

PREMIER FOODS BAKERY SOLAR FARM

TRANSPORT STATEMENT

01 September 2023

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TRANSPORT STATEMENT

PROJECT DETAILS

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1. Introduction

1.1. Context

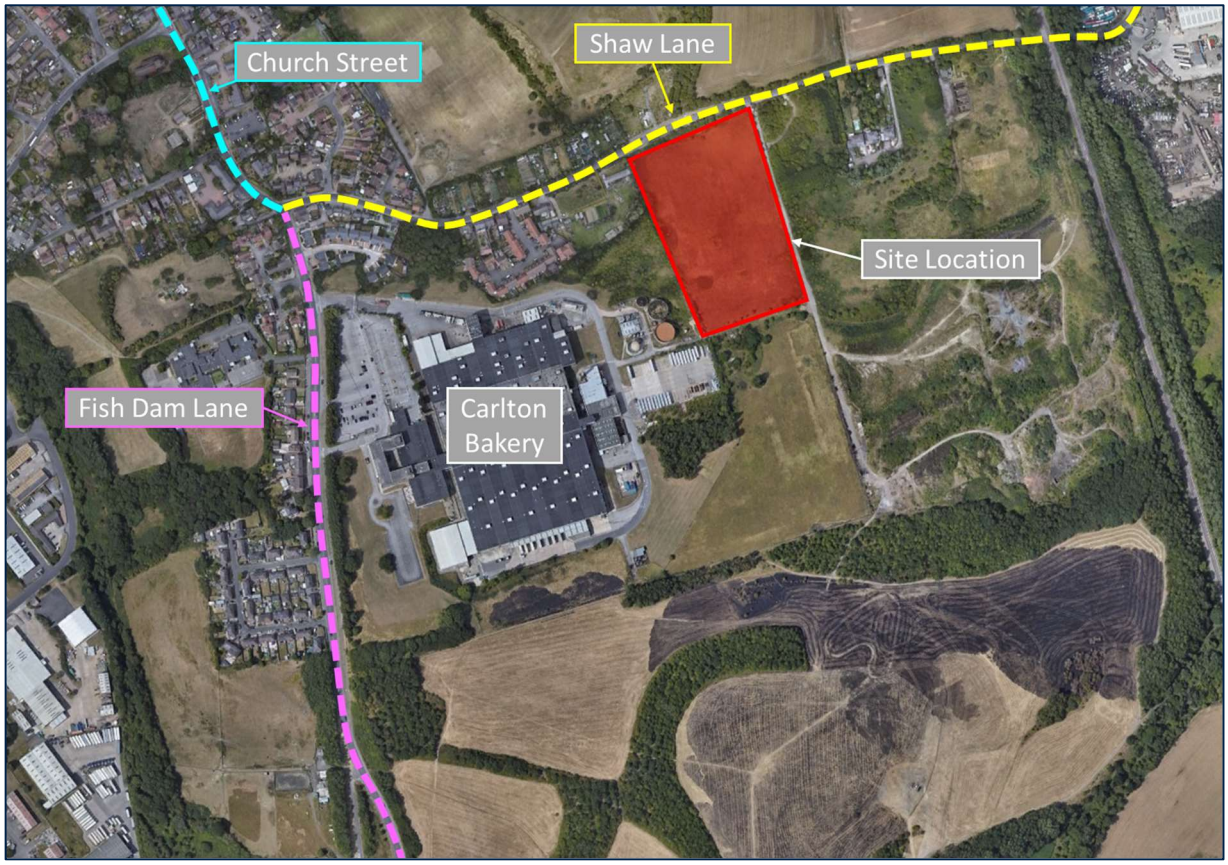
1.1.1. This Transport Statement (TS) has been prepared by Evoke Transport Planning Consultants Ltd on behalf of Premier Foods Plc in support of a planning application for the installation and operation of a Solar Farm together with all associated works, equipment and necessary infrastructure, to deliver up to 2MW of electricity on land adjacent to Premier Foods Bakery, Carlton, S71 3HF. The Local Planning Authority (LPA) and the Local Highway Authority (LHA) are both the Barnsley Metropolitan Borough Council (BMBC).

1.2. Existing Site

1.2.1. The Application Site is located in Carlton to the north east of Barnsley and comprises an area of approximately 2.7 hectares to the east of the Premier Foods site (Carlton Bakery). To the north, the Site is bound by Shaw Lane, to the south and east by undeveloped land and to the west by the Carlton Bakery. At present, a secure access to the Application Site is provided via the internal Carlton Bakery highway network in the south western corner of the Site.

1.2.2. The general location of the Application Site is shown at Figure 1.

Figure 1 – Site Context Plan



1.3. Consultation

1.3.1. A pre-application submission was made by tor&co to BMBC outlining the proposed development of a solar farm to provide up to 50% of Premier Food's Carlton Bakery power needs. A response was received

from BMBC in May 2023. In respect of transport, the main points within BMBC's response have been outlined below:

- The Pre-application Planning Statement produced by tor&co. highlights the fact that vehicle movements will be negligible once the solar farm is up and running. Highway Development Control (HDC) have no objections to the principle of development.
- It is proposed that a Transport Statement and a Construction Environmental Management incorporating Traffic Management Plan will be submitted to the planning application, for the Highways Authority's review and consideration. These documents will provide details of how the construction phase will be managed, to ensure that residential amenity and the local transport network is not unduly impacted.
- Highways DC welcome the intention to submit these details as part of a full application. The required Construction Management Plan should include but not be restricted to:

    i. Phasing of the works
    ii. Site working hours
    iii. Delivery hours which should avoid peak hours
    iv. Means of access for construction traffic including delivery routes
    v. Phasing of unloading of plant and materials
    vi. The parking of vehicles of site operatives and visitors
    vii. Storage of plant and materials used in constructing the development
    viii. Measures to prevent mud/debris being deposited on the public highway

1.3.2. The response has been taken into account in the production of this TS and the separate Traffic Management Plan which will form part of the wider Construction Environmental Management Plan submitted with this application.

1.4. Planning History

1.4.1. A desktop review using the Local Authority's online planning register has been undertaken, there are no pertinent historical planning applications associated with the application site.

1.4.2. The site is however, located within allocation MU3 'Land off Shaw Lane, Carlton' in the adopted Barnsley Local Plan (January 2019). The allocation proposed a mixed use development comprising housing and green space, subject to the production of a phased Masterplan Framework. The Carlton Masterplan Framework has since been adopted in November 2021 following a six-week public consultation exercise. The application site is identified within the Carlton Masterplan Framework as an area safeguarded for Premier Foods expansion.

