Ling Hall Solar Project
Lawford Heath, Rugby

Transport and Access Appraisal

Final Report for
REG Solarpower & Veolia ES Landfill Limited

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1.0 INTRODUCTION

1.1.1 This Transport and Access Appraisal has been prepared by Hydrock Consultants Ltd on behalf of REG Solarpower and Veolia ES Landfill Limited in support of an application for planning permission to construct a solar project on land to the north at Ling Hall, Warwickshire.

2.0 SITE LOCATION

2.1.1 The site is located to the west of the Rugby, on the former Lawton airfield site, approximately 1km to the north of the A45 trunk road.

2.1.2 The site adjoins Lawford Heath Lane to the south and east and Coalpit Lane on its south western side. Ling Lane runs on an east west axis along the northern boundary of the site connecting to Lawford Heath Lane at the eastern extent.

2.1.3 The location and extent of Ling Hall is shown on Drawing LH001: Location Plan and the red line application site is shown on Drawing LH002: Site Boundary Plan. These are not contained within the Transport and Access Appraisal but are submitted separately as part of the planning application.

3.0 EXISTING CONDITIONS

3.1 Existing Site Use

3.1.1 The site forms part of the former Lawton airfield. The site has a history of sand and gravel quarrying, which ceased in 2009, and household/commercial/industrial waste landfill operations which remain on-going. Additional uses are also located on site including a concrete batching plant, road stone coating plant, plant for processing road sweepings and gully arisings and plant and equipment to recycle incinerator bottom ash.

3.1.2 The hours of operation at the site are primarily 07:00-18:00 Monday to Friday and 07:00-13:00 on Saturdays.

3.1.3 In terms of traffic generation, the landfill operation at the site has historically generated between 90 and 130 loads (180 and 260 two-way movements) per day. However, the number of loads associated with the landfill operation has steadily reduced over recent years due to a number of factors to a level of around four per hour, or approximately 44 loads per day.

3.1.4 The planning documents for the incinerator bottom ash recycling plant planning application (RBC/13CM003) granted in 2013 state that the facility would generate up to 22 deliveries and collections per day.

3.1.5 The quarrying activities on site ceased in 2009. The supporting statement for the retention of the concrete plant (RBC/10CM017) granted in 2011 estimated that the operation of the quarry, concrete batching plant and road stone coating plant would result in 100 vehicle movements in and out of the site per day. Without the operation of the quarry, it is estimated that the remaining plant would generate 78 vehicle movements in and out of the site per day.

Traffic Routing Agreements

3.1.6 Associated with the existing land uses on site, there are a number of vehicle routing agreements which have been the subject of previous planning conditions and legal agreements.
3.1.7 Under planning application number R16/05CM033 for the extension to hours of operation for the landfill site, the applicant agreed to enter into a Section 106 Agreement with Warwickshire County Council (WCC) to agree a set of measures concerning traffic routing, ensuring that waste vehicles routed to and from the A45/A4071 junction.

3.1.8 A Section 106 Agreement is also associated with the grant of planning permission for the quarrying and landfill activities which restricts the routes taken by vehicles associated with the mineral and landfill activities. Vehicles are prohibited from using Coalpit Lane to the north of the site access or Lawford Heath Lane to the east of the junction with Coalpit Lane.

3.1.9 The Warwickshire Advisory Lorry Route Map 2nd Edition produced by WCC does not identify any vehicle restrictions on Lawford Heath Lane to the south of the site to the junction with the A45 trunk road.

3.1.10 Policy SF2 of the Warwickshire Local Transport Plan 2011-26 relates to Road Freight Strategy and managing the potential environmental and social impacts of freight strategy. Adopting an agreed access route for construction and delivery vehicles to the site will accord with the aims of Policy SF2 in seeking to mitigate the impact of heavy goods vehicles associated with the construction period on communities in the vicinity of the site.

3.2 Existing Access Arrangements

3.2.1 There are two existing points of vehicular access to the site, one from Coalpit Lane provides the main point of access for the existing quarrying and waste related activities. The second access is from the entrance to the Lawford Heath Industrial Estate site, served from Lawford Heath Lane.

3.2.2 The existing access from Coalpit Lane forms the minor arm of a priority junction with a ghost island right turn lane arrangement. Coalpit Lane is subject to the national speed limit. Approximately 70 metres to the north of the access, Coalpit Lane narrows to single vehicle width and continues north to the B4455 serving agricultural land and isolated properties to the north of the site. Coalpit Lane to the south of the site access junction, and the access road serving the Ling Hall site have carriageway widths of approximately 7.3 metres. Manual for Streets identifies carriageway widths of 5.5 metres as sufficient for two HGVs to pass one another.

3.2.3 The second point of access to the site is gained from a field gate into the eastern side of the site from the access serving Lawton Industrial Estate.

3.2.4 Within the site a network of internal roads and access tracks provides access across the site.

3.3 Public Rights of Way

3.3.1 No public rights of way are located within the site.

4.0 PROPOSED DEVELOPMENT

4.1.1 The solar project is made of three separate parcels of land, one to the north of the site, one to the south-east of the site; and one to the south-west of the site. The parcels of land selected are either restored or nearly restored areas of the landfill, that while no longer active, are subject to ongoing environmental control and aftercare.

4.1.2 A temporary construction compound will be installed. The compound will accommodate temporary portacabin-type buildings in addition to an area for material storage and for construction delivery vehicles to turn around. Portacabins are required for offices, toilets, canteen and storage. The compound will contain temporary parking spaces for staff.
4.1.3 At the end of the construction period, the compound and all equipment will be removed.

