| Committee Date: | 24/11/2016 | Application Number: | 2016/06867/PA |
|-----------------|---------------|---------------------|---------------|
| Accepted: | 12/08/2016 | Application Type: | Full Planning |
| Target Date: | 25/11/2016 | | |
| Ward: | South Yardley | | |

Fordrough, Webster & Horsfall, South Yardley, Birmingham, B25 8DW

Creation of an automated low carbon refuelling station with support facilities, 2 no. 20m high silent revolution wind turbines and new link road onto Energy Way

| Applicant: | Webster & Horsfall Fordrough, South Yardley, Birmingham, B25 8DW | |
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| Agent: | DACH Planning Webster And Horsfall, Hay Mills, Birmingham, B25 8DW | |

Recommendation Approve Subject To Conditions

Report Back:

This planning application was originally considered by the Planning Committee at the 10th November 2016 Meeting and deferred in order to consult the Health and Safety Executive (HSE) on the proposal.

The HSE are a statutory consultee for planning applications around major hazard sites and pipelines and on applications for hazardous substance consent. The application site does not fall within a consultation zone in relation to a major hazard site or pipeline requiring the HSE to be consulted as a statutory consultee. In relation to hazardous substance consent, this would be required if the site holds certain quantities of hazardous substances at or over defined limits. In such cases this would need to take the form of a different type of planning application known as a hazardous substance consent and could not be considered as part of an application for full planning permission, such as the current application. The list of hazardous substances and controlled quantities are detailed in the Planning (Hazardous Substances) Regulations 2015.

The current proposal would involve the storage of hazardous substances however these would be under the requirements for Hazardous Substance and CoMAH regulations. The chart below illustrates that the materials that would be stored all fall below consent thresholds, both as individual products and as combined volumes.

| Product | Proposed Volume | Lower Teir Threshold COMAH | Threshold Hazardous Substances |
|----------------|-----------------|-------------------------------|-----------------------------------|
| Hydrogen | 1.2t | 5.t | 2t (up to 5t in combination) |
| LPG | 3.0t | 50.t | 25t (up to 50t in combination) |
| CNG | 8.0t | 50.t | 15t (up to 50t in combination) |
| Diesel/Gas Oil | 180.t | 2,500t | 2,500t |

Whilst it is acknowledged that it was the Planning Committee Member's desire for the HSE to be consulted on the application it is demonstrated above that the HSE do not need to be consulted on the application. However, the site would be controlled with legislation that operates separate of the planning system. These include, amongst others, Dangerous Substances & Explosive Atmospheres Regulations 2002, Control of Pollution (Oil Storage) Regulations, Environmental Permitting Regulations / HSG176 / HSG 140, Regulatory Reform (Fire Safety) Order, Codes of Practice work to UKLPG COP1 and COP20 Health and Safety at Work Act 1974, Carriage of Dangerous Goods and use of Transportable Pressure Equipment Regulations 2009 and Confined Space Regulations 2015.

The applicant has consulted with Hay Mills Fire Station who has advised that comments from the Fire Authority would be sent as part of the building control review process. The development would need to comply with the Regulatory Reform (Fire Safety) Order, and a fire detection system capable of detecting a hydrogen flame would be installed. Furthermore, the development would be built in accordance with UK LPG COP1 part 1 fire safety requirements for LPG installations. Regarding the size and layout of the fuel storage and dispensers, the applicant has advised that the proposal is in excess of the minimum safety distances that are required when designing and building refuelling stations.

Notwithstanding this, the HSE have been contacted to seek their views on the proposal and they have confirmed that the HSE do not wish to be consulted on this planning application.

In light of the above and the strategic importance of this project within the City's wider objectives relating to carbon footprints and air quality, it is recommended that the application be determined.