1.5. Proposed Development

1.5.1. The proposed development consists of the installation and operation of a Solar Farm together with all associated works, equipment and necessary infrastructure, to deliver up to 2MW of electricity on land adjacent to Premier Foods Bakery. The existing field entrance will be utilised to facilitate occassional operational traffic as well as construction traffic. This will also utilise the existing internal highway network within the Carlton Bakery site. No additional car and cycle parking will be provided as part of the proposed development; the existing facilities within the Carlton Bakery site will be utilised.

1.6. Report Structure

1.6.1. This TS sets out the existing highway conditions, proposed access arrangements; and the principal traffic impacts which will occur during the construction of the solar farm.

1.6.2. Following this introductory section, this TS is structured as follows:

- **Chapter 2: Policy Context** – Outlines the national, regional and local policies which will be examined as part of this Transport Statement;
- **Chapter 3: Existing Situation** – Describes the existing site and the sustainable transport conditions in its vicinity;
- **Chapter 4: Proposed Development** – Summarises the development proposals and proposed access arrangements;
- **Chapter 5: Traffic Generation** – Outlines the anticipated trips associated with the construction of the proposed development and comments on the impact of these trips on the surrounding transport and highways network; and
- **Chapter 6: Summary**– Outlines the findings of this TS and summarises the proposed development in transport and highway terms.

2. National, Regional, and Local Policy Context

2.1.1. This section of the report provides a review of national, regional and local policies and design guidance in relation to this proposed development.

2.1.2. This Transport Statement includes reference to:

- National Planning Policy Framework (July 2021);
- Planning Practice Guidance (PPG) – Travel Plans, Transport Assessments and Statements in Decision Taking (March 2014);
- Barnsley Local Plan (January 2019);
- Barnsley Supplementary Planning Document: Parking (November 2019); and
- Carlton Masterplan Framework (2021).

2.1.3. The key policy documents promote development where there is a choice of sustainable transport modes such as walking, cycling, public transport and electric vehicles.

2.1.4. Paragraph 105 emphasises the importance for sustainable locations for growth, however it is recognised that opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

2.1.5. The Site is located within the Settlement Boundary and the 'Urban Fabric' denoted in the Barnsley Local Plan.

2.1.6. Policy T3 'New Development and Sustainable Travel' of Barnsley's Local Plan states that "*New development will be expected to:*

- *Be located and designed to reduce the need to travel, be accessible to public transport and meet the needs of pedestrians and cyclists;*
- *Provide at least the minimum levels of parking for cycles, motorbikes, scooters, mopeds and disabled people set out in the relevant Supplementary Planning Document;*
- *Provide a transport statement or assessment in line with the thresholds and guidance set out in the National Planning Policy Framework including where appropriate having regard for cross boundary local authority liaison; and*
- *Provide a travel plan statement or a travel plan in accordance with guidance set out in the National Planning Policy Framework including where appropriate having regard for cross boundary local authority liaison. Travel plans will be will be secured through a planning obligation or a planning condition.*"

2.1.7. This application's compliance with these standards is discussed through this TS and accompanying Traffic Management Plan.

2.1.8. The NPPF concludes that development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

3. Existing Situation

3.1. Context

3.1.1. This section of the report provides an overview of the existing conditions surrounding the site including an assessment of the local highway network and sustainable travel opportunities.

3.2. Application Site and Surroundings

3.2.1. The site currently comprises of a parcel of undeveloped land measuring approximately 2.7 hectares with access provided via the Carlton Bakery site using the existing access road from Fish Dam Lane. To the north the Site is bound by Shaw Lane, to the south and east by undeveloped land and immediately to the west by Carlton Bakery. Access to the Site is taken via the internal Carlton Bakery highway network linking with the Site in the south western corner.

Access to the Premier Foods Bakery

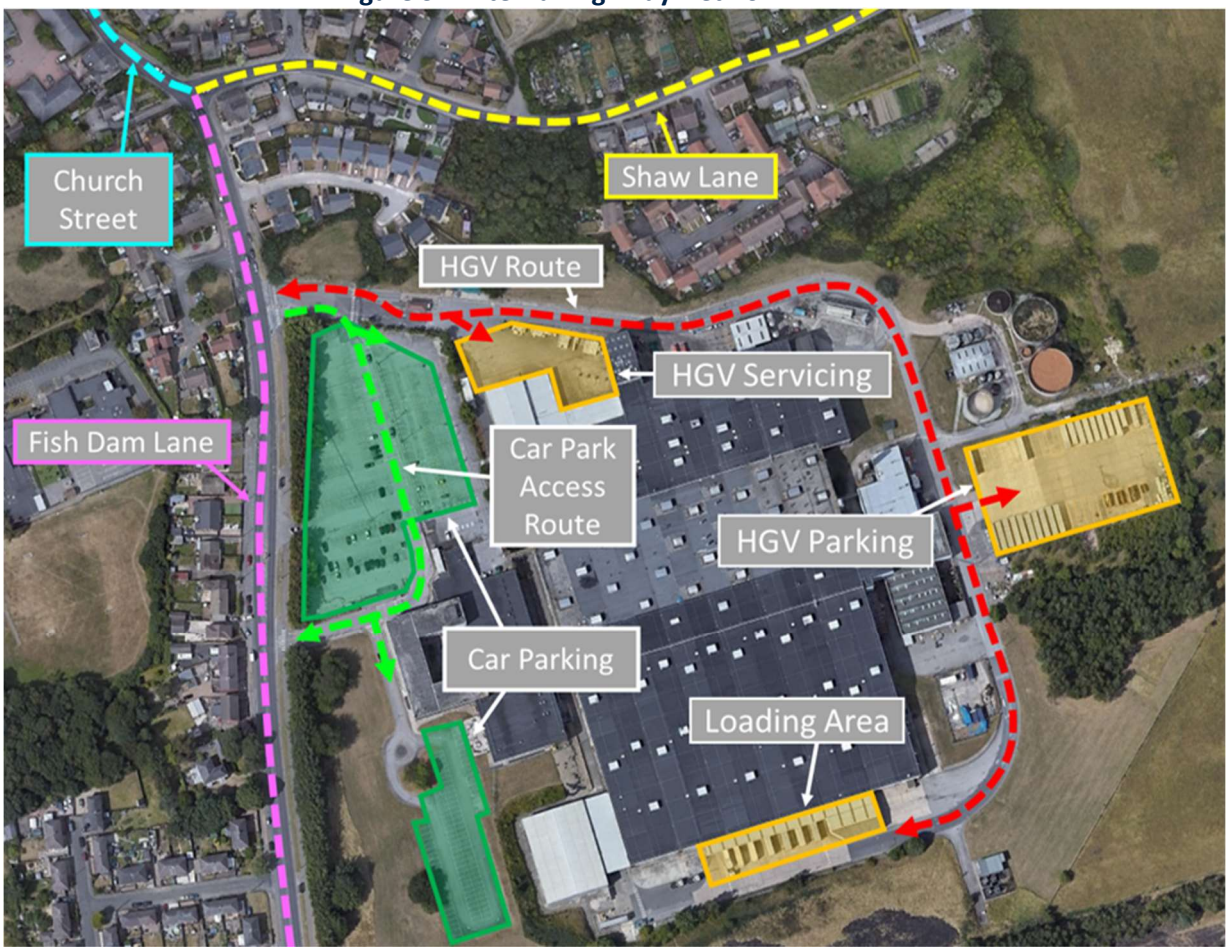
3.2.2. Access to the existing bakery is currently taken off Fish Dam Lane in the form of a priority junction with ghost island right turn lane (as shown below in Figure 2). The access is provided with a large bell-mouth and dedicated pedestrian crossing demarcated using zebra markings.

