

**Proposed Energy from Waste Facility
Trident Park, Cardiff**

Transportation Scoping Report



**September 2007
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DRAWINGS

Drawing 1 Site Location Plan

Drawing 2 Application Site

1.0 INTRODUCTION

SLR Consulting Limited (SLR) has been appointed by Viridor to submit a planning application on their behalf for the introduction of an Energy from Waste (EfW) facility at Trident Park, off Ocean Way, Cardiff. Not only would the EfW provide Cardiff Council and surrounding local authority areas with a waste disposal option alternative to landfill, but also a facility for collection and industrial waste treatment.

As part of the Environmental Impact Assessment, it is assumed that a Transport Assessment (TA) would be required. This scoping report has been produced to provide the local highway authority with details relating to the methodology proposed in producing the TA. The TA would be produced with guidance from the Department for Transport Document 'Guidance on Transport Assessment' which was published in March this year (2007).

2.0 APPLICATION SITE DESCRIPTION

The application site is located at Trident Park, Cardiff as indicated in Drawing 1. Trident Park is a prominent 50 acre site within Cardiff Bay, the vibrant and successful regeneration of Cardiff's docklands. The Park comprises ten existing warehouses and office buildings and three plots suitable for development; it is one of these plots which is proposed for the EfW. The application site is shown in Drawing 2.

Further information on Trident Park can be found on its web site at <http://www.tridentparkcardiffbay.co.uk/>.

3.0 SURROUNDING AREA DESCRIPTION

The areas surrounding the application site are of an industrial nature. To the south of the site is the Cardiff Docks. To the north east is Ocean Way, which is the main road linking the Docks with the City Centre. There are no residential properties nearby and Trident Park is close to the existing landfill site, meaning site traffic would not need to be redirected to a different part of the city.

4.0 DEVELOPMENT PROPOSALS

It is proposed that an Energy from Waste facility be introduced within the application site boundary. The plan is to create a state-of-the-art waste management and resource recovery facility on the Trident Park site that would place Cardiff at the forefront of waste management practice in the UK.

4.1 Developments Proposed by Others

Trident Park are proposing to introduce office development within the north-eastern part of the Park. Associated with this development is a small roundabout which is proposed within the site near the northwest access. These proposals are illustrated in Drawing 2.

5.0 SITE ACCESS PROPOSALS

Glass Avenue is currently the main means of access to Trident Park and it is via this location that, subject to capacity assessments, the access to the proposed EfW will be sought. Glass Avenue is an established access road built to adoptable standard and is accessed from the 40m roundabout on Ocean Way. There are no existing safety issues associated with the existing access arrangements.

6.0 PARKING PROVISION

Parking for the development by all relevant transport modes will be provided in accordance with Cardiff Council's document 'Access, Circulation & Parking Requirements'.

7.0 ACCIDENT ANALYSIS

It is a requirement to conduct a full accident data analysis in TA's. The TA will include a study of data which will be collected for the latest 5-year period. The data will be examined for any statistically significant accidents which indicate existing safety problems, or which could be exacerbated by the development proposals.

The level of severity of the accidents and the cause of accidents will be assessed. Any patterns in accidents, accident blackspots or clusters would be identified and discussed in the TA.

8.0 SUSTAINABILITY

A review will be made of the facilities available for travelling to the site by non-car modes.

The docks and industrial railway line exists to the south of the application site. The practicality of using rail and sea modes for importing / exporting waste materials is understood to be infeasible at present and therefore, the TA will assume that all waste material is to be imported / exported by road. However, there may be future opportunities for utilising rail and sea and this will be covered in the TA.

9.0 POLICY

The TA will acknowledge the national and local policies appropriate to the development of Trident Park. The TA will seek to demonstrate how the proposed EfW will address and conform to the adopted policies.

The policy documents which will be researched as part of the policy section of the TA will include:-

- Planning Policy Wales;
- City of Cardiff Local Plan 1996;
- Planning Policy Guidance (PPG) 13; and
- Technical Advice Note (TAN)18

10.0 TRAFFIC IMPACT ASSESSMENT

10.1 Baseline Traffic Data

Peak hour data has been obtained for the Glass Avenue and Nettlefold Road junctions with Ocean Way. We will also collect 24-hour ATC data for Ocean Way and Rover Way for a one week period.

10.2 Trip Generation

The proposed EfW facility is predicted to have the capacity to receive 400,000 tonnes of waste per annum. We have undertaken some initial calculations for the purpose of this scoping study to provide the highway authority with a steer with regards to the number of trips that could be generated. All trips quoted are 2-way.

7 tonne RCV's – 50%

20-tonne bulk vehicles – 50%

Assume 400,000tpa

Assume 12-hour operation (0800-2000)

Assume waste received 305 days per year

Therefore 1311tpd – 655t by RCV, 655t by bulk

= 187 trips per day / 15 trips per hour by RCV

= 65 trips per day / 5 trips per hour by 20-tonne bulk vehicles

Total of 252 trips per day / 21 trips per hour

10.3 Trip Distribution

We will identify sources of waste and confirm the volumes quoted above in order to produce a gravity model. The most appropriate routes for transporting waste will be identified with the assistance of GIS. The distances over which waste will travel will be calculated along with annual vehicle km travelled.

10.4 Impact on Local Roads

The traffic impact resulting from the proposed development will be calculated for information. In line with the GTA, we would undertake capacity assessments at the following junctions as a matter of course due to the busy nature of the road network in the vicinity of the application site:-

- Glass Avenue/Ocean Way roundabout; and
- Nettlefold Road / Ocean Way T-junction

We propose undertaking an assessment for the opening year and 5 years after this date.

The results of the capacity assessments will be analysed and discussed in the TA. The increase in traffic arising from the proposed development will be reviewed in the context of existing traffic on the network for each of the assessment years.

The method of forecasting traffic growth will be as per the industries accepted method of utilising National Road Traffic Forecasts and adjusting them using TEMPRO.

11.0 MITIGATION

The results of the junction capacity assessments will determine whether any mitigation is required in the form of junction improvements. Any required mitigation will be presented in the TA in the form of preliminary AutoCAD drawings.

12.0 SUMMARY AND CONCLUSIONS

This scoping report is for an EfW plant which is proposed by Viridor Waste Management at Trident Park and sets out the methodology for producing a TA to accompany an outline Planning Application for the development.

This report has been produced prior to any discussions with Cardiff Council and will be the basis for commencing dialogue with the Authority and agreeing a way forward for producing the TA.

This report sets out the methodology for producing the TA and an indication of the number of trips predicted to be generated.

It is anticipated that, due to the potentially sensitive nature and scale of the proposed development, a close close dialogue is maintained throughout the duration of the project in order to arrive at TA conclusions that are acceptable to all parties and stakeholders concerned.

All aspects of the TA will be undertaken by Dean Watkins, Senior Transport Planner at SLR's Cardiff office (tel 02920 497366) and Tom Green, Technical Discipline Manager at the Bradford-on-Avon office (tel 01225 309400).