draft | Date |
|-----|-------------|-----|-------|----------|
| A | | | | 12.08.14 |

Project
Byron Shire Central Hospital
 54 Ewingsdale Road,
 Ewingsdale

Sheet Subject
PROPOSED CONSTRUCTION SITE PLAN DRAFT

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