Figure 2 – Fish Dam Lane Site Access



3.2.3. As shown below in Figure 3, this access currently accommodates all two-way HGV movements associated with the bakery, i.e. all inbound delivery / servicing trips as well as all outbound delivery / servicing trips. However, with regards to car / light vehicle movements that utilise the car park area to the west of the site, these vehicles access via the junction shown in Figure 2 but exit via a separate 'exit only' junction approximately 160m further south. This arrangement minimises the potential for conflict between HGV movements and staff / visitor vehicle movements within the site.

Figure 3 – Internal Highway Network



3.2.4. The HGV route is provided with a security hut, barriers and weighbridge (shown in Figure 4) which control the movement of vehicles around the site, ensuring that all visitors and cars route directly to the car park to the west of the site with all HGVs and servicing vehicles following the HGV route to the appropriate areas within the site, including the loading area, servicing yard and HGV parking area.

Figure 4 – Existing HGV Route



3.2.5. Vehicle access to the application site is currently taken from a private track to the north of the HGV parking area, as shown below in Figure 5.

Figure 5 – Application Site Access Route



3.3. Local Highway Network

Fish Dam Lane

3.3.1. Fish Dam Lane is a two-way single carriageway road subject to a 30mph speed limit which measures approximately 11.5m wide within the vicinity of the site. As shown in Figure 2, a ghost island right turn lane is provided at the main access to Premier Foods allowing for through carriageway widths of 3.6-3.9m in width.

Shaw Lane

3.3.2. Shaw Lane routes in an east to west alignment and forms the northern boundary of the site. Shaw Lane links with Fish Dam Lane to the west of the site in the form of a simple priority junction. Along the boundary of the site, Shaw Lane provides a footway and street lighting along the southern carriageway edge. A railway bridge is located approximately 800m to the east of the Shaw Lane / Fish Dam Lane junction, the bridge has a height restriction of 4.8m and a width restriction of 2.0m.

West Green Way

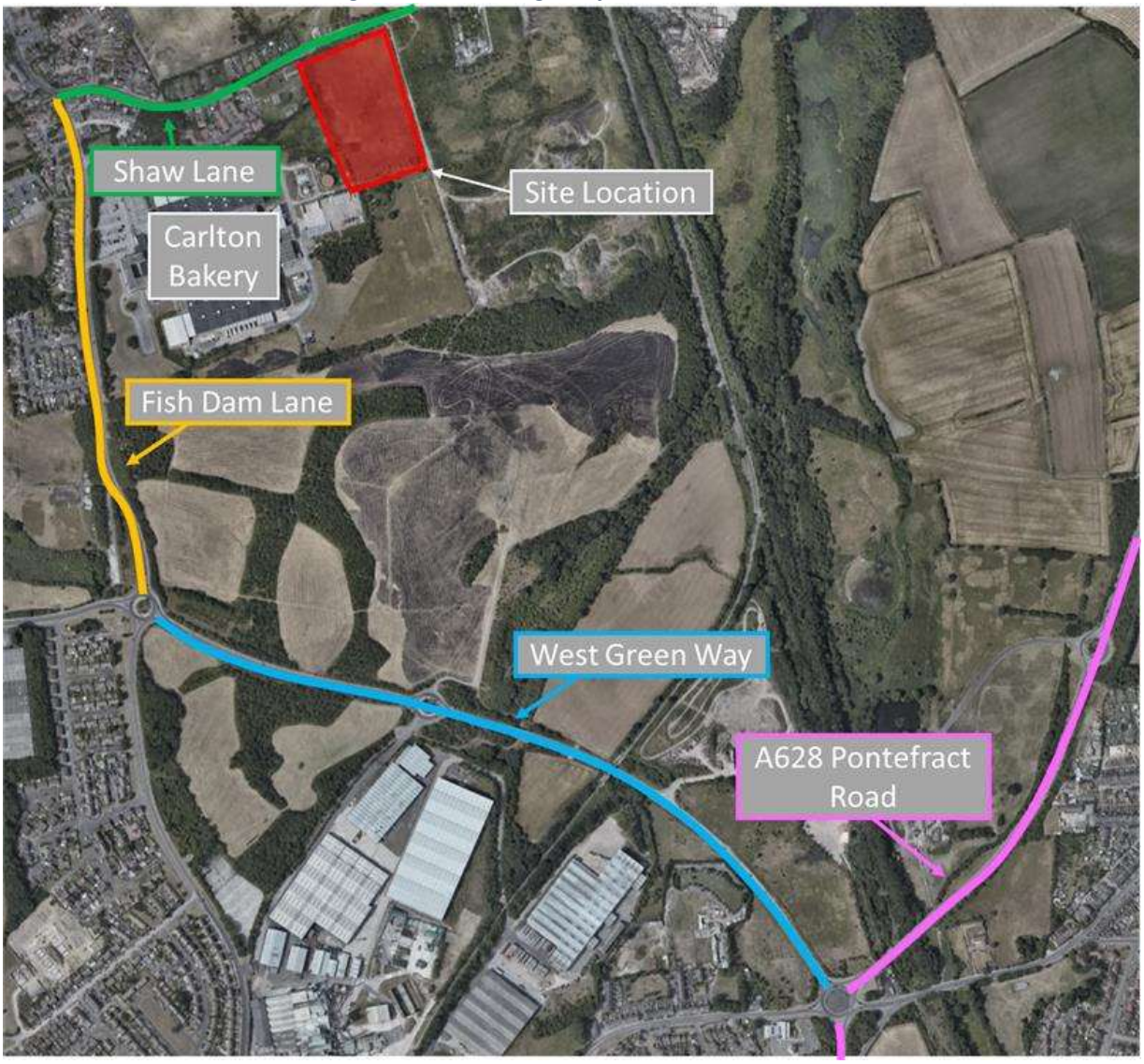
3.3.3. West Green Way is located to the south of the Premier Foods site and adjoins Fish Dam Lane in the form of a four-arm roundabout. West Green Way is subject to the National Speed Limit (60mph) with a shared cycle footway along the southern side of the carriageway. West Green Way provides access to the wider highway network via the A628 Pontefract Road / Cudworth Parkway.

