# **Limerick Gasworks**

# **Traffic Impact Assessment**

## **Scoping Report**

September 2010



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#### 1 Introduction

- 1.1. This scoping note has been prepared in advance of a planning application being made to remediate the land at the now vacant Limerick Gasworks on behalf of Bord Gáis.
- 1.2. A meeting was held on-site between Mouchel and Rory McDermot, Highway Officer, of Limerick City Council (LCC) on 10.08.10, during which the Council's requirements for Traffic Impact Assessment were discussed.
- 1.3. This Report is presented to Bord Gáis in respect of Limerick Gasworks and may not be used or relied on by any other person or by the client in relation to any other matters not covered specifically by the scope of this Report.
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## 2 Local Highway Network

- 2.1. The site (shown on Figures 1 &2 attached) lies to the south west of Limerick City Centre on Dock Road (N69), on the opposite side of Dock Road from Limerick Docks, as seen on the aerial photograph below.
- 2.2. LCC have advised that Average Annual Daily Traffic levels (AADT) on Dock Road and O'Curry Street are 19,000 and 3,500 vehicles respectively.
- 2.3. Peak traffic periods in the area are considered by LCC to be between the hours of 0700-0930 and 1630-1830 Monday to Friday. Quiet periods are considered to be Monday, Tuesday and Wednesday evenings and weekends.
- 2.4. Each of the surrounding roads meet with give-way junctions. Right turns are prohibited from O'Curry Street at the junction O'Curry Street/Dock Road junction, and pedestrians are catered for with a pedestrian refuge island. We understand, that this junction is to be upgraded to signal control in the coming months.
- 2.5. The site is bound to the north by Dock Road to the east by O'Curry Street, a former An Garda Síochána training building and residential properties lie to the south and a Public House and residential properties to the west.
- 2.6. Dock Road is a National Secondary Road with two westbound lanes and one eastbound in the vicinity of the site; it is subject to the national speed limit of 100km/h (62.5 mph). Double yellow lines are present on both sides of the road.
- 2.7. The remaining three woads that bound the site are all single lane two-way roads. Each of these roads have painted parking bays on each side of the carriageway between the hours of 0930-1730 Monday to Friday with a 2 hour stay for the most part.
- 2.8. The Limerick Tunnel has recently been opened, the link road associated with this tunnel links the Dock Road to the N7 which leads east, the route map for the tunnel is shown on Figure 3.
- 2.9. The Tunnel consists of:
  - 9.75km of two lane dual carriageway
  - 2.3km if single lane dual carriageway
  - 675m long tunnel under the River Shannon
  - 750m causeway across Bunlicky Lake
  - 11 Bridges
  - 6 Underpasses and 8 Culverts

- 2 Toll Plazas
- 2.10. The Limerick South Ring Road Project consisted of two phases. Phase I
  - A connection of the Dublin Road N7 to the Cork Road N20/21, this was completed in May 2004.

#### Phase II

• The Limerick Tunnel connecting the Dublin Road, N7 to the Ennis Road N18. This is now completed and forms the final part of the bypass around Limerick City this links all national routes converging on the city.



### 3 Predicted Traffic Movements

#### Risk

LCC may consider that the predicted level of vehicular movements may have a detrimental affect on the local road network and therefore require mitigation measures.

### Mitigation

Rory McDermot of LCC confirmed during a scoping meeting that any impact was likely to be minimal and therefore no capacity assessments would be required based upon figures provided to date.

3.1. At this stage there is estimated to be in the region of 2 or 3 construction vehicles entering and leaving the site each day during the remediation works. Further details of expected traffic numbers are listed below; these numbers are the total for each period stated - not per day (apart from Staff/ general maintenance & deliveries).

#### Phase 1 (Pump & Treat works)

- Delivery to site (equipment, stores, machinery etc) 6 construction vehicles (low loaders) in first 2 weeks
- Export of materials (allow 400 tonnes of DNAPL) 20 construction vehicles (20t wagons) over a period of 12 months
- Removal from site (equipment, stores, machinery etc) 6 construction vehicles in the last 2 weeks
- Staff/ general maintenance & deliveries 10 cars, 2 vans and a lorry per day.
   The busiest periods for this traffic is expected to be at the beginning and end of each day.

#### Phase 2 (Stabilisation works)

- Delivery to site (equipment, stores, machinery etc) 6 construction vehicles (low loaders) in first 2 weeks
- Export of materials (allow 6,500 tonnes of heavily contaminated soils, equating to 10% of total volume to be treated) - 325 construction vehicles (20t wagons) over a period of 12 months
- Import of binder (cement, pfa etc) allow 3,250 tonnes (5% by volume of total volume to be treated) 163 construction vehicles over a 12 month period
- Removal from site (equipment, stores, machinery etc) say 6 construction vehicles in the last 2 weeks

- Staff/ general maintenance & deliveries say 10 cars, 2 vans and a lorry per day. The busiest periods for this traffic is expected to be at the beginning and end of each day.
- 3.2. The impact these vehicles may have on capacity of the local highway network was discussed during the meeting set out in Section 1. It was concluded that any impact was likely to be minimal and therefore no capacity assessments would be required based upon these figures.
- 3.3. Should these figures increase Mouchel will discuss these with LCC to determine whether any capacity assessments are necessary and mitigation measures required.

