

Determination Report

Digital Train Radio System - Waterfall Site

December 2011

1 Background

The Waterfall Base Transceiver Station (BTS) is one of approximately 255 radio facilities which will be constructed as part of a Digital Train Radio System (DTRS) to provide enhanced, efficient and reliable train communication. At the time of the Determination the proposed work on the Waterfall site consists of the following:

- a. a new 31 metre tall steel monopole with a bored pile foundation and four Argus panel antennas mounted onto the monopole.
- b. one BTS cabinet and one power cabinet which will be installed on a concrete base slab about two metres away from the monopole.
- c. power supply from the existing main switchboard in the Waterfall car park 450 metres south of the site;
- d. an approximately 10 metre fibre optic cable installed underground and a DISAC placed on the ground; and
- e. earthing and other associated activities.

Construction work will include excavation for trenches, monopole, concrete slab and earthing. Operation activities are insignificant and related essentially to maintenance of installed plant and equipment.

Before proceeding with proposed activity, RailCorp must make a determination in accordance with the provisions of Part 5 of the *Environmental Planning and Assessment Act 1979 (EPAA)*. A Review of Environmental Factors (REF) was prepared by UGL Infrastructure to assist in determination and to ensure compliance with planning and environmental legislation.

1.1 Review of Environmental Factors

The REF has been assessed and considered against the requirements of Section 111 of the *Environmental Planning and Assessment Act 1979*. In considering the proposed activity, all matters affecting or likely to affect the environment have been addressed.

However, during the preparation of the REF the project has been modified which affects the scope of REF and ultimately its determination. The status of these modifications is presented below.

TABLE 1: Scope of work covered by the REF

	Project Activity	Modifications to the REF	Environmental assessment provided by the REF
a	New monopole and antennas	No	OK
b	A new power and BTS cabinets	No	OK
c	Power supply	No but 450m of trenching not accounted in the REF	Can be handled by CEMP
d	Cable for data transfer	Scope is modified to provide for DISAC trial	Minor trenching can be handled by CEMP A separate REF for DISAC is already Determined
e	Earthing works, concrete slab	App. 100m of trenching has not be accounted in the REF	General provisions in the REF can be handled by CEMP

This Determination provides for all items provided under the scope of work for the Waterfall site. The environmental impact of the activities which have not been covered appropriately in this REF (items c, d and e) will have to be managed through the CEMP as condition of this Determination.

The environmental impact of the cabling for data transfer (item d) is subject to a separate Determination and therefore is excluded from this Determination.

1.2 Consultation and Assessment of Submissions

Consultation about the REF was carried out between 14 November and 4 December 2011 (inclusive). During this time a total of 400 letters were distributed to residents, businesses and community organisations in Waterfall. Premises within 250 metres of the site were doorknocked and letters were delivered to properties within 500 metres of the site. The REF was published on the RailCorp website where an online feedback form was also available. Meetings were held with Sutherland Shire Council and the National Parks and Wildlife Service to discuss the DTRS.

No submissions were received about proposed DTRS work at Waterfall. Therefore, it is considered that the key issues have been addressed satisfactorily and do not require modifications to the Proposed Activity, providing the mitigation measures detailed in the REF are implemented.

1.3 Consideration of the Environmental Impacts

The proposed activity described in the REF will have some environmental impacts which can be controlled satisfactorily. Having regard to the proposed management and mitigation measures proposed, this assessment has considered that these impacts are unlikely to be significant and therefore an approval for the Project does not need to be sought under Part 3 of the *Environmental Assessment and Planning Act, 1979*.

It is also considered that the proposed activity does not trigger the approval regime under Part 3 of the *Environment Protection and Biodiversity Conservation Act*.

The Environmental Impact Assessment is recommended to be approved subject to the proposed mitigation and management measures included in the Conditions of Approval contained in this Determination Report.

