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FORMER POWERGEN SITE, BULLS BRIDGE, HAYES TRANSPORT ASSESSMENT ADDENDUM

FM Conway

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Prepared by	Ben Taylor			
Signature				
Checked by	Laura Hudson			
Signature				
Authorised by	Peter Day			
Signature				
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FORMER POWERGEN SITE, BULLS BRIDGE, HAYES

Transport Assessment Addendum

FM Conway

December 2012

Client

FM Conway Ltd
Erith Wharf
Church Manorway
Erith
Kent
DA8 1DF

Consultant

WSP UK
Mountbatten House
Basing View
Basingstoke
RG21 4HJ
UK

Tel: +44 (0)1256 318800
Fax: +44 1256 318700

www.wspgroup.co.uk

Registered Address

WSP UK Limited
01383511
WSP House, 70 Chancery Lane, London, WC2A 1AF

WSP Contacts

Peter Day
Laura Hudson
Ben Taylor

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1 Introduction

1.1 Background

- 1.1.1 WSP has been commissioned by FM Conway Ltd to provide transportation and highways advice in support of a proposed planning application for the redevelopment of the Former Powergen site, Bulls Bridge, North Hyde Gardens, Hayes. The site location is shown on Figure 1. The development proposal is for an aggregate recycling facility, asphalt storage and production plant, and wet waste plant; together with associated ancillary structures and facilities, car and HGV parking and landscaping.
- 1.1.2 This Transport Assessment Addendum (TAA) report has been prepared to supplement the Transport Assessment (TA) report which was prepared in May 2012 in support of planning application reference 13226/APP/2012/2185 for the proposed development.

1.2 Transport Assessment Addendum

- 1.2.1 This TAA has been prepared primarily to address the comments issued by Transport for London (TfL) on 31 October 2012 and the London Borough of Hillingdon (LBH) on 2 November 2012 in respect of the TA and Travel Plan (TP) reports in support of the planning application at the Bulls Bridge site. Correspondence from TfL and LBH is included at Appendix A. As requested, this TAA includes additional analysis of the traffic impact of the proposals and details of sustainable travel measures not detailed within previous documentation.
- 1.2.2 Furthermore, the TAA is supported by a suite of further technical documentation which is appended:
- Pedestrian Environment Review System (PERS) Audit Report (Appendix B);
 - Delivery and Servicing Plan (Appendix D); and
 - Linsig Modelling Report (Appendix E).

1.3 Report Structure

- 1.3.1 The remainder of this TAA is structured as follows:
- Section 2 summarises the Pedestrian Environment Review System (PERS) Audit;
 - Section 3 responds to TfL's comments regarding sustainable infrastructure;
 - Section 4 provides a summary of the Delivery and Servicing Plan;
 - Section 5 summarises the LinSig modelling report, specifically the updates the analysis of the traffic impact assessment undertaken in the TA report; and
 - Section 6 provides a summary and conclusion.

2 Pedestrian Environment Review System Audit

2.1 Introduction

- 2.1.1 TfL (16 October 2012) recommended that a Pedestrian Environmental Review System (PERS) Audit be conducted in order to assess the pedestrian facilities in the vicinity of the site.
- 2.1.2 Subsequently, WSP identified three routes from the Bulls Bridge site which encompassed destinations such as local facilities, bus stops and Hayes and Harlington railway station. The routes have been agreed with TfL as per correspondence attached at Appendix A.

2.2 PERS Audit

- 2.2.1 The PERS Audit was undertaken in accordance with the guidance provided in TfL's 'Pedestrian Environment Review System, Review Handbook Version 2, May 2006'. The Audit focused on the following three routes as agreed with TfL:
- Site to Hayes & Harlington Railway Station
 - Site to parade of shops and bus stops
 - Site to superstore
- 2.2.2 The scope of the audit comprised a total of eight links, four crossings, three public transport waiting areas and three routes. Each individual element was rated and presented with Red, Amber, Green (RAG) scores:
- Red: Negative overall;
 - Amber: Average overall;
 - Green: Positive overall.
- 2.2.3 The resulting scores were acceptable, with four items classed as green (positive overall), 14 classed as amber (average overall) and none classed as red (negative overall). This was reflected in amber scores for all three routes audited. The scores reflect that no major issues were highlighted by the PERS audit in the area surrounding the site.
- 2.2.4 In the audit commentary, it was noted that some general maintenance and localised improvement works by the highway authority could improve the environmental quality of some of the links and crossings in the study area. The audit suggested that these measures could be considered for inclusion in the highway authority's routine maintenance programme.
- 2.2.5 The overall conclusion of the PERS audit was that the pedestrian environment around the development site was found to be acceptable.