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## 4 Access Arrangements

Risk

A risk that existing vehicular access points will not be suitable for construction traffic.

## **Mitigation**

Use of two existing vehicular access points, one on Dock Road and one on O'Curry Street was discussed with Rory McDermot of LCC on site and no objections were raised to using either of these accesses.

- 4.1. There are currently 3 vehicular access points to the site, one on O'Curry Street and the remaining two on Dock Road. The eastern access on Dock Road does not have sufficient width to accommodate the size of vehicles used during the remediation works, so only the westernmost access on Dock Road would be used for access for this purpose.
- 4.2. At this stage, it is proposed that access to the site would be made via the existing access points described above.
- 4.3. There is potential for construction vehicles to wait in the existing parking bays on O'Curry Street if required. This would require further discussion with the Council should the scheme come forward.

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### 5 Traffic Routes

#### Risk

The Local Network may not be suitable for the number and size of construction vehicles predicted.

### **Mitigation**

Rory McDermot of LCC confirmed that all traffic should turn left out of the site along Dock Road and onto the new Tunnel Link Road which leads directly to the N7 to the east. These roads have all been designed to accommodate large vehicles and high traffic levels, as confirmed by LCC on-site.

- 5.1. It is understood at the time of writing that the majority of material removed from the site will travel by road to a central area east of the site.
- 5.2. LCC have stated that they would prefer construction traffic not to enter of leave the site through Limerick City Centre and that the new Limerick Tunnel Link be used to access the N7.
- 5.3. Construction Traffic travelling through Limerick City would add further to traffic congestion in the city and increase 602 emissions.
- 5.4. At this stage, therefore, it is intended that HGVs would turn left out of the site onto Dock Road (N69), before joining the N7 via the new Limerick Tunnel Link road and onto the motorway network (M7) which leads to the east. Shown in Figure 4.
- 5.5. An alternative route to the east would be via the Tunnel and roads north of the site. This route would be much longer and through lesser quality roads than the route described in 5.4 and is therefore not considered appropriate.

## 6 Special Traffic Movements

#### Risk

An increase in traffic movements leading to traffic congestion in the area.

### **Mitigation**

Rory McDermot of LCC confirmed on-site that should this take place a Traffic Management scheme will need to be agreed with them beforehand. This may include a manually controlled "Stop/Go" arrangement. Notice will also be required as the occupiers of the Docks opposite to the site often have large movements of vehicles over a 12 hour period. These events therefore, must not clash.

- 6.1. The possibility of a "one off event" removing material from the site by road to the Docks then by sea to treatment facilities overseas was discussed during the meeting.
- 6.2. It is estimated that the vehicle movements in this scenario may total 100 construction vehicles in a 12 hour period.
- 6.3. LCC have confirmed that should this take place a Traffic Management scheme will need to be agreed with them beforehand. This may include a manually controlled "Stop/Go" arrangement at the site access due to the higher volume of traffic accessing the site.
- 6.4. Additionally, the docks on the opposite side of Dock Road to the site experience occasional large volumes of traffic, with the occupiers of the Docks informing LCC when these movements are due to take place. Therefore, LCC would require notice should movements to the former Gasworks increase above the levels set out in Section 3 so that both sites do not add significantly to traffic levels in the area at the same time.

### 7 Road Permits

Risk

In order to transport Abnormal Loads, Wide Loads and Contaminated Loads permits are required to be sought by the appointed contractor from each Country travelled through.

## **Mitigation**

Permits are to be sought from each County by the appointed contractor.

7.1. As is necessary, permits will be sought with LCC and each of the Counties that construction traffic travel through. These will include Abnormal Loads, Wide Loads and Contaminated Load Permits. The appointed Contractor will be responsible for gaining these permits.

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### 8 Protected Structures

Risk

Protected structures on site may be damaged during remediation works.

## **Mitigation**

Protected structures to be identified by LCC and a Plan agreed with LCC's Planning, Environmental and Highways Department to ensure that these structures are not affected by construction vehicles.

- 8.1. During a meeting with LCC's Planning Department the protected structures on the site were discussed.
- 8.2. Should the scheme come forward, a Plan will be agreed with LCC's Planning, Environmental and Highways Departments to ensure that these structures are not affected by construction vehicles.