2 Determination

Environmental Impact Assessment

DIGITAL TRAIN RADIO SYSTEM –WATERFALL SITE

REVIEW OF ENVIRONMENTAL FACTORS, SUBMISSIONS REPORT & DETERMINATION REPORT

APPROVAL

I, Tony Cunningham Program Manager, Projects Division, Engineering and Project Group, RailCorp, in my capacity as Determining Authority state as follows:

1. In accordance with Section 111 of the *Environmental Planning and Assessment Act, 1979*. I have examined and considered Review of Environmental Factors for DTRS site at Waterfall.
2. I determine on behalf of RailCorp (the proponent) that the proposed activity may be carried out in accordance with the Conditions of Approval in this Determination Report, consistent with the proposal described and mitigated in the Review of Environmental Factors as amended by the scope detailed in this report, and mitigation measures included in the Conditions of Approval.



Tony Cunningham
Program Manager
RailCorp Projects Division
Engineering and Project Group

Date: 12 December 2011

3 Conditions of Approval

The Determination of this project is for the scope of work as specified in Table 1 and is subject to compliance with the Conditions of Approval outlined below.

3.1 General

The work related to cable connection should be undertaken in accordance with the REF for DISAC trials which has been separately Determined.

3.1.1 Terms of Approval

The project must be carried out in accordance with the:

- (a) Review of Environmental Factors Waterfall Site, prepared by UGL Infrastructure dated July 2011;
- (b) these Conditions of Approval.

In the event of any inconsistency with the proposal as described in (a) or (b) these Conditions will prevail.

3.1.2 Statutory Compliance

The following approvals, licences and permits must be obtained prior commencement of any site activities.

Responsible Authority	Approval/Licences/Permits
RailCorp	Determination under Part 5 of the <i>Environmental Planning and Assessment Act 1979</i>

These Conditions do not replace the obligation to obtain all other licences, permits and approvals where are required by law to be obtained and maintained in respect to this project.

3.2 Communications

3.2.1 Community Notification and Liaison

Before and during construction, the community is to be notified of works to be undertaken, the estimated hours of construction and details about how further information can be obtained including the project information line number.

Construction specific impact including traffic changes and controls, access changes, detours, high noise generating activities and work required outside the nominated working hours must be advised to the local community before such work is undertaken.

3.2.2 Website

RailCorp will provide electronic information related to the project, on dedicated pages within its existing website, including:

- a. the final REF and determination report;
- b. details of construction information and progress of construction activities; and
- c. contact telephone number for information and complaints.

3.2.3 Site Notice

UGL Infrastructure will ensure that a site notice(s) will be prominently displayed at the boundaries of the site for the purposes of informing the public of project details. The notice(s) is to satisfy all but not be limited to, the following requirements:

- (a) the notice is to be durable and weatherproof and is to be displayed throughout the works period; and
- (b) the approved hours of work, the name of the site manager, the responsible managing company, its address and contact phone number for any enquiries, including construction/ noise complaints are to be displayed on the site notice.

3.2.4 Complaints and Enquiry Management

RailCorp will maintain a project contact phone number for the duration of the construction works and the first year of operation. The community must also be provided with both a postal address and an email address to which complaints and enquiries can be sent.

Details of all complaints and enquiries received are to be recorded in a register. The register must include but not be limited to:

- (a) the date and time, where relevant, of the complaint or enquiry;
- (b) the means by which the complaint or enquiry was made (telephone, mail or e-mail);
- (c) any personal details of the complainant or enquirer that were provided, or if no details were provided, a note to that effect;
- (d) the nature of the complaint or enquiry;
- (e) any action(s) taken in relation to the complaint or enquiry, including any follow-up contact with the complainant or enquirer; and
- (f) if no action was taken in relation to the complaint or enquiry, the reason(s) why no action was taken.

3.3 Environmental Management

3.3.1 Environmental Induction

Before construction begins, all contractors must be inducted on the key project interfaces, associated environmental risks and mitigation measures.

3.3.2 Construction Environmental Management Plan

A Construction Environmental Management Plan (CEMP) must be prepared for all works under this Determination, and implemented before construction begins. The CEMP must be prepared in accordance with these Conditions, REF mitigation measures, DTRS Environmental Management Plan and all relevant Acts and Regulations. The CEMP must include:

- (a) all environmental management sub-plans required by these Conditions,
- (b) definition of the role, responsibility, authority, accountability and reporting of personnel relevant to compliance with the CEMP;
- (c) identification of relevant statutory obligations, including all approvals and consultations/agreements required from other authorities and stakeholders, and key legislation and policies;
- (d) environmental controls maps which provide a visual representation of all the controls that are to be implemented on site;
- (e) details of the induction and training of all employees, contractors and sub-contractors on the requirements of the CEMP; and,
- (f) a program for site inspections and audits.