A628 Pontefract Road

3.3.4. The A628 Pontefract Road is a distributor route subject to national speed limit (60mph) located to the south of the site and routes in a north to south alignment, providing access to the wider highway network, including the A635 Doncaster Road and Barnsley.

3.3.5. A summary of the local highway network within the vicinity of the site has been provided below in Figure 6.

Figure 6 – Local Highway Network



3.4. Road Safety

3.4.1. To establish the road safety record on the local highway network in the vicinity of the site, personal injury accident data (PIA) data has been obtained from the Crashmap database for the most recent five-year period available (2017-2021). The results are shown in Figure 7.

Figure 7 – PIA Locations in Site Vicinity



Source: Crashmap

3.4.2. As can be seen, there have been no incidents resulting in injury at either of the site access junctions in the most recently available 5-year period (2017-2021). Whilst there are some scattered incident locations further from the site access, including four incidents to the north of the Church Street / Fish Dam Lane junction, the data indicates that there is not a common trend within the incidents to indicate a particular highway safety concern. It should be noted that the construction traffic associated with the

site is not anticipated to route via this route. Whilst any incident is regrettable, the construction of the solar farm is not anticipated to exacerbate any potential for incidents along this route.

3.4.3. To the south of the site, which forms the key route from the site to the strategic road network, one incident has taken place on Fish Dam Lane in the latest five year period which involved a single road user (a car). This incident is considered to be isolated and does not represent a defect in the highway or a particular highway safety concern.

3.4.4. Whilst there has been a cluster of incidents, including five slight and one fatal incident, on the West Green Way / Fish Dam Lane / Industry Road roundabout and its approaches, this is not considered to be uncommon for distributor routes such as this which provide a connection between key employment areas and the wider highway network. It is of note that the fatal incident occurred between a HGV and a car to the west of the roundabout on Industry Road, however as this incident is isolated and did not occur on the roundabout itself or on the route that HGVs will be taking, it is considered that it does not represent a trend which could be exacerbated by the site construction traffic.

3.4.5. As a result of this analysis, it can be concluded that the existing highway network is suitable to accommodate the minor increase in HGV traffic that would be generated by the construction of the solar farm. As noted below, the number of vehicle movements is anticipated to be marginal and is likely to fall within day to day variations currently experienced on the local highway network. A range of traffic management measures will also be employed, as outlined within the Traffic Management Plan, to further manage and promote safe routing by construction vehicles.

3.4.6. Further to this, once operational the number of vehicle trips generated by the solar farm would be negligible, equivalent to one two-way trip per month. As such, there are not considered to be any existing highway safety issues that would be exacerbated by the proposed development.

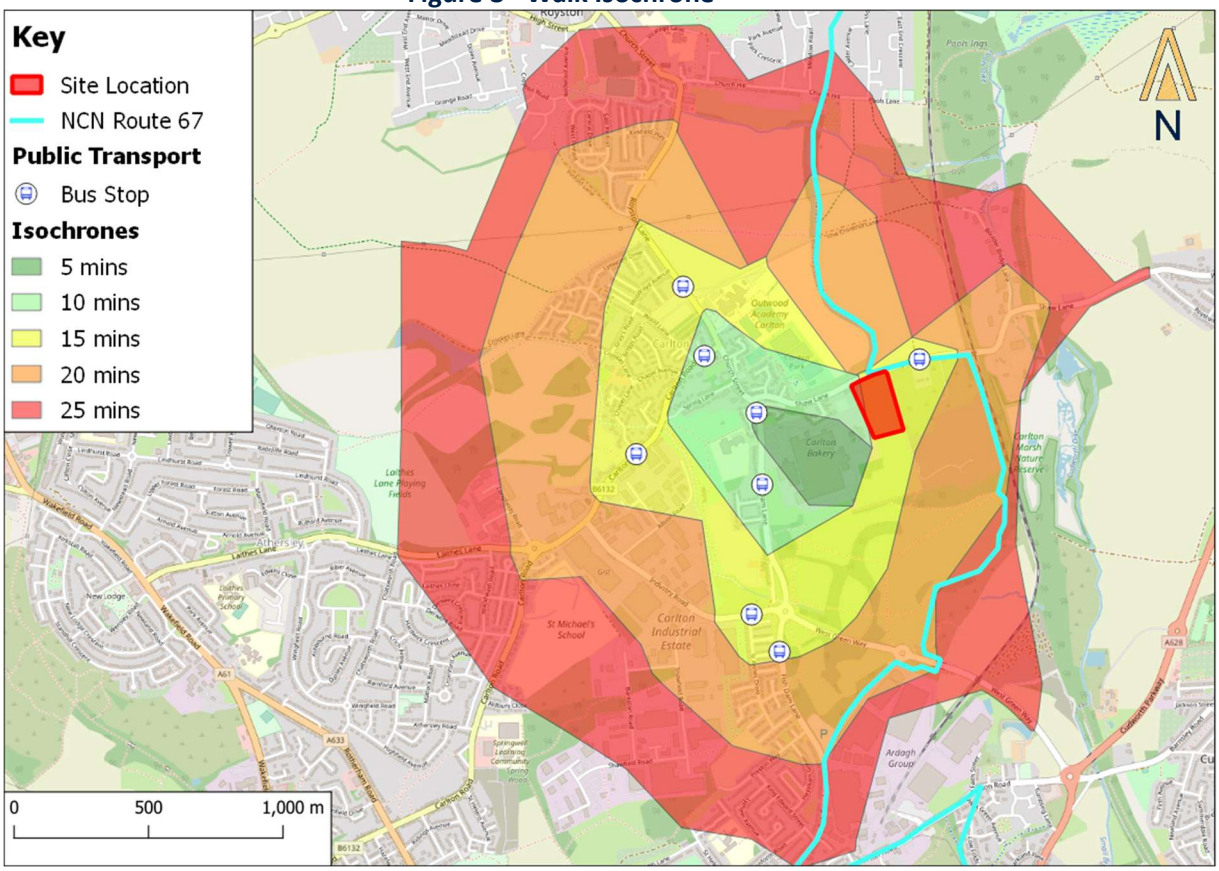
3.5. Pedestrian and Cycle Accessibility

3.5.1. To enable an assessment of the viability of walking and cycling between the site and key destinations in the local area it is appropriate to establish the maximum distance that people are generally prepared to walk and/or cycle and the destinations that exist within these distances.