3 Parking and Sustainable Infrastructure

3.1 Car Parking

3.1.1 The LBH Highways Officer indicates in his comments, contained at Appendix A, that 70 spaces is considered too high for staff, based on the objectives to promote sustainable travel included in the accompanying Travel Plan.

3.1.2 In Section 7 of the Transport Assessment, it is demonstrated that between the hours of 04:00 and 09:00, there are 68 arrivals and 3 departures by car. It is therefore proposed that the initial car parking provision for staff is reduced from 70 spaces to 68. Further to this, the staff parking will be based on the mode share target set out in the Travel Plan, this being:

“A 1% annual reduction in the overall proportion of journeys by staff to the site by car (single occupant) for the first five years following the baseline survey”.

3.1.3 Therefore it is proposed to reduce staff parking by 1% against the initial provision on an annual basis for five years following the baseline survey to be conducted for the purpose of Travel Plan monitoring. . Table 3.1 shows the progressive reduction in staff parking over the five year period.

Table 3.1: Proposed Staff Parking Provision (Based on 1% reduction per annum from the full provision)

Time Period after Baseline Survey	Staff Car Parking (Spaces)
Baseline Survey	68
1 year	68
2 years	67
3 years	66
4 years	66
5 years	65

Source: Consultant calculated

3.1.4 Therefore, five years after the initial baseline travel survey the proposed number of staff parking spaces will be 65. This represents a reduction of five spaces in comparison to the 70 staff car parking spaces previously proposed.

3.2 Electrical Vehicle Charging Infrastructure

3.2.1 In accordance with TfL's comments regarding the provision of suitable infrastructure for electric vehicles, the proposed development will incorporate eight active Electric Vehicle Charging Points, with the infrastructure provided for seven additional charging points which will remain 'passive' until such time as required.

3.3 Cycle Parking Provision

- 3.3.1 As part of their respective comments, TfL and LBH state a requirement for cycle parking provision for the use of staff to be formally confirmed. As stated by TfL in their correspondence, a comparable standard of cycle parking for the proposed development is not contained within the London Plan.
- 3.3.2 Based on the incompatibility of the defined standards in the London Plan with the land use of the proposed development, TfL have recommended a minimum provision of six cycle parking spaces, with LBH recommending eight. The proposed development will therefore be in line with both sets of recommendations, by providing eight cycle parking spaces, located in a covered area which will be situated in the main car park, to the west of North Hyde Gardens.
- 3.3.3 Changing areas, showers and lockers will be provided within the welfare facility located immediately south of the Administration office at the proposed development. The location of the welfare facility and the cycle parking is shown on Drawing CWY14-010-P1, contained at Appendix C.

4 Delivery and Servicing Plan

4.1 Introduction

- 4.1.1 TfL have noted in their correspondence a requirement for the delivery and servicing arrangements at the proposed development to be set out. This has been fulfilled in a Delivery and Servicing Plan (DSP) which is attached at Appendix D.

4.2 Delivery and Servicing Plan Purpose

- 4.2.1 The purpose of the DSP is to inform the authorities of the intent of the applicant in managing service vehicle trips to and from the development in order to minimise their impact on the surrounding public highway. The DSP will be an evolving document and will be subject to discussion and agreement with LBH and TfL. It will complement the Travel Plan produced for the site through the implementation of sustainable delivery initiatives.
- 4.2.2 The DSP outlines the provision to be made at the proposed development for the storage and collection of refuse, and the arrangements for deliveries.

4.3 Servicing Vehicle Generation

- 4.3.1 Based on similar operations at FM Conway's site at Erith, it is estimated that on a typical day, there will be 10 vehicular two-way delivery and servicing trips (five arrivals and five departures) generated by the proposed development when at full capacity.

4.4 Objectives

- 4.4.1 The DSP sets out a number of objectives which it seeks to achieve. These are:
- Demonstrate that goods and services can be delivered, and waste removed, in a safe, efficient and environmentally-friendly way;
 - Identify deliveries that could be reduced, re-timed or even consolidated, particularly during busy periods;
 - Improve the reliability of deliveries to the site;
 - Reduce the operating costs of building occupants and freight companies; and
 - Reduce the impact of freight activity on local residents and the environment.