The CEMP and any other required plans, as detailed in these Conditions, are required to be approved by RailCorp before work begins.

3.3.3 Standard Construction Hours

Construction activities must be restricted to the hours of 7:00am to 6:00pm (Monday to Friday); 8:00am to 1:00pm (Saturday) and at no time on Sundays and public holidays.

All works outside normal hours must gain written approval from the proponent and the community must be notified at least five days in advance, of the proposed works.

3.4 Environmental Controls

The environmental controls will be fully compliant with the measures specified in the REF. Any exemption and/or variations from these controls must be justified and approved by RailCorp before work begins. In addition to the measures specified by the REF, the UGL Infrastructure s must satisfy the following conditions of this Determination:

3.4.1 Soil and Water Management Plan

A level 2 Soil and Water Management Plan (SWMP) must be prepared to address all project related activities and be implemented before construction begins. The SWMP must be prepared by a competent person and should be fully in accordance with the Landcom's *Managing Urban Stormwater: Soils and Construction 4th Edition* (Landcom, 2004).

The SWMP will include:

- (a) identification of responsibilities for implementation of the plan and/or its components;
- (b) identification of all construction activities that could cause soil erosion or discharge sediment or water pollutants from the site;
- (c) descriptions of management methods to minimise soil erosion or discharge of sediment or water pollutants from the site including a strategy to minimise the area of bare surfaces during construction;
- (d) descriptions of the location and capacity of erosion and sediment control measures;
- (e) identification of the timing and conditions under which construction stage controls will be decommissioned;
- (f) identification of wastewater that may be generated on-site and measures required for effective management, including treatment and disposal; and
- (g) a program for inspecting, reporting on and responding to the effectiveness of the SWMP to ensure controls are being implemented efficiently.

3.4.2 Contamination, and Hazardous Materials Management

No storage of chemicals is allowed on site.

As part of the CEMP, a strategy must be developed to effectively manage any contamination that may be encountered or suspected during the proposed works. The strategy should include, but not limited to:

- (a) safe procedures for working with potentially contaminated sites, including handling, storage and removal of contaminants.
- (b) clean up and verification; and
- (c) reporting to RailCorp and other authorities.

3.4.3 Waste Management Plan

As part of the CEMP, a detailed Waste Management Plan (WMP) must be prepared and implemented to correctly identify waste streams and define proper strategies for effective management. In addition to the types of waste already been identified in the REF, proper consideration of waste concrete should be given in the WMP. Management of concrete waste must be in accordance with the *Environment Best Management Practice Guideline for Concreting Contractors* (DECC, 2004)

The WMP must include information about:

- (a) methods of handling, segregating and storage of all waste generated as part of the project;
- (b) the need for environmental safeguards and the adoption of environmentally sensitive work practices to minimise waste and advance the values of ecologically sustainable development;
- (c) arrangements for waste which cannot be re-used, recycled or reprocessed to be disposed of at a licensed waste disposal facility;
- (d) procedures for classifying waste in accordance with DECCW's *Waste Classification Guidelines (2009)*; and
- (e) Reporting on the amount of material generated, the amount recycled and the amount purchased with recycled content as part of the project.

3.4.4 Traffic Management Plan

The UGL Infrastructure must prepare a construction Traffic Management Plan (TMP). The TMP will have to further detail the mitigation measures outlined in the REF and will have to be prepared and implemented in consultation with the Sutherland Shire Council, and will include:

- a) identification of designated transport routes for heavy vehicles to the project site, including ingress and egress;
- b) identification of haulage and construction vehicle volumes and detailing measures to minimise peak time congestion and intersection impacts at local and arterial roads;
- c) measures to minimise traffic disruptions around the project site; and
- d) identification of designated construction personnel parking areas;