3.5.2. The Chartered Institute for Highways and Transport (CIHT) guidance, 'Planning for Walking' (2015) states that 'walkable neighbourhoods are typically characterised as having a range of facilities within 10 minutes' walking distance (around 800m). The guidance also notes that 'the propensity to walk or cycle is not only influenced by distance but also the quality of the experience; people may be willing to walk or cycle further where their surroundings are more attractive, safe and stimulating.'

3.5.3. Figure 8 shows a walk isochrone which demonstrates the areas that can be reached within a 25-mintue walk of the site (at 5-minute, or approximately 400m, intervals), with bus stops within a 15-minute walk of the site marked.

Figure 8 –Walk Isochrone



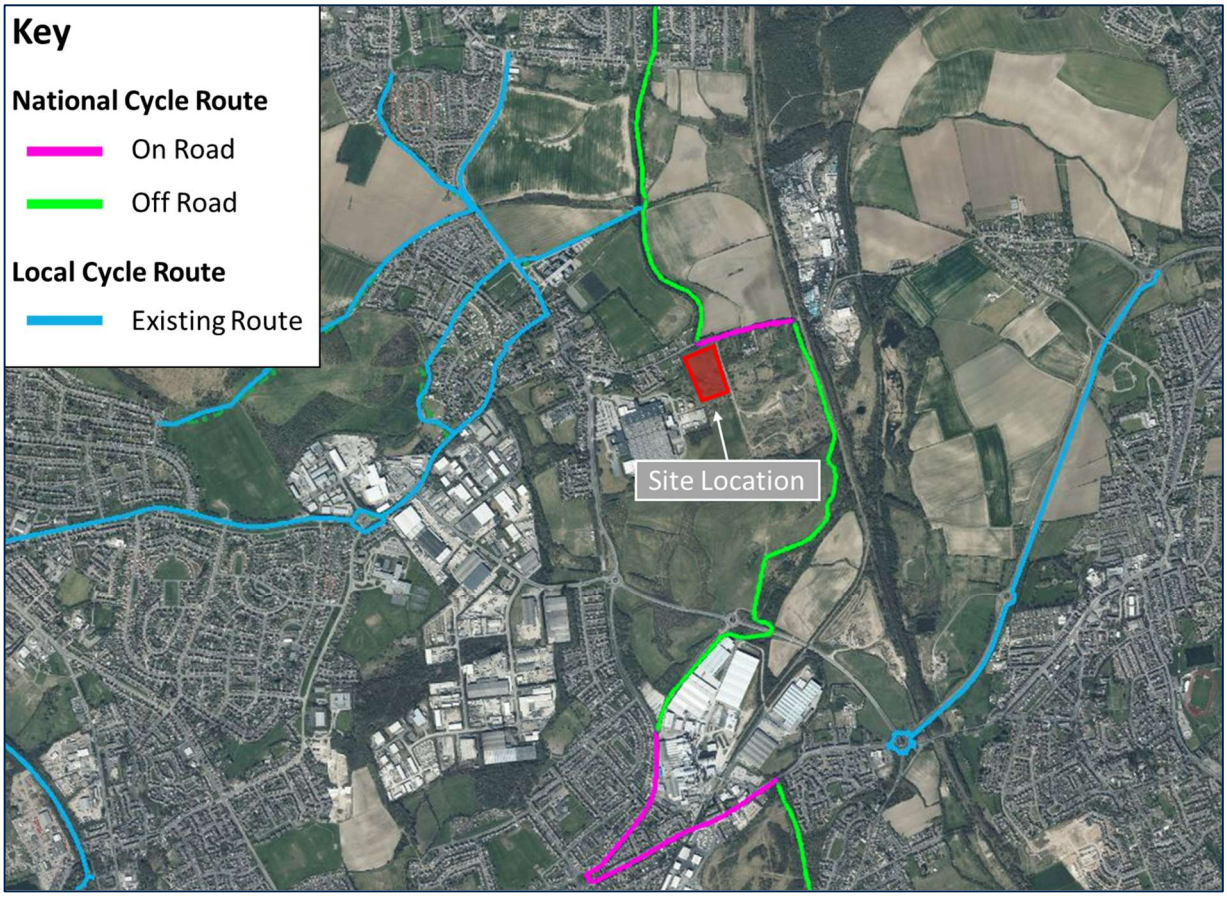
Source: QGIS and Openroute Service (walk speed 5kph)

3.5.4. The isochrone demonstrates that the site is in easy walking distance of a number of bus stops, as well as within a 20-minute walk of a number of residential areas to the north-east of the site which provide potential catchment areas for construction workers as well as workers that may need to access the solar farm once operational.

3.5.5. LTN 1/20, Cycle Infrastructure Design states that cycling is considered an important mode of sustainable travel, and five miles (eight kilometres) is generally considered an 'achievable' cycle distance for most people. Journey distances for electric bicycle journeys are extended beyond this.

3.5.6. National Cycle Network (NCN) Route 67 runs along the northern border of the site. The route connects the site to Royston and Wakefield in the North and Wombwell in the south, leading to Doncaster via Route 62. The cycling routes available in the vicinity of the site are shown in Figure 9.