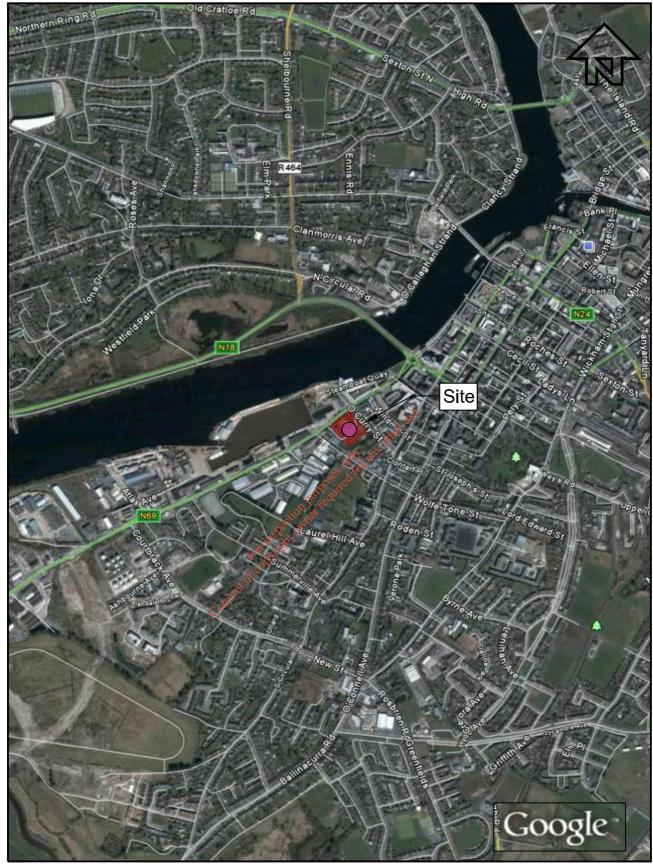
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## 9 Summary

- 9.1. This note provides a summary of the scoping meeting regarding all traffic required for removal of material from the former Gasworks site, Dock Road Limerick including construction traffic, staff, general maintenance and delivery vehicles.
- 9.2. Material is expected to be removed by road to a central area east of the site. with in the region of 2 or 3 construction vehicles arriving at and leaving the site per day.
- 9.3. The possible impact on highway capacity of this traffic was discussed on site and it was confirmed by LCC due to the minimal impact expected that capacity assessments would not be required.
- 9.4. LCC have stated that they would prefer construction traffic not to enter of leave the site through Limerick City Centre and that the new Limerick Tunnel Link be used to access the N7.
- 9.5. At this stage, therefore, it is intended that HGVs would turn left out of the site onto Dock Road (N69), before joining the NV via the new Limerick Tunnel Link road and onto the motorway network (NV) which leads to the east. Shown in Figure 4.
- 9.6. The possibility of increasing movements as a "one off event" in order to take material to the Dock for travel by sea were discussed. LCC will require a Traffic Management Planto be agreed between them and Bord Gáis in order for vehicles to access the site safely and not have a detrimental affect on others using the local bighway network.
- 9.7. Road Permits will require to be sought in order to transport Abnormal Loads, Wide Loads and Contaminated Material from LCC and each County which material is being carried through to their destination.
- 9.8. There are Protected Structures on the site, and agreement will be required between LCC's planning department and Bord Gáis to ensure that these structures are not compromised during the remediation process.
- 9.9. We have used our reasonable endeavours to provide information that is correct and accurate and have discussed above the reasonable conclusions that can be reached on the basis of the information available.



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Site Location Plan A Limerick Gasworks

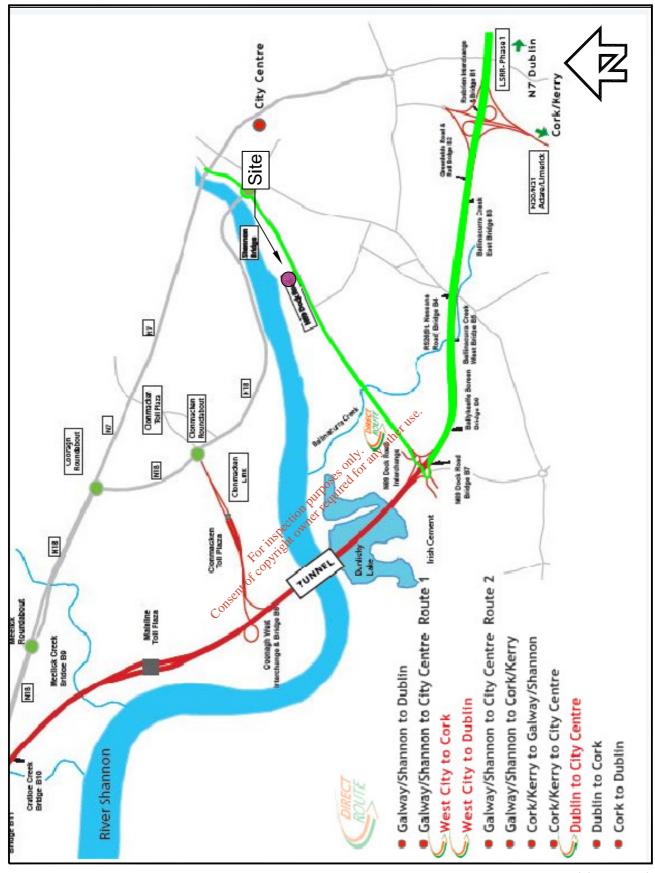
FIGURE 1



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Site Location Plan B Limerick Gasworks FIGURE 2



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Construction Vehicle Route Limerick Gasworks

FIGURE 4