Report to accompany an application for Director General's Requirements relating to State Significant Development.

Proposed Waste Management Facility and associated Truck Depot, with ancillary components including construction of a Crown Public Road

25 Government Road Bargo

Purpose of this Report

This report has been prepared to accompany an application for Director General's Requirements relating to State Significant Development at a site known as No 25 Government Road Bargo (main site).

Proposed State Significant Development

The proposal involves the erection and use of a Waste or Resource Management Facility, specifically a Waste or Resource Transfer Station and a Resource Recovery Facility, with associated Truck Depot, administration and other facilities on the main site, as well as off-site roadworks including the construction of an unformed Crown Public Road and other minor roadworks on existing public roads.

The proposal is State Significant Development pursuant to Schedule 1, Clause 23(2), State Environmental Planning Policy (State and Regional Development) 2011, as:

- The proposal is for a Waste of Resource Transfer Station;
- The site is located within the metropolitan area of the Sydney Region; and
- The facility proposes to handle in excess of 100,000 tonnes per year of waste

Format of this Report

This report addresses the matters listed at Step 1 – Introduction and Notes – contained on the Department's website, relating to "Request for DGRs for State Significant Development".

1. Site Details

Provide high quality aerial photographs, maps or figures that clearly depict the following:

- The local and regional context of the proposal
- Surrounding development and any potentially affected properties
- The location of key infrastructure and environment features

RESPONSE

The above photograph depicts the subject site and its immediate surrounds.

- To the east of the main site is the existing Bargo Waste Management Centre, which is a landfill controlled by the local Wollondilly Shire Council.
- To the south and west of the site is land used for hobby farming.
- To the north of the site is land with a dense vegetative cover and not currently used for any purpose.

The photograph also depicts the section of Crown Public Road to be constructed as an ancillary component of the development. The relevant section is approximately 950 metres long and passes mainly through open paddocks. It is necessary to construct a bridge to cross a small watercourse near its eastern end.

There are no dwellings within 500 metres of the main site. The *Handbook for design and Operation of Rural and Regional Transfer Stations* prepared by Department of Environment and Conservation NSW recommends a buffer distance of 250 metres between a transfer station and a dwelling or other sensitive receiver not associated with the proposed facility. (Part 1, p11, section 4.5.4)

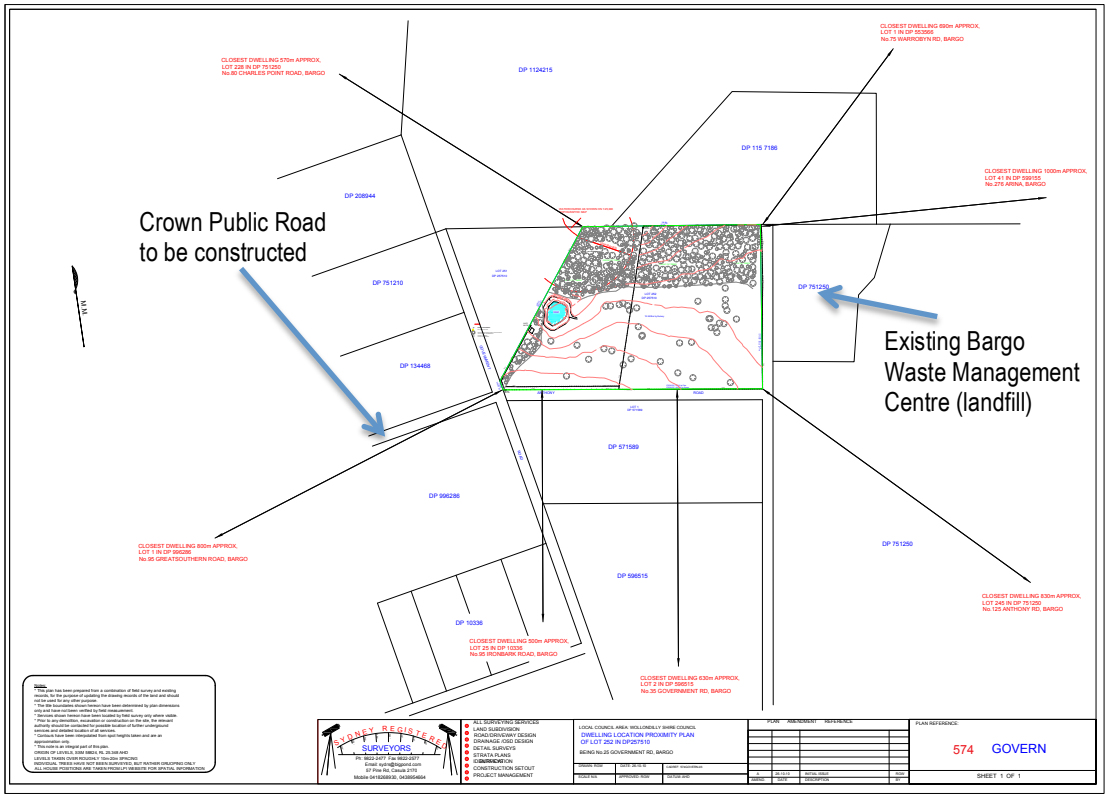
The property immediately to the south of the main site, beyond Anthony Road, will contain some land within 250 metres of the facility. However, it still has an adequate area for the future erection of a dwelling beyond the 250 metre buffer. This land is currently vacant and is not used for any purpose.