4.5 Delivery and Servicing Management Measures

- 4.5.1 In order to achieve the objectives listed above, a number of measures will be employed at the proposed development. These are set out in Table 4.1 below and fully defined in the DSP.

Table 4.1: Delivery and Servicing Management Measures

Measure Type	Measure
Design Based	Heavy Load Carry Distances
	Off Street Servicing Facilities
	Risk Assessment of Servicing Areas
	Security Measures
	Servicing Restrictions
	Traffic Management Regulation Audit
Procurement Strategy	Consolidation of Suppliers
	Freight Operator Recognition Scheme
Operational Efficiency	Accommodating Special Deliveries
	Communication of Delivery Procedures
	Delivery Booking System
	Delivery Restriction and Enforcement
	Promotion of Freight Information Portal
	Staff Training Requirements and Responsibilities
Waste Management	Refuse Collection Procedures
	Waste Reduction, Storage and Removal Measures

4.6 Monitoring

- 4.6.1 The success of the measures contained in the DSP will be monitored through delivery surveys. A baseline survey will be undertaken within six months of occupation, with further surveys undertaken three years and five years after the baseline.

5 Proposed Development Impact

5.1 Introduction

- 5.1.1 LBH requested that the impact of the proposed development is assessed on its own merits as the TA had previously assessed the net trip generation impact of the proposals in comparison to planning consent 13226/APP/2001/849, which expired in November 2011.
- 5.1.2 This Section considers the impact of the proposals on the local highway network independent of the previous planning consent.

5.2 Committed Development

- 5.2.1 The TA included two committed developments within its assessment of the local highway network. These were:
- Southall Gasworks (Planning application: 58414/APP/2009/430), and
 - Asda (Planning application: 32157/APP/2011/872).
- 5.2.2 Further detail of these committed developments can be found in Section 6.3 of the TA, however, LBH have requested that the committed development traffic flows on the local highway network are included within this TAA, as they were not separately provided within the TA. The committed development flows are shown in Figures 2 and 3 for the AM and PM peak hours respectively.

5.3 Development Impact

- 5.3.1 A full discussion of the methodology used to determine background traffic growth from the baseline year of 2010 to the forecast year of 2016, and the generation and distribution of vehicular traffic generated by the proposed development is detailed within Section 6 and 7 of the TA report. However, for ease of reference, the 2016 Forecast Traffic Flows (inclusive of committed development) for the AM and PM peak hours are included as Figures 4 and 5 of this TAA respectively, with Figures 6 and 7 showing the same respective time periods for the 2016 Forecast plus Proposed Development flows.
- 5.3.2 The impact on two-way vehicle flows of the proposal on North Hyde Gardens was previously examined in Section 8.4 of the TA. Table 5.1 below corrects this comparison between the 2016 Forecast Base and the 2016 Forecast Base plus development scenarios and also includes additional links on the local highway network which were not previously considered in the TA.

Table 5.1: Comparison of 2016 Two-Way Link Flows With and Without Proposed Development (Vehicles)

Link	AM Peak (08:00 – 09:00)			PM Peak (17:00- 18:00)		
	2016 Forecast Base	2016 Forecast Base + Proposed Development	% Increase from baseline	2016 Forecast Base	2016 Forecast Base + Proposed Development	% Increase from baseline
North Hyde Gardens	182	206	13.2%	119	128	7.6%
North Hyde Road (E of North Hyde Gardens jct)	994	1018	2.4%	1019	1028	0.9%
A312 The Parkway (N of North Hyde Road jct)	4,369	4,377	0.2%	5,155	5,159	0.1%
A312 The Parkway (S of North Hyde Road jct)	3,909	3,925	0.4%	4,574	4,578	0.1%

Source: Consultant calculated

- 5.3.3 It can be seen in Table 5.1 that in terms of both number of vehicles and percentages, the proposed development has a limited impact on two-way flows on the local highway network. The largest increase is on North Hyde Gardens, which is to be expected, as it is the single point of access to the site. There is an increase of 24 two-way movements in the AM peak and nine in the PM peak on North Hyde Gardens. This increase will have a negligible impact on the link capacity of North Hyde Gardens.
- 5.3.4 As the development traffic disperses across the local highway network, its impact decreases further. For example the percentage of traffic on A312 The Parkway generated by the proposed development is less than 1% in both peak hours.