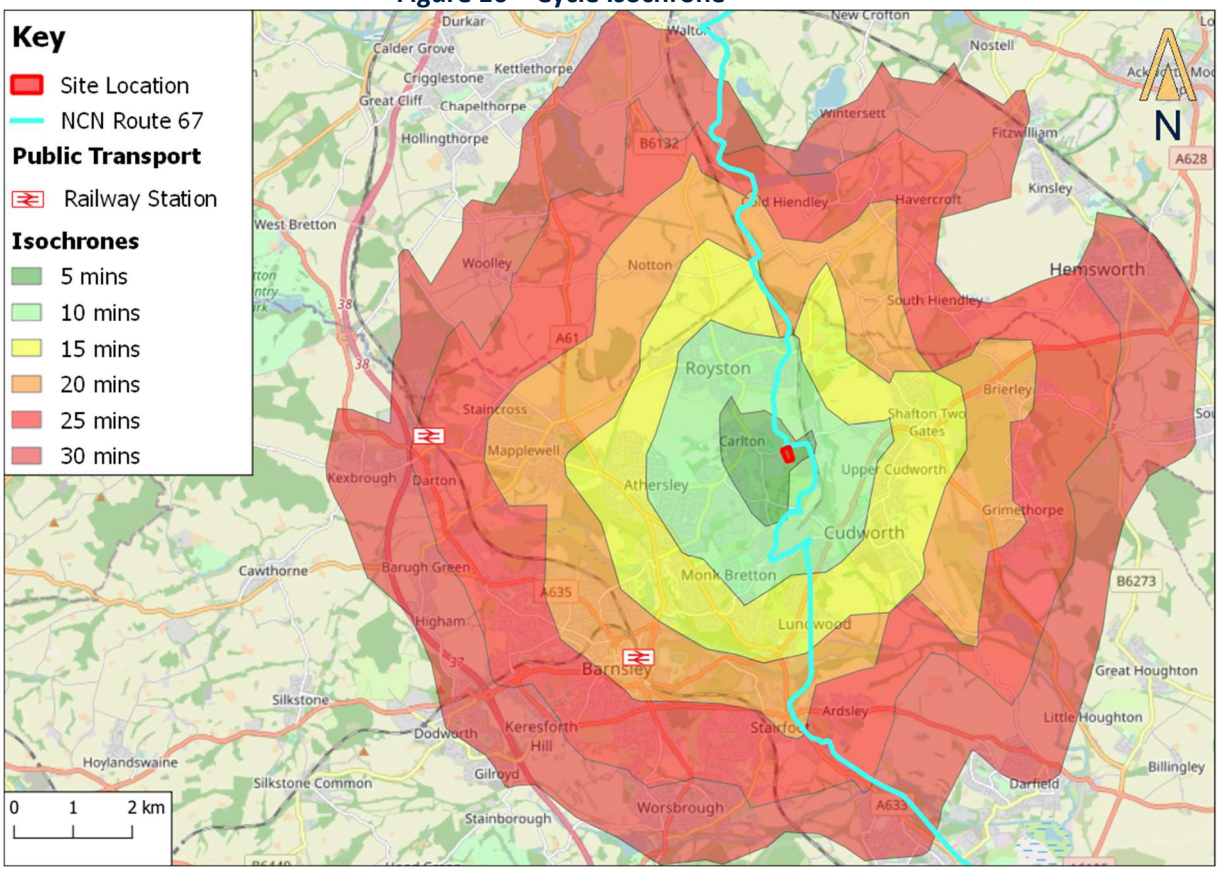
Figure 9 – Formal Designated Cycle Routes Around the Site



Source: Barnsley.gov.uk

3.5.7. Figure 10 shows a cycle isochrone which demonstrate the areas that can be reached within a 30-minute cycle of the site (at 5-minute intervals). The isochrones are generated based on speeds dependent on the surface and highway type. The majority of the routes used would be paved and as such would be subject to an c.18kph cycle speed based on the parameters in the software. A five-minute isochrone would therefore cover a distance of c. 1.5km, with a 30 minute isochrone covering a distance of 9km.

Figure 10 – Cycle Isochrone



Source: QGIS and Openroute Service (cycle speed c. 18kph)

3.5.8. The isochrones demonstrate that Cudworth, Barnsley town centre, and Mapplewell are all within a 20-minute cycle from the site. This includes Barnsley Interchange Railway Station, which is equipped with 24 sheltered and CCTV covered cycle storage spaces.

3.5.9. Additionally, the proximity of the site to the previously mentioned NCN Route 67 ensures that dedicated and formal cycle routes are provided to facilitate access to nearby residential areas such as Royston, Lundwood, and Stairfoot.

3.6. Public Transport

Bus Services

3.6.1. The nearest bus stops to the site are located within 100m of the main site entrance. A summary of the bus services accessible from the site and their routes and typical frequencies is shown in Table 1.

Table 1 – Local Bus Services

Number	Destination	Weekday			Weekend Frequency	
		Approx. Frequency	First Bus	Last Bus	Saturday	Sunday
57	Royston	30 minutes	07:50	18:56	30 minutes	No Services
57	Barnsley	30 minutes	05:37	17:46	30 minutes	No Services
59	Wakefield	30 minutes	05:35	23:51	30 minutes	60 minutes
59	Barnsley	30 minutes	04:59	23:12	30 minutes	60 minutes

Note: Route 59 Services to Wakefield after 18:24 only go to Royston instead of all the way through to Wakefield

3.6.2. The bus stops accessible within short walking distance of the site provide access to frequent services to Barnsley (a 16-minute bus journey), with the timetables of the two services staggered to provide services approximately every 15 minutes during the day. The 59 Route operates before and after typical working times providing suitable opportunities for workers to use the bus network.

3.6.3. The additional services north to Royston (an 11-minute journey) and Wakefield (a 34-minute journey) allows worker from a wider catchment area to reach the site through sustainable means.

Rail Services

3.6.4. Barnsley Interchange Railway Station is located 4.9km south-west of the site (equating to a 22-minute cycle). Barnsley Station provides services to Sheffield, Leeds, Lincoln, and Huddersfield. The station is also equipped with 24 sheltered and CCTV covered cycle storage spaces.

3.6.5. The level of accessibility to frequent bus and rail services to a range of destinations ensures that travel to and from the site by public transport is a viable mode.

3.7. Census Data

3.7.1. The site is located within the Barnsley 002 mid-level super output area (MSOA). Census 2011 data has been analysed to establish the journey to work modal split for people that travel to this MSOA for work. The results are shown below in Table 2. It is of note that at the time of producing this report, the workplace employee dataset is not yet available from the 2021 Census.

Table 2 – Barnsley 002 MSOA Journey to Work Workplace Population

Mode	Barnsley 002 MSOA
Train	0.3%
Bus	5.0%
Taxi	0.6%
Motorcycle	1.2%
Car Driver	71.3%
Car Passenger	10.2%
Bicycle	2.4%
On foot	8.7%
Other	0.3%
Total	**100.0%**

Source: Census 2011, NOMIS

3.7.2. The 2011 data shows that the majority (71%) of employees working in the Barnsley 002 MSOA travel to work by private car, with an additional 10% as car passengers. A total of 16% of employees travel using sustainable modes of transport, of which 5% are by bus, 9% on foot, and 2% by cycle.

3.7.3. It is worth noting that the most recently available Census data is over 12-years old and therefore it is likely that mode shares have changed in recent years. Changes in travel behaviour and working patterns post Covid are also not reflected in the data.