The properties to the north and west of the main site either 1) generally extend through to Great Southern Road and have dwellings already erected which are in excess of 250 metres from the proposed transfer station, or 2) are vacant but have adequate area for the future erection of a dwelling beyond the 250 metre buffer.

The property to the east of the main site is the existing Bargo Waste Management Centre and is not considered to be a sensitive receiver. This site will also never accommodate a dwelling.

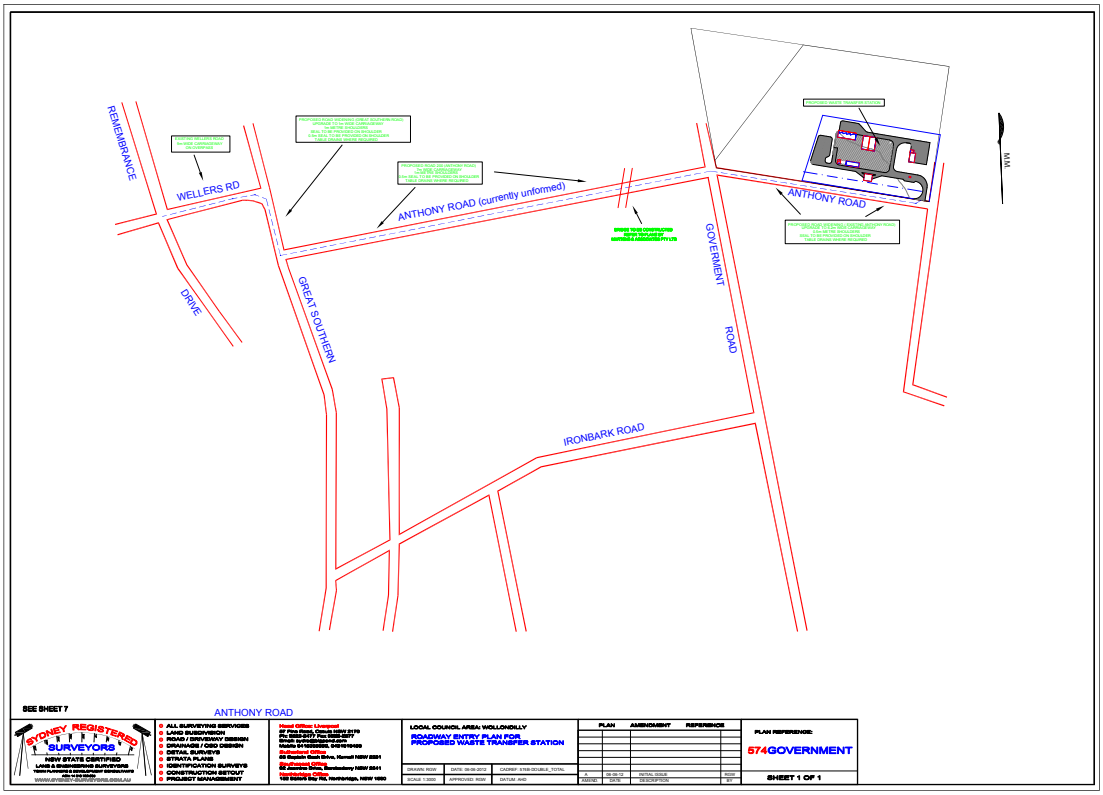
The photograph above depicts the site in a regional context. Bargo is at the southern extent of the Wollondilly Shire and is proximate to the Main Southern Railway (Sydney to Melbourne) and enjoys easy access to the F5 Freeway. Remembrance Driveway, the main road running north-south through Bargo, is an existing RMS approved B Double route.