Original Report:

1. <u>Proposal</u>

- 1.1. This full planning application represents Phase 2 of the redevelopment of the Tyseley Energy Park and consists of a number of elements:
 - Creation of a new road entrance off Energy Way to provide direct access from the site onto the A45 Small Heath Highway. The new road would cross the existing Mill Stream and would not only serve Phase 2 but also the recently completed Phase 1 Biomass Power Plant, which currently utilises an existing access off Speedwell Road, as well as the future development of Phases 3 and 4.
 - An automated low carbon refuelling station with support facilities that would have the capacity to accommodate up to 500 vehicles per day. There would be seven islands within the forecourt with two dispensers per island. The pumps would be fully automated, self-service operated by means of customer key fob authorisation only, and would be open for use 24 hours a day, seven days a week. It would consist of a number of different low carbon fuels:
 - 1. Compressed Natural Gas used primarily by waste collection vehicles and HGVs. An intermediate pressure gas line is located alongside the site adjacent to the grand Union Canal and a new connection would be constructed to supply gas to the new facility. Gas from a natural gas pipeline is compressed using on-site compressors and then dispensed into trucks.

- 2. Hydrogen used by fuel cell electric vehicles (e.g. cars and buses). The proposal includes the construction of a hydrogen generation, storage and vehicle refuelling system.
- 3. Biodiesel made up of predominantly fats, oils and grease and would also include an AdBlue pollution reduction agent / or equivalent.
- 4. Liquefied Petroleum Gas (LPG).
- 5. Electric Charging to be used by taxis travelling between Birmingham City Centre and Birmingham International Airport by means of rapid chargers. Private charging points are also incorporated. All electricity for the electric charging will come from green energy produced either by the biomass power plant on Phase 1 or solar and wind energy generated within the site.
- Erection of 2no. 20m high wind turbines adjacent to the heavily vegetated strip to the south of the site that runs parallel to the Grand Union Canal. The turbines would be a vertical axis twin turbine system and would be the first installation of this system in the country. It is claimed that this technology is different to others as it moves without creating noise or shadow flicker. Furthermore, because of the turbines' vertical design it is claimed that it presents less of a collision risk for wildlife.
- 1.2. The following have been submitted in support of the application: Design and Access Statement, Transport Assessment, Archaeological Assessment, Ecological Assessment, Land Contamination Desk Study, Noise Assessment, Air Quality Assessment, Food Risk and Drainage Assessment, and Tree Survey.
- 1.3. The proposals have been screened under the provisions of the Town and Country Planning (Environmental Impact Assessment) (Amendment) Regulations 2015 and there is no requirement for an Environmental Assessment.
- 1.4. Link to Documents

2. <u>Site & Surroundings</u>

- 2.1. The application site (approx. 2.12ha) refers to part of the south eastern corner of the wider Webster and Horsfall premises. The application site also includes links to the existing gated access off Speedwell Road to the east and a new access road linking to the Energy Way to the northwest. The site as a whole comprises several interconnecting sheds, subsidiary buildings, hard standings and a private watercourse the mill stream which flows from the mill pond and runs north east towards and beneath St Cyprians Church before joining the River Cole. It is accessed via the Fordrough and Speedwell Road.
- 2.2. The site is adjoined to the north by the remainder of the Webster and Horsfall site, including factory buildings, former workers housing on the Fordrough, a former schoolroom and the Grade II listed St Cyprian's Church, which are not affected by the current proposals. Further to the north are industrial premises, a retail park fronting Heybarnes Circus roundabout and an ASDA supermarket. To the east the site is adjoined by Kings Road Industrial Estate and residential properties fronting Speedwell Road. To the south is the Grand Union Canal, beyond which are further industrial premises. To the immediate west is the recently constructed Phase 1 Biomass power plant, and beyond that the River Cole, the existing Tyseley Incinerator and Small Heath Highway.
- 3. <u>Planning History</u>