3.8. Summary

3.8.1. In compliance with Policy T3 of the Barnsley Local Plan, it has been shown in this section that the site is in an accessible location where construction workers and those that will work at the site once it is operational can access the site through public transport, cycling, and on foot.

3.8.2. The presence of numerous footways and cycle routes within the vicinity provides a permeable network for active travel that connects the site to a range of surrounding residential areas.

3.8.3. Regular bus services connect the site to the centre of Barnsley as well as Royston and Wakefield, and services to Barnsley connect to the Barnsley Interchange Railway Station which in turn provides long-distance travel options to destinations such as Sheffield, Leeds, Lincoln, and Huddersfield.

3.8.4. The most recently available Census Journey to Work data for the workplace population shows that, in 2011, approximately 71% of employees in the Barnsley 002 MSOA drove to work with a further 10% as car passengers, whilst approximately 16% of the workplace population travelled to work through sustainable modes.

3.8.5. An analysis of PIA data on the surrounding highway network highlighted that there have been no incidents at the site access, demonstrating that the site access arrangements are safe and suitable for current use. The proposed development, and negligible increase in HGV movements during the construction phase, are not anticipated to exacerbate the trend in PIA incidents.

4. Proposed Development

4.1. Context

4.1.1. This chapter of the report outlines the proposed development strategy whilst also detailing the access and car and cycle parking arrangements for the site.

4.2. Proposed Development

4.2.1. The proposed development consists of the installation and operation of a Solar Farm together with all associated works, equipment and necessary infrastructure, to deliver up to 2MW of electricity on land adjacent to Premier Foods Bakery. The proposed layout plans are attached at **Appendix A**.

4.2.2. In summary the proposed development will include:

- Installation of up to 2MW solar PV arrays at 2.5m in height;
- Installation of substation;
- Ancillary underground cabling works;
- Erection of 2.4m palisade perimeter fence (colour: moss green) to secure the solar PV arrays;
- Installation of double leaf gate to provide secure access to/from the Premier Foods Bakery site
- Installation of 4 CCTV posts at each corner of the site (6m high posts)

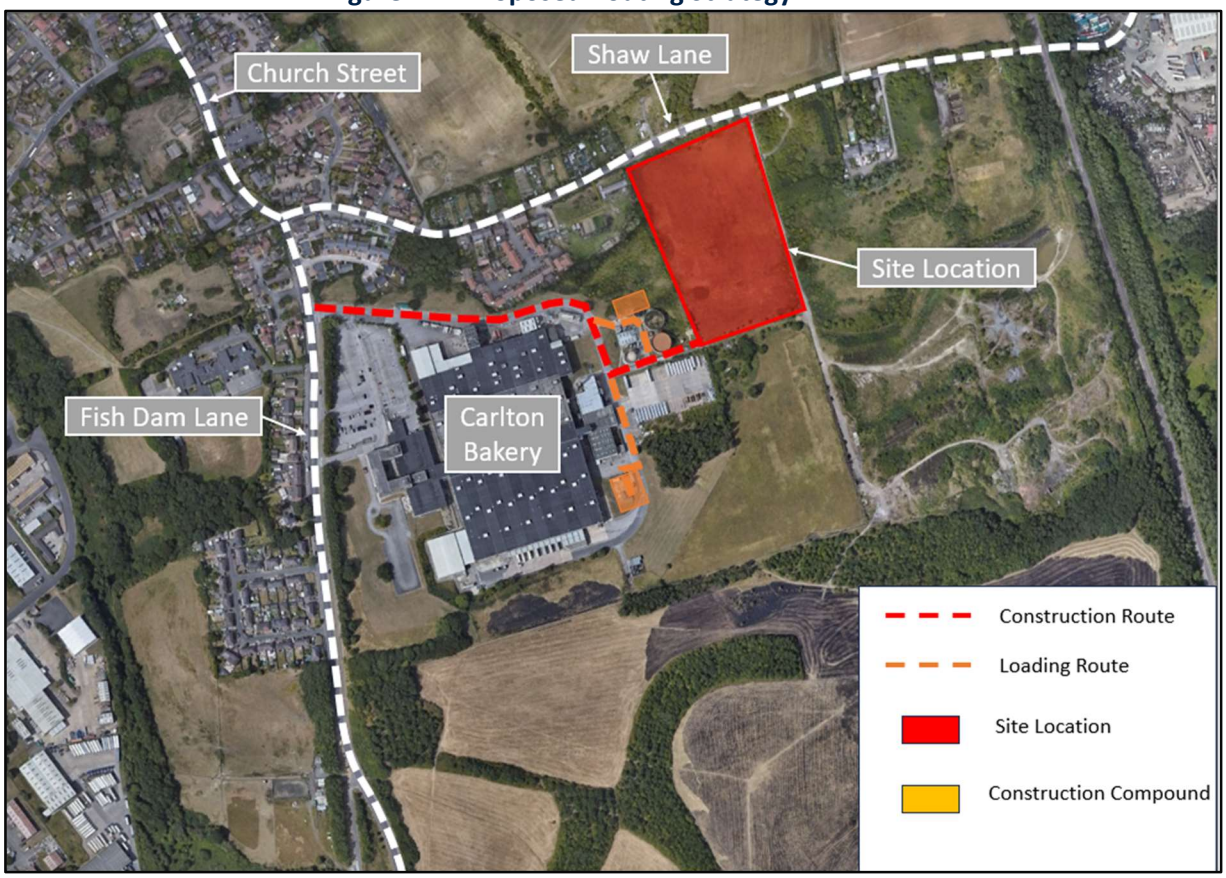
4.2.3. The proposals will include increased landscape screening in the form of additional planting around the site boundary, to mitigate any potential visual impacts and improve biodiversity connectivity. Further to this an additional 5m ecological buffer (6m around existing ash tree) will be provided around the perimeter of the site.

4.3. Proposed Access Arrangements

4.3.1. The existing field entrance will be utilised to facilitate occasional operational traffic as well as construction traffic. To accommodate construction vehicles minor widening of the field gate access may be utilised during the construction phase, however this is anticipated to comprise of small scale hedge removal which would be reinstated following completion of the construction phase.

4.3.2. With regards to the suitability of the existing internal highway network within the Carlton Bakery site, the roads measure approximately 8.0m in width which is sufficient to allow the simultaneous two-way flow of HGVs. As such, given that the route is safe and suitable to accommodate the HGV movements associated with the bakery, no widening or improvement works are proposed on the internal network for the construction period. The proposed routing strategy is shown below in Figure 11.