An unnamed watercourse to the west of the main site and to the east of the main site, as well as some minor watercourse tributaries, flow in a northerly direction into Bargo River, as is visible on the above photographs.



The plan above depicts the cadastral setting of the main site, together with straight-line approximate distances to surrounding dwellings and a minor watercourse in the northwest corner.

The plan below depicts the preferred route to the main site from Remembrance Driveway (RMS approved B Double Route).



2. Development Description

Provide a clear and concise summary of the proposal that describes the types of activities that will be undertaken during each stage of the development.

RESPONSE

Construction Works

A. Waste or Resource Transfer Station and Resource Recovery Facility (erection and operation)

A **Waste or Resource Transfer Station** is defined as *a building or place used for the collection and transfer of waste material or resources, including the receipt, sorting, compacting, temporary storage and distribution of waste or resources and the loading or unloading of waste or resources onto or from road or rail transport* (State Environmental Planning Policy (Infrastructure) 2007).

A **Resource Recovery Facility** is defined as *a building or place used for the recovery of resources from waste, including works or activities such as separating and sorting, processing or treating the waste, composting, temporary storage, transfer or sale of recovered resources, energy generation from gases and water treatment, but not including re-manufacture or disposal of the material by landfill or incineration* (State Environmental Planning Policy (Infrastructure) 2007)

(Note: Whilst the WRTS and the RRF are separately defined land uses in the SEPP (Infrastructure) 2007, in practice they operate together within the one facility in this instance).

The proposed **erection** of the Waste or Resource Transfer Station (WRTS) and Resource Recovery Facility (RRF) comprises the following on-site works:-

- Structures as depicted on the plans and further described in this report
- Weighbridge
- Internal roads
- Removal of a small number of isolated trees
- Installation of an onsite effluent disposal system
- An acoustic wall approximately 30 metres long and 4.5 metres high (consisting of a 3.5 metre earth mound with a 1 metre high fence at the top of the mound)
- Earthworks required for the construction of the above works
- Fencing as required
- Signage as required

The proposed **operation** of the Waste or Resource Transfer Station and Resource Recovery Facility comprises:-

- Dumping, sorting and separating of waste
- Removal of waste material to final destination
- Recovery and recycling of material (including temporary storage and sale of recovered resources by wholesale – that is, not on-site retail)
- Processing of concrete, bricks and the like by crushing for reuse off site (including temporary storage and sale of recovered resources by wholesale – that is, not on-site retail)
- Processing of greenwaste by mulching and chipping for reuse off site (including temporary storage and sale of recovered resources by wholesale – that is, not on-site retail)

Ancillary facilities

Ancillary to the operation of the WRTS and RRF, the following is proposed:-

- Office / administration facilities
- Staff amenities / toilets / showers and the like

B. Truck depot (erection and operation)

A **Truck Depot** means *a building or place used for the servicing and parking of trucks, earthmoving machinery and the like* (Standard Local Environmental Plan template)

- Overnight garaging of trucks / vehicles
- Mechanical and other repairs of vehicles belonging to the operator of the WRTS and RRF (not a commercial mechanical repair shop or panel beaters)

C. Off site works

Road and drainage works are required to be undertaken in order to provide adequate vehicular access to the proposed facility.