5.4 Junction Modelling

- 5.4.1 The TA undertook LinSig assessments of the North Hyde Gardens / North Hyde Road and A312 The Parkway / North Hyde Road signal junctions. TfL requested that the junction modelling followed TfL Best Practice modelling guidance. Subsequently the LinSig model has been updated to follow the TfL guidance. Full details of the calibration and validation of the model is contained in the LinSig Modelling Note attached at Appendix E.

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- 5.4.2 The Modelling Note also contains updated results for each of the assessment scenarios originally considered within the TA. These assessments found that the addition of development traffic has a negligible impact on junction performance when compared to the 2016 Forecast scenario which included committed development. In the majority of cases, the Degree of Saturation (DOS) remained the same, with any increases being in the order of 1-2%.
 - 5.4.3 Further LinSig assessments were also undertaken for the peak hours which made a robust assumption which doubled the number of HGVs generated by the proposed development. The results of this assessment show that the DOS on the junctions largely remains the same, or in some instances sees a minor increase.
 - 5.4.4 The Modelling Note concludes that, with the LinSig model calibrated and validated using TfL guidance, the impact of the vehicular trip generation of the proposed development on the two modelled junctions is negligible, with no changes to most links.

6 Summary and Conclusion

6.1 Summary

- 6.1.1 WSP has been commissioned FM Conway Ltd to provide transportation and highways advice in support of a proposed planning application for the redevelopment of the Former Powergen site, Bulls Bridge, North Hyde Gardens, Hayes. The site location is shown on Figure 1. The development proposal is for an aggregate recycling facility, asphalt storage and production plant, and wet waste plant; together with associated ancillary structures and facilities, car and HGV parking, and landscaping.
- 6.1.2 This Transport Assessment Addendum (TAA) report has been prepared to supplement the Transport Assessment (TA) report which was prepared in May 2012 in support of planning application reference 13226/APP/2012/2185 for the proposed development.
- 6.1.3 Following the submission of the planning application, WSP has received comments on the accompanying transport reports from Transport for London (TfL) and the London Borough of Hillingdon (LBH). This TAA provides a response to the comments raised.
- 6.1.4 A PERS Audit of pedestrian facilities in the vicinity of the site has found the network to be acceptable.
- 6.1.5 Consideration has been given to points raised by TfL and LBH concerning the provision of cycle and car parking, and to the provision of Electric Vehicle Charging Points (EVCP). As such cycle parking arrangements have been formalised, with showers, changing facilities and lockers to be provided on site, and the proposed level of car parking will be reduced over a five year period in line with Travel Plan targets to reduce single occupancy car journeys. EVCPs will be provided to a level set out by TfL in their correspondence.
- 6.1.6 A Delivery and Servicing Plan (DSP) has been prepared to manage service vehicle trips to and from the proposed development to minimise their impact on the surrounding public highway. The DSP sets out the location of servicing areas within the proposed development and contains a number of measures which will contribute to its objectives.
- 6.1.7 At the request of LBH, further clarification has been provided of the impact of the vehicular trip generation of the proposed development on the local highway network. It has been shown that the proposals do not result in a significant increase in link flows in the vicinity of the site when compared to the 2016 forecast scenario inclusive of committed development.
- 6.1.8 The LinSig model of the North Hyde Gardens / North Hyde Road and A312 The Parkway / North Hyde Road signal junctions has been updated to conform to TfL guidance. Using this updated model, it has been demonstrated that the vehicular trips generated by the proposed development have a negligible impact on the operation of the junction, with a maximum increase in any Degree of Saturation of 1 – 2%

6.2 Conclusion

- 6.2.1 This Transport Assessment Addendum report has responded to the comments raised by TfL and LBH following their respective reviews of the transportation documentation submitted in support of the proposed development at Bulls Bridge. It is concluded that this report and its appendices sufficiently address the matters raised.

FIGURES

APPENDICES

APPENDIX A

Correspondence with Transport for London & London Borough of Hillingdon

APPENDIX B

PERS Audit Report

APPENDIX C

Drawing CWY14-010-P1

APPENDIX D

Delivery and Servicing Plan

APPENDIX E

LinSig Modelling Report

WSP UK Limited
Mountbatten House
Basing View
Basingstoke
RG21 4HJ
UK
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