- 3.1. 07/01/2010 2009/05541/PA. Outline application with all matters reserved save for access. For the construction of new buildings for uses falling within use classes B1b (research and development), B1c (light industrial process), B2 (general industrial) and B8 (storage and distribution) plus the construction of a new access across Energy Way. Approved.
- 3.2. 01/06/12 2012/02976/PA. Demolition of approximately 6,013sq.m of industrial floor space to the south of the site (Phase 1). Prior approval required and approved.
- 3.3. 25/10/12 2012/05481/PA. Erection of waste timber resource recovery and combined heat and power biomass plant with associated flue, weighbridge and parking. Approved.
- 3.4. 10/08/16 2016/05886/PA. Application for a prior notification for the demolition of former industrial buildings. Prior approval required and approved.
- 4. <u>Consultation/PP Responses</u>
- 4.1. Transportation Development No objection subject to conditions relating to the provision of the new link road and service road, no access via Speedwell Road, control vehicle priority and construction management plan.
- 4.2. Regulatory Services No objection subject to conditions relating to contamination, acoustic barrier and noise assessment relating to the turbines.
- 4.3. Lead Local Flooding Authority No objection subject to conditions relating to a sustainable drainage scheme and a Sustainable Drainage Operation and Maintenance Plan.
- 4.4. Environment Agency No objection subject to conditions relating to detailed modelling and a remediation strategy.
- 4.5. Severn Trent Water No objection subject to condition relating to the disposal of foul and surface water flows.
- 4.6. Canal & River Trust No objection subject to conditions relating to construction management plan and a planting buffer.
- 4.7. Natural England No objection.
- 4.8. West Midlands Police No objection.
- 4.9. Neighbouring premises, and local residents groups, Councillors and MP consulted with site and press notices posted. No responses received.
- 5. <u>Policy Context</u>
- 5.1. Birmingham UDP, Draft Birmingham Development Plan, Places for All SPG, Loss of Industrial Land to Alternative Uses SPD Car Parking Guidelines SPD and the NPPF.
- 6. Planning Considerations
- 6.1. Background:

6.2. The proposed refuelling facility is in response to the initiative being promoted by the Council as set out in the document 'A City Blueprint for Low Carbon Fuel Refuelling Infrastructure'. The document states that:

"Birmingham's Green Commission has committed the city to achieving ambitious carbon reduction targets in the coming decades, as part of a programme of work that aims to make Birmingham a leading green city. The Carbon Roadmap, launched by the Commission in November 2013, aims to reduce C02 emissions by 60% compared to 1990 levels by 2027. Road transport within the city is a priority area for reducing greenhouse gas emissions as well as improving local air quality".

- 6.3. This Blueprint sets out a strategy for creating a number of depots and charging points across the wider network to accommodate a significant shift by all types of vehicles to electric, hydrogen and gas power. The market for such alternative fuels is evolving and the intention for this particular facility, which is specifically highlighted in the Blueprint, is to provide for early adoption of the strategy. By 2020, it is anticipated that some 240 vehicles on the network would be using these low carbon fuels. It is expected that this number will rise to around 1,000-1,400 vehicles by 2025, with the main focus being on HGVs, buses and taxis.
- 6.4. To meet demand, a new network of refuelling stations will be developed with Hydrogen and Plug-in being available on a local level at 4 or 5 locations, whilst gas stations are proposed at strategic locations including the wider trunk road network. The application site has been specifically identified as meeting all of the locational needs of all the fuel types.

6.5. **Policy Context:**

- 6.6. Local Planning Authorities must determine planning applications in accordance with the Statutory Development Plan, unless material considerations indicate otherwise. If the Development Plan contains material policies or proposals and there are no other material considerations, the application should be determined in accordance with the Development Plan. Where there are other material considerations, the Development Plan should be the starting point, and other material considerations should be taken into account in reaching a decision. The Development Plan comprises the saved policies of the Birmingham Unitary Development Plan 2005.
- 6.7. The NPPF is clear that "the purpose of the planning system is to contribute to the achievement of sustainable development... There are three dimensions to sustainable development: economic, social and environmental. These dimensions give rise to the need for the planning system to perform a number of roles:
 - an economic role contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;
 - a social role supporting strong vibrant and healthy communities, by
 providing the supply of housing required to meet the needs of present and
 future generations; and by creating a high quality built environment, with
 accessible local services that reflect the community's needs and support its
 health, social and cultural well-being; and
 - an environmental role contributing to protecting and enhancing our natural, built and historic environment...".

6.8. The NPPF and the Draft Birmingham Development Plan are material considerations. The Draft Birmingham Development Plan is at an advanced stage and as such holds significant weight. The proposal raises a variety of planning-related matters, these being the loss of industrial land and the provision a low-carbon refuelling station, highway safety, visual amenity and neighbour amenity, which are discussed below.