The required road and drainage works may be summarised as follows:-

- Construction of the site access off Anthony Road at the southeast corner of the site
- Widening of the existing constructed section of Anthony Road
- Construction of the extension of Anthony Road (between Government Road and Great Southern Road), including intersection works at each end and the construction of a bridge structure

- Widening of Great Southern Road between the intersection of the proposed new section of Anthony Road and Wellers Road
- Remedial works to the approaches to the Wellers Road railway overpass
- Some minor works on the deck of the Wellers Road railway overpass
- Some reconstruction work at the intersection of Wellers Road and Remembrance Driveway
- Installation of fencing within the Anthony Road road reserve around the cluster of *Pomaderris Brunnea*, in order to provide some level of protection and notification of their existence

Operational Works

The facility is proposed to cater for the following volumes of waste:

Waste Category	Design capacity estimate per annum
General waste (putrescible)	20,000 tonnes
General household waste (non-putrescible)	12,000 tonnes
Construction and Demolition waste	20,000 tonnes
Commercial and Industrial waste	18,000 tonnes
Greenwaste	10,000 tonnes
Recyclables	20,000 tonnes
Chemicals	1,000 tonnes

The above volumes total 101,000 tonnes.

It is proposed that the facility would accept the following types of waste:

Categories	Recyclable	On-site procedure
Putrescible	No	Drive to raised main dumping area, tip/unload onto moving floor, conveyed to hopper, compacted, transfer trailer to heavy vehicle for transportation to landfill
Rubbish	Some	Tip/unload generally onto moving floor area, sorted, unrecoverable waste conveyed to hopper for compaction and transportation off-site
Mattresses	Metal springs only	Tip/unload to designated area for transportation off-site
Glass	Yes	Tip/unload to designated area for transportation off-site
Paper / cardboard	Yes	Tip/unload to designated area for transportation off-site
Timber	Most	Sorted for recoverable items, balance transferred to vehicle for transportation off-site
Concrete / bricks	Yes	Tip/unload to designated area, loaded by front-end loader to crushing/grinding machine, deposited to heavy vehicle for transportation off-site

Dirt (VENM)	Yes	Tip at designated area for transportation off-site
Building rubbish	Some	Drive to raised main dumping area, tip/unload onto moving floor, conveyed to hopper, compacted, transfer trailer to heavy vehicle for transportation to landfill
Plastic	Some	Tip/unload to designated area for transportation off-site
Tyres	Yes	Unload by hand to designated area for transportation off-site
Oil	Yes	Unload containers by hand to designated area for transportation off-site
Batteries	Yes	Unload by hand to designated area for transportation off-site
Gas bottles	Yes	Unload by hand to designated area for transportation off-site
Paint / chemicals etc	No	Unload by hand to designated area for transportation off-site
Greenwaste	Yes	Tip/unload to designated area, loaded into chip/mulch machine, deposited to vehicle for transportation off-site

It is also proposed to mulch / chip greenwaste at the facility, as well as crush / grind broken concrete, bricks and the like.

3. Permissibility and Strategic Planning

Identify the strategic planning documents, environmental planning instruments and key development standards applying to the development, including any development standards not being met.

RESPONSE

There are no specific strategic planning documents applying to the subject site or to the proposed activity. The facility would be designed to ensure that it is consistent with the aims, objectives and guidance contained in the *NSW Waste Avoidance and Resource Recovery Strategy 2007.*

The key environmental planning instruments applying to the development are as follows:-

- State Environmental Planning Policy (State and Regional Development) 2011
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy No 33 – Hazardous and Offensive Development
- State Environmental Planning Policy No 55 – Remediation of Land
- Sydney Regional Environmental Plan No 20 – Hawkesbury Nepean River
- Wollondilly Local Environmental Plan 2011
- Wollondilly Development Control Plan 2011

The proposal is generally consistent with the objectives and requirements of the above listed instruments and no variations are sought in relation to any development standards.

Whilst the Waste or Resource Transfer Station and the Resource Recovery Facility are not permitted by the Wollondilly LEP 2011, RU1 zone, SEPP (Infrastructure) 2007 is invoked to enable the proposed development in the zone. Part 1, Clause 8 of SEPP (Infrastructure) 2007 provides that in the event of an inconsistency between itself and any other Environmental Planning Instrument (EPI), the SEPP will prevail to the extent of the inconsistency. Therefore, in this circumstance, the proposed WRTS and RRF are made permissible by the SEPP, notwithstanding they are prohibited by WLEP 2011.

The Truck Depot is permissible with consent by Wollondilly LEP 2011, RU1 zone, and is associated with the Waste Management facility. The off-site road construction of the Crown Public Road is also permissible with consent under the Wollondilly LEP 2011.

4. Impact identification and assessment

Identify and prioritise the expected environmental impacts (positive and negative) associated with the development, based on a preliminary risk assessment. Briefly outline any strategies to address the impacts identified.