4.1.4 Construction will take place over a period of approximately 25 weeks.

4.2 Proposed Access Arrangements

4.2.1 It is proposed that the site will be accessed via the existing main access serving the quarry and landfill operations on Coalpit Lane, to the southwest of the site.

4.2.2 The existing access junction is laid out and constructed to a high standard and is considered suitable to accommodate the proposed solar project construction traffic.

4.3 Proposed Routing of Construction Traffic

4.3.1 In travelling to the site, it is proposed that construction traffic will access the site from the A45 to the south. Figure 4.1 shows the proposed construction traffic route illustrated by the red dashed line along Lawford Heath Lane and Coalpit Lane.

![Figure 4.1: Proposed Construction Traffic Routing](image)

4.3.2 The proposed construction traffic access route provides a direct connection to the site from the strategic road network and accords with the routing strategies agreed in previous planning applications associated with the Ling Hall site.

4.4 Construction Traffic

4.4.1 The solar panels will be mounted on a galvanised metal racking system, set into concrete foundation ‘shoes’ to maintain the integrity of the landfill cap. A total of 6,558 concrete ‘shoes’ will be required with two options for delivery; cast on site with concrete delivered in ready-mix lorries, or precast and delivered to site. The delivery option is still to be determined therefore for the purpose of providing an indication of the number of delivery vehicles anticipated, it has
been assumed that precast foundation blocks would be delivered to the site. Based upon information provided by the supplier, it has been assumed that 15 foundation shoes could be delivered per vehicle.

4.4.2 The components required to construct the solar array will be transported to the site using a combination of rigid and articulated delivery vehicles. An approximate breakdown of delivery vehicles is set out in Table 4.1 below.

Table 4.1: Approximate Breakdown of Delivery Vehicles

<table>
<thead>
<tr>
<th>Activity</th>
<th>Vehicle Loads &amp; Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Clearance/Fencing</td>
<td>25 (light/medium goods vehicles)</td>
</tr>
<tr>
<td>Maintenance/access tracks</td>
<td>175 (tipper trucks)</td>
</tr>
<tr>
<td>Cabling/ducting</td>
<td>60 (light/medium goods vehicles)</td>
</tr>
<tr>
<td>Foundation shoes</td>
<td>440 (HGVs)</td>
</tr>
<tr>
<td>Module and rack deliveries</td>
<td>225 (HGVs)</td>
</tr>
<tr>
<td>Plant and recycling</td>
<td>40 (HGVs)</td>
</tr>
</tbody>
</table>

4.4.3 The construction deliveries will take place over the 25 week construction period.

4.4.4 Staff will travel to the site by light vehicles and minibuses.

4.4.5 In the context of the background traffic to and from the Ling Hall site associated with the existing land uses, it is considered that the volume of construction traffic associated with the proposed solar project would represent a small and short term increase. This impact of the temporary construction period is lessened when considered in the context of the much higher levels of traffic associated with the site when the quarry was still in operation in 2009, when the number of trips to the landfill site were substantially greater.

4.5 Operational Traffic

4.5.1 Solar projects such as that proposed generate a very low and infrequent number of trips throughout their operational life. No staff would be permanently based at the site. Maintenance and servicing trips would be made to the site by 4x4 vehicles or light vans and would be undertaken typically on a quarterly basis. Outside of these regular maintenance visits, other vehicle trips would be associated with infrequent visits for the purpose of replacing equipment as necessary.

5.0 CONSTRUCTION TRAFFIC MANAGEMENT

5.1.1 It is proposed that the requirement for the preparation of a full Construction Traffic Management Plan (CTMP) prior to the commencement of construction could form a suitably worded condition to the grant of planning consent.

5.1.2 The CTMP would provide further detail on the management and mitigation measures proposed in connection with the construction phase of the solar project including confirmation of:

Management Measures

- The prescribed route for construction traffic, including the standard measures associated with construction traffic movements and control;
- Management of construction traffic e.g. hours of delivery and the implementation of a call-on system; and,
- Internal site compound arrangements.
Mitigation Measures

- Measures such as wheel washing and dust control; and,
- Erection of signage.

6.0 SUMMARY AND CONCLUSIONS

6.1 Summary

6.1.1 This Transport and Access Appraisal has been prepared by Hydrock Consultants Ltd on behalf of REG Solarpower and Veolia ES Landfill Limited in support of an application for planning permission to construct a solar project on land to the north at Ling Hall, Warwickshire.

6.1.2 Specifically this report has considered the appropriateness of the site access and vehicle routes and has provided details of the predicted traffic generation of the development proposals.

6.2 Conclusions

6.2.1 The following conclusions have been made:-

- In terms of traffic generation, the proposed solar project will result in an increase in vehicle movements for the duration of the construction period, anticipated to be 25 weeks. Throughout the operational life of the solar project, trips associated with the site will be occasional and undertaken by 4x4 vehicles or light vans;
- A proposed route for construction traffic has been identified connecting the existing main access to the Ling Hall site with the trunk road network. The Warwickshire Advisory Lorry Route Map 2nd Edition does not identify any restrictions on the proposed route.

6.2.2 It is proposed that the requirement for the preparation of a full CTMP could form a suitably worded condition to the grant of planning consent.

6.2.3 To summarise, given the measures outlined within this report, the proposal to prepare a CTMP, and the relatively short construction period of 25 weeks, it is considered unlikely that the construction phase of the development would have any material detrimental impact upon the surrounding local highway network.

Hydrock Consultants Ltd.