6.9. **Principle – loss of industrial land and provision of a low-carbon refuelling station:**

- 6.10. Within the UDP and 'Loss of industrial land to alternative uses' SPD there is a general presumption against the loss of industrial land. The application site is classed as Core Employment Land within the Draft Birmingham Development Plan. The SPD identifies that a number of sui-generis uses, such as waste management processing and treatment facilities, can also be located on industrial land. The SPD recognises that these uses that are suitable to an industrial area are important to the local economy and will be treated on a case-by-case basis. This stance is supported in Policy TP18 of the Draft Birmingham Development Plan.
- 6.11. The NPPF is clear that planning plays an important role in helping to secure radical reductions in greenhouse gas emissions, minimising vulnerability ad providing resilience to the impacts of climate change and supporting the delivery of renewable and low carbon energy and associated infrastructure.
- 6.12. Policy TP1 of the Draft Birmingham Development Plan reinforces the Council's commitment to a 60% reduction in total C02 emission produced in the City by 2027 from 1990 levels. Policy TP5 relating to a low carbon economy supports a number of initiatives including the installation of refuelling recharging stations for electric and hydrogen fuel cell vehicles and hybrid buses.
- 6.13. The application site also falls within the Tyseley Environmental Enterprise District (TEED) which has been identified as a principal location in Birmingham for CO2 reduction as part of a low carbon, low waste economy through encouraging recycling energy production and renewables including manufacturing and supply chain development.
- 6.14. Whilst the proposal sui generis use does not represent a conventional industrial use within this important core employment area, it is considered that it is compatible with the objectives of the TEED as well as the Council's wider strategies to reduce the City's carbon footprint. Furthermore, the application site is in a strategically important location, being within a key industrial area of the City and off the main transport corridor between the City Centre and the Airport. As such no objection is raised in principle to the proposed use as it represents an appropriate alternative use of this industrial site.

6.15. Highway Safety:

6.16. A crucial element of this application is the creation of a new link road off Energy Way which currently serves the adjacent Tyseley Energy Recovery Facility. This would give the application site, as well as the already developed Phase 1 and remaining undeveloped phases of the Tyseley Energy Park, direct access to the Small Heath Highway. Tyseley Energy Park, including the application site, currently has access off a gated entrance off Speedwell Road, which is a relatively narrow street with a mix of residential and commercial uses.

- 6.17. The application has been accompanied by a Transport Statement and subsequent addendum. In assessing demand and capacity, it has taken 2025 as a future forecast year for 500 refuels per day. The document identifies in terms of capacity that the 14 dispensers could accommodate around 5-10 vehicles per hour depending on the type of fuel. This would equate to at least 7 vehicles per hour and a peak of around 140 vehicles per hour, which is in excess of the forecast flows with no risk of queuing or other operational issues.
- 6.18. In terms of traffic impact, the Transport Statement has not only analysed the proposed refuelling station, but also Phase 1 and the undeveloped phases of the Tyseley Energy Park using the new link road onto Energy Way. The site lies within an area which has previously obtained, but now expired, planning permission for industrial floorspace up to 15,142sqm and a link road onto Energy Way (2009/05541/PA). It is estimated that the current proposal would replace around 6,500sqm of the total floorspace previously approved.
- 6.19. Regarding existing operations that would use Energy Way, the Tyseley Energy Recover Facility has around 240 HGV per day resulting in a two way flow of around 450-480 HGV movements per day. The majority of outflows are early morning with most vehicles returning to the depot between 1000-1400hours. The Phase 1 Biomass Power Plant generates around 30-40 two way HGV movements today, which is significantly less than the 2009 consent for industrial uses which also included that site. The proposed low-carbon refuelling station is forecast to generate around 1000 movements per day, though this is likely to be substantially lower in the early years. Assuming 10% of movements occur in the peak hours this would generate 50 two way movements an hour. It is estimated that the future phases (3 & 4) of the redevelopment of Tyseley Energy Park have the potential to accommodate some 8,500 sqm of industrial floorspace.
- 6.20. The Transport Statement concludes that the traffic impact of the current proposal would be modest, though in the longer term flows would increase but not dissimilar to the anticipated daily flows of the combined area of Phases 1 and 2 under the 2009 industrial uses consent. The Transport Statement also acknowledges that the implementation of the link road to Energy way would have significant benefits in terms of reduced demand on Speedwell Road.
- 6.21. Transportation Development have assessed the submission and raise no objection subject to a number of conditions, of most note being the refuelling station not being used until the link road to Energy Way is constructed and no access to the refuelling station via Speedwell Road.