RESPONSE

The main environmental impacts anticipated are as follows:

Noise

Noise impacts may relate to the operation of the facility, traffic noise and noise during construction of the facility and road works.

A detailed noise assessment covering each of these risk factors will be undertaken and lodged with the application.

An acoustic barrier is proposed at the southwest corner of the facility to reduce noise impacts from the greenwaste mulching and concrete crushing activities.

The buffer distances provided will assist to ameliorate noise impacts.

Air quality

Air quality impacts may relate to odour from the putrescible waste and dust from crushing activities and demolition waste. A detailed air quality assessment covering each of these risk factors will be undertaken and lodged with the application.

The facility will incorporate a moving floor system, which conveys waste to a hopper, where it is compacted into a 60cum transfer trailer. Once the waste is conveyed to the hopper, the system is sealed and emits very little odour. Transfer trailers will be removed from the site once full or after a maximum of 2 days. The moving floor and surrounding unloading areas will be washed down regularly as part of good management practices to minimize the risk of odour generation.

In order to minimize dust, all roads and manoeuvring areas within the site will be bitumen sealed. All other areas will be vegetated so that no bare ground exists.

All drop off areas where there is a potential for dust generation will be covered or enclosed.

The mulching and crushing area will be covered or enclosed, or wet down regularly to suppress dust generation.

Traffic

A detailed traffic analysis and report will be prepared for this proposal and lodged with the application.

The proposal will result in an increase in traffic, particularly heavy vehicles. All local access roads along the preferred access route to the site will benefit from upgrading work at the developer's expense. The construction of the Crown Public road at no cost to the public will benefit to local community because it will reduce the volume of traffic currently using residential streets to access the existing Bargo Waste Management Facility.

Flora and fauna

A detailed flora and fauna report, including 7 part test, will be undertaken and lodged with the application. The facility utilizes the predominantly cleared section of the site, which minimizes disturbance to existing vegetation.

An area comprising about one-third of the site, at the northern side, is heavily vegetated. This area will be fenced off and protected under a Conservation Management Agreement.

A 20 metre wide strip along the southern edge of the site will be reserved and dedicated to regeneration of native vegetation, including the species *Pomaderris Brunnea,* of which a few specimens in a single cluster have been identified (not in the vicinity of the proposed facility).

A 25 metre wide strip along the western edge of the site will be reserved in order to maintain a continuous canopy of trees, to assist with the free movement of animals.

Soil and Water

A detailed Water Cycle Management Study (WCMS) will be prepared and lodged with the application.

The WCMS will detail the stormwater regime for the facility, including details of proposed water filtering and reuse.

Detailed soil tests will be carried out and a report lodged with the application, detailing the site soil characteristics and assessing the suitability of the site for the proposed activity.

Leachate is not expected to be an issue, because the areas where putrescible waste is managed is covered and sealed.

5. Justification

Explain why the site was chosen for the proposal and briefly discuss the alternatives considered. Outline the strategic context for the proposal, including the benefits it would bring to the wider region and / or State.

RESPONSE

This site was chosen for the proposal because of the following reasons (in brief):

- Its proximity immediately adjacent to the existing Bargo Waste Management Centre (landfill) was considered to provide synergies in terms of the economic and social management of waste for the region.
- Its proximity at the edge of the township of Bargo, meaning it could provide buffer distances twice as large as that recommended by the *Handbook for design and Operation of Rural and Regional Transfer Stations,* whilst still being close enough to provide convenience to users.
- Ease of access to F5 Freeway to travel north and south

- Vehicular traffic to the site from the northern towns of Tahmoor, Picton and Thirlmere (areas where population growth is planned) does not have to travel through residential areas to access the site
- Close proximity to the growth areas of the Wollondilly Shire
- The access road to the site (Anthony Road) is not used for any purpose other than access to the existing waste facility, so it is not a through road accommodating traffic to dwellings or any other destination. This confines the use of the road generally to those vehicles travelling either to the existing landfill or the proposed transfer facility
- Minimal environmental impacts, including a minimal number of paddock trees only required to be removed
- The subject site and immediate area are not agriculturally productive

Two other areas were considered:

Arina Road Bargo, which has very convenient access to the Freeway, but has 3 major downsides:

- The lots are generally elongated in shape, meaning minimal buffers can be provided to adjoining / nearby dwellings
- Significant vegetation would need to be disturbed
- Vehicles travelling from the northern towns of Tahmoor, Picton and Thirlmere (areas where population growth is planned) would have to travel through residential areas to access the site

Silica Road Bargo, which has reasonable access to the Freeway, but also has several major downsides:

- Significant vegetation would have to be removed
- Several watercourses traverse the area
- Vehicles travelling from the northern towns of Tahmoor, Picton and Thirlmere (areas where population growth is planned) would have to travel through residential areas and the main township of Bargo to access the site
- It may result in rural land conflict because there are at least two active, productive farms in the vicinity

Benefits to the wider region

Growth of Wollondilly

The Wollondilly LGA has been identified as a growth area to help meet the demands of the Sydney housing market. A recent strategy prepared by Council identifies potential for an additional 2000 dwellings in the township of Bargo alone. In addition, the rezoning of substantial areas of Picton, Tahmoor and Thirlmere to residential zones is almost complete and gazettal is expected in 2013.

Announcements have been made recently of up to 15,000 new house sites over a period of time in the Wilton area. In addition, separate rezoning applications are at various stages of completion for a number of other sites within the immediate area. Wollondilly Council is currently managing more than twice as many planning proposals for rezoning than any other LGA in NSW.

In addition, the expected residential growth will be accompanied by increases in construction waste, as well as waste from expanding commercial areas.

No strategic plan or public waste facility

Despite all the planned growth over the next few years in this area, Wollondilly Council has no strategic plan to manage the increased waste that will occur in conjunction with the growth.

Currently, Wollondilly is one of the only Council's on the edge of the metropolitan area that does not have a publicly accessible waste transfer station. The existing landfill site does not accept putrescible waste, so all existing putrescible waste is transported in a semi compacted state to Jack's Gully in neighbouring Camden Council LGA. With the population set to increase significantly, this is not a satisfactory situation. The proposed waste transfer station will be able to accommodate the expected waste volume and thereby benefit the wider region.

Proximity to existing facility

The location of the proposed transfer station, immediately adjacent to the existing landfill, will result in synergistic benefits to the wider region. The life of the landfill would be extended because of increased resource recovery efficiencies and reduced travelling costs to dispose of sorted non-putrescible waste. Costs would therefore be reduced, with benefits passed on to the consumer.

The clustering effect also allows the waste management to be confined to a single area, where mitigation measures can be implemented to minimise impacts to the surrounding community in one location.

Expanded recycling capacity

The designers of the moving floor system have reported that some current users estimate increases in resource recovery (meaning reduction in waste to landfill) of up to 70%. The current adjoining landfill has no weighbridge and no power connected to the site. The proposed state-of-the-art transfer facility, with weighbridge, will be able to monitor waste in a more efficient manner and increase resource recovery significantly. This will help the local community to achieve State government targets for resource recovery.

New infrastructure at no cost to the community

The proposal will necessitate the construction of a new section of Anthony Road (currently unformed Crown Public Road), as well as a new intersection at Remembrance Driveway and Wellers Road (identified as a black spot) and other local road improvements – all at the developer's cost. The new section of road has been proposed in order to take existing and additional traffic away from residential areas.

Access to the F5 freeway

The site can be accessed by the wider community by exiting the F5 freeway at the Bargo exit. The route to the site is predominantly along an RMS approved B Double route.

6. Consultation

Outline any consultation (with the community, local councils, other Government agencies) already undertaken and proposed to be carried out for the proposal.

RESPONSE

At this point no consultations have been undertaken in respect of this State Significant Development proposal. Upon receipt of DGRs, appropriate consultations will be carried out as directed.

7. Capital Investment Value

Provide an accurate estimate of the cost of carrying out the proposal. If your proposal is identified as State Significant Development by a capital investment value threshold in Schedule 1 of SRD SEPP, a quantity surveyor's report confirming the capital investment value of the development is required.

RESPONSE

The estimated cost of the proposed development, including construction of the facility, construction of the road works, cost of buildings, landscaping, essential services and machinery, but excluding the land purchase price, is $3,500,000.

This proposal is not identified as State Significant Development by a capital investment value threshold, so a quantity surveyor's report is not required.