6.22. Visual Amenity:

6.23. Within the context of the site's industrial surroundings, including the Phase 1 Biomass Power Plant which has a building and flue measuring 20m and 40m in height respectively, the visual impact of the proposed refuelling station would be minimal. Views from the public realm would be limited and the site would be screened from the Grand Union Canal by a retained and heavily vegetated embankment. The ground level of the proposed refuelling station would be some 3m lower than the canal. The final design of the structures associated with the (e.g. refuelling island, the different fuel compounds, rapid charging points and toilet facilities) are unknown at this stage but due to their small scale and nature it is considered appropriate to cover this by means of a planning condition. 6.24. The proposed 20m high wind turbines would be of a vertical design and the first of its kind installed within the UK. In terms of appearance, these turbines are compact with a bulky appearance and have been designed specifically to be accommodated within more built-up environments. At 20m high, it would be similar to the maximum height of the adjoining Phase 1 Biomass Power Plant building and half the height of its flue. Within this industrial backdrop, which also includes the nearby and dominating Tyseley Energy Recover Facility, the location of these turbines is considered acceptable. Furthermore, the turbines would be located close to the Grand Union Canal and the lower section of the structure would be screened by retained vegetation along this boundary.

6.25. Neighbour Amenity:

- 6.26. The proposed refuelling station would create additional traffic on the site and some of the fuelling equipment would generate a level of noise. The closest noise sensitive properties are the existing houses on the western end of Speedwell Road, adjacent to the site. The submitted Noise Impact Assessment contains the findings from a noise survey and concludes that noise on the site is dominated by the noise emanating from the recycling plant at the Tyseley Energy Recover Facility. Furthermore, during day time, evening and early morning periods there was also a significant level of traffic noise from the A45.
- 6.27. The application includes a 4m high close boarded timber barrier on the north and east sides of the plant compound, which would screen the equipment for houses on Speedwell Road as well as block a clear view of the new roadway and the refuelling lanes. Furthermore, certain pieces of equipment would also require silencers or effective attenuation to reduce noise levels to an acceptable level.
- 6.28. Regulatory Services have raised no objection to the proposed refuelling station but requested additional information on noise associated with the wind turbines. In response the applicant has advised that such information is currently not available. There is an operational turbine in Germany, which is due to be tested but the noise assessment has not been completed as it has not yet been subject to high wind condition. The applicant adds that the turbines are really for demonstration purposes and likely to be subject to future funding bids. On this basis it is considered that further noise data from the existing operational turbine in Germany, to be required by planning condition, be provided prior to its installation in order to inform equipment design. The applicant is in agreement with this approach.
- 6.29. Due to the level of vehicular movements associated with the proposed refuelling station the application has been accompanied by an Air Quality Assessment. This highlights that there are no process emissions to the atmosphere associated with the operation of the facility but only those associated with the vehicles travelling to and from the site. The document demonstrates that there will be significant benefits for local air quality, including annual average NO2 concentrations where NOX emissions may be as much as 31% lower with biodiesel powered vehicles and as much as 90% lower for CNG and LPG powered vehicles. There would also be zero emission of pollutants associated with hydrogen and electric vehicles.

6.30. Other Matters:

6.31. A Phase 1 Habitat Survey and Bat Survey identified that the habitats present on the site (buildings, scattered trees scrub, tall ruderal and amenity grassland) are collectively typical of urban areas and no species of animals using the site or plants present are likely to be solely dependent on these habitats. There are habitats for

nesting birds but no evidence of an active bat roost. The report makes recommendations in relation to habitat enhancements associated with the development and these include bird and bat boxes. The City Ecologist raises no objection subject to conditions relating to an ecological mitigation plan and enhancement measures.

- 6.32. The City Ecologist has also considered the wind turbines, recognising that they are of a vertical nature rather than of the traditional design with large spinning blades. Furthermore it is noted that the turbines would be located alongside the Grand Union Canal which provides a commuting and foraging route for bats and birds. Like with the issue of noise discussed above, due to its relatively early stage of development, being a demonstrator and the first of its kind in the country, the City Ecologist has requested post installation monitoring for the first two years to assess if there has been any strikes occurring. This data would be used for information purposes in relation to this as a new technology to the UK. The applicant is happy to oblige with this request and an appropriate planning condition is attached.
- 6.33. The submitted Flood Risk Assessment identifies that there is an extremely low to low risk of flooding exists from the majority of sources. However, a moderate risk has been identified for the flood risk associated fluvial and canal/artificial watercourses. The Environment Agency raise no objection subject to conditions including, amongst others, detailed hydraulic modelling to demonstrate that the new bridge structure will not cause an increase in flood risk to others.
- 6.34. The Drainage Strategy identifies that storage is required to attenuate run-off generated and the proposal also includes the remodelling and reuse of the existing mill pond to attenuate surface water runoff to the site-specific greenfield rate. The Lead Local Flooding Authority raises no objection subject to conditions.
- 6.35. A Desk based archaeology assessment indicates that the site has low potential for prehistoric to medieval remains. Post medieval activity is limited to the construction and expansion of the Webster and Horsfall Wire Works and earlier evidence of activity is likely to have been removed, truncated or obscured by later industrial development. Archaeological deposits may be preserved beneath canal embankments. However, these are unlikely to be disturbed by the development. Therefore it is considered that the proposal would result in negative effects to heritage assets.

7. <u>Conclusion</u>

- 7.1. The proposal represents a suitable alternative use for this industrial site within a core employment land and would make an important contribution to the Council's commitment to reduce the City's carbon footprint, promote low carbon industries and improve air quality. Furthermore, the scheme's impact on visual amenity, neighbour amenity, highway safety, ecology and flood risk is acceptable and as such planning permission should be granted.
- 8. <u>Recommendation</u>
- 8.1. Approve subject to conditions.
- 1 Requires the prior submission of a construction method statement/management plan

- 2 Requires the prior submission of a contamination remediation scheme
- 3 Requires the prior submission of a contaminated land verification report
- 4 Requires the prior submission of a sustainable drainage scheme
- 5 Requires the prior submission of a Sustainable Drainage Operation and Maintenance Plan
- 6 Requires the prior submission of a scheme for the dispoal of foul and surface water flows
- 7 Requires the prior submission of detailed hydraulic modelling
- 8 Requires the prior submission of a construction ecological mitigation plan
- 9 Requires the prior submission of a scheme for ecological/biodiversity/enhancement measures
- 10 Requires the submission of post-installation monitoring of any bird / bat strike from the turbines
- 11 Requires the prior submission of an acoustic barrier
- 12 Requires the prior submission of a noise assessment for the wind turbines
- 13 Requires the prior submission of hard and/or soft landscape details
- 14 Requires the prior submission of boundary treatment details
- 15 Requires the prior submission of a lighting scheme
- 16 Requires the prior submission of level details
- 17 Requires the prior submission of the buildings/structures/plant/compounds
- 18 Requires the construction of the bridge link and service road off Energy Way
- 19 Restricts vehicles visiting the refuelling station to use the bridge link and service road off Energy Way
- 20 Requires the prior submission of measures to control vehicle priority along the site access road and at the entry/exit points to the refuelling station
- 21 Requires the scheme to be in accordance with the listed approved plans
- 22 Limits the approval to 3 years (Full)

Case Officer: Peter Barton

Photo(s)



Figure 1 – View of Energy Way towards the access point of the new link road



Figure 2 – View of site with the gated Speedwell Road access in the foreground and the Phase 1 Biomass Power Plant in the background



Figure 3 - View along Speedwell Road towards the application site



Figure 4 – View of southern boundary of the site viewed from the Grand Union Canal with the Phase 1 Biomass Power Plant in the background

Location Plan

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