Figure 11 – Proposed Routing Strategy



4.3.3. Further to this, a range of loading / unloading areas will be provided within the wider Carlton Bakery site for the construction period which would not disrupt the day to day operation of the bakery. Full details of these locations and swept path analysis to demonstrate suitability for use has been contained within the Traffic Management Plan submitted alongside this Transport Statement, however it should be noted that both options will be managed by both Premier Foods and Photon Energy.

4.4. Proposed Car and Cycle Parking Provision

4.4.1. Due to the nature of the site as a solar farm, no permanent employees will be operating on the site. Additionally, as the site is connected to the Premier Foods establishment to the west, which already contains parking areas set aside for maintenance and visitors, no additional allocated car or cycle parking will be provided.

5. Traffic Generation

5.1. Context

5.1.1. This section of the report sets out the estimated volume and type of vehicles that will be generated throughout the construction and operational phase of the development. This information has been used in subsequent sections that consider the geometry and safety of the adjoining highway networks, in order to inform the suite of management measures proposed.

5.2. Existing Carlton Bakery

5.2.1. Whilst the proposed development will be external to the existing bakery site, an assessment of the current trip generation has been undertaken to determine the potential impacts on the solar farm site. As noted above, all car movements are currently directed to the car park to the west of the site, providing separation from the HGV movements associated with the delivery and distribution of goods.

5.2.2. With regards to the HGV movements, these are controlled by the bakery and are summarised below:

- Peak period (June – December): Approximately 50 deliveries per day which equates to 100 two-way movements Monday to Friday and between 10-20 two-way movements during weekends;
- Off peak period (January – May): Approximately 30 deliveries per day which equates to 60 two-way movements Mondary to Friday and between 6-12 two-way movements during weekends.

5.2.3. It is of note that the above provides a worst case assessment given that some HGV trips would be one-way, i.e. they would depart from the site and return on a separate day. All HGV movements currently route to and from the access shown in Figure 2.

5.3. Construction Movements

5.3.1. The trip generation potential of the construction phase of the development has been informed through discussion with the applicant on the anticipated construction programme.

5.3.2. The construction period is estimated to last for up to six months (24 weeks), with deliveries fluctuating within this period. It is envisaged that the majority of movements would be Monday to Friday with only a limited number of movements on a Saturday. All deliveries will be instructed to avoid the network peak hours of 08:00-09:00 and 17:00-18:00, along with key school drop-off and collection periods (08:00-09:30 and 14:30-16:00). A summary of the anticipated vehicle movements across the construction period has been outlined below in Table 3.

Table 3 – Construction Vehicle Movements

Type of Vehicle	Number of Vehicles
Articulated Truck	Approximately 8, mostly during the first 4-6 weeks
Curtain Sided Lorry	6 lorries over 4 weeks (in the middle of the project) for PV modules delivery
Waste Management	Collection of skip and container approximately 1 per week. Total 10.
Articulated Low Loader	Approximately 6 throughout construction period. (For the delivery of construction machinery.)
Rigid Lorries – for equipment deliveries	Approximately 15 over the first 4 months of the project
Hiab	2 deliveries due at the end of the project
JCB	1 near the middle of the project for a day

5.3.3. As noted above, the overall number of vehicle movements associated with the construction of the solar farm is anticipated to be approximately 48 which equates to 96 two-way movements over the

construction phase (24 weeks). Deliveries will vary in amount per week, however on average the construction phase is anticipated to generate between 2-6 deliveries per week 4-12 two-way HGV movements), however as noted within Table 3, once the majority of materials are on site there will be days throughout the construction period where there will be no HGV movements associated with the construction.

5.3.4. The most intensive period during construction will occur during the initial site set up. A range of management measures have been outlined within the accompanying Traffic Management Plan.

5.3.5. During construction, there is a balance to be made between the intensity of on-site activity and the duration of that activity. In terms of employment generated by the solar park, the construction phase will generate approximately 10-15 full time jobs. Car sharing will be employed to minimise traffic so far as is practically possible.

5.3.6. All staff are anticipated to arrive at the site in the 30-minute periods preceding the start of the operating day (i.e. 07:30 to 08:00hrs) and depart in the 30-minute period that follows the end of the operating day (i.e. 18:00 to 18:30hrs). Staff trips are likely to travel to / from different origins / destinations and hence spread their movement across the highway network.

5.3.7. Premier Foods will allow construction workers to park in the existing employee car park on site to avoid obstruction to the operation of the public highway, and use of this car park shall be strictly enforced.

5.4. Operational Trip Generation

5.4.1. Due to the nature of the proposals once the solar farm has been installed there will be negligible vehicle movements associated with the operational phase, limited to routine maintenance activities. To provide a robust assessment, it is assumed that this would not exceed one maintenance activity per month which would equate to two x two-way movements accessing the site by a small van. This vehicle would route through the HGV route before entering the site via the existing access.

5.5. Development Impact

5.5.1. As demonstrated above, the proposed level of trips once the development is operational would be negligible, equivalent to two two-way vehicle trips per month which is considered to fall well within the daily variation of trips currently routing to and from the Carlton Bakery site.

5.5.2. Throughout the construction phase, whilst there will be an uplift in the number of HGVs accessing the site for the delivery of materials, this number is considered to be marginal and would not exceed 2-6 deliveries per week for construction materials. Given the existing use of the site, the additional trips will not be perceptible compared with baseline movements at the site.

5.5.3. A range of management measures have been proposed within the accompanying Traffic Management Plan to ensure that any conflict between the construction of the solar farm and any existing HGV movements associated with the bakery are minimised. As noted above, the internal network within the bakery site is sufficient to accommodate two-way HGV movements, therefore the marginal increase in vehicle trips for a limited number of weeks throughout the year is not anticipated to give rise to any highway safety concerns.

6. Summary

6.1.1. This Transport Statement (TS) has been prepared by Evoke Transport Planning Consultants Ltd on behalf of Premier Foods Plc in support of a planning application for the installation and operation of a Solar Farm together with all associated works, equipment and necessary infrastructure, to deliver up to 2MW of electricity on land adjacent to Premier Foods Bakery, Carlton, S71 3HF. The Local Planning Authority (LPA) and the Local Highway Authority (LHA) are both the Barnsley Metropolitan Borough Council (BMBC).

6.1.2. The Application Site is located in Carlton to the north east of Barnsley and falls and comprises an area of approximately 2.7 hectares to the east of the Premier Foods site (Carlton Bakery). To the north the Site is bound by Shaw Lane, to the south and east by agricultural land and to the west by the Carlton Bakery. At present, a secure access to the Application Site is provided via the internal Carlton Bakery highway network in the south western corner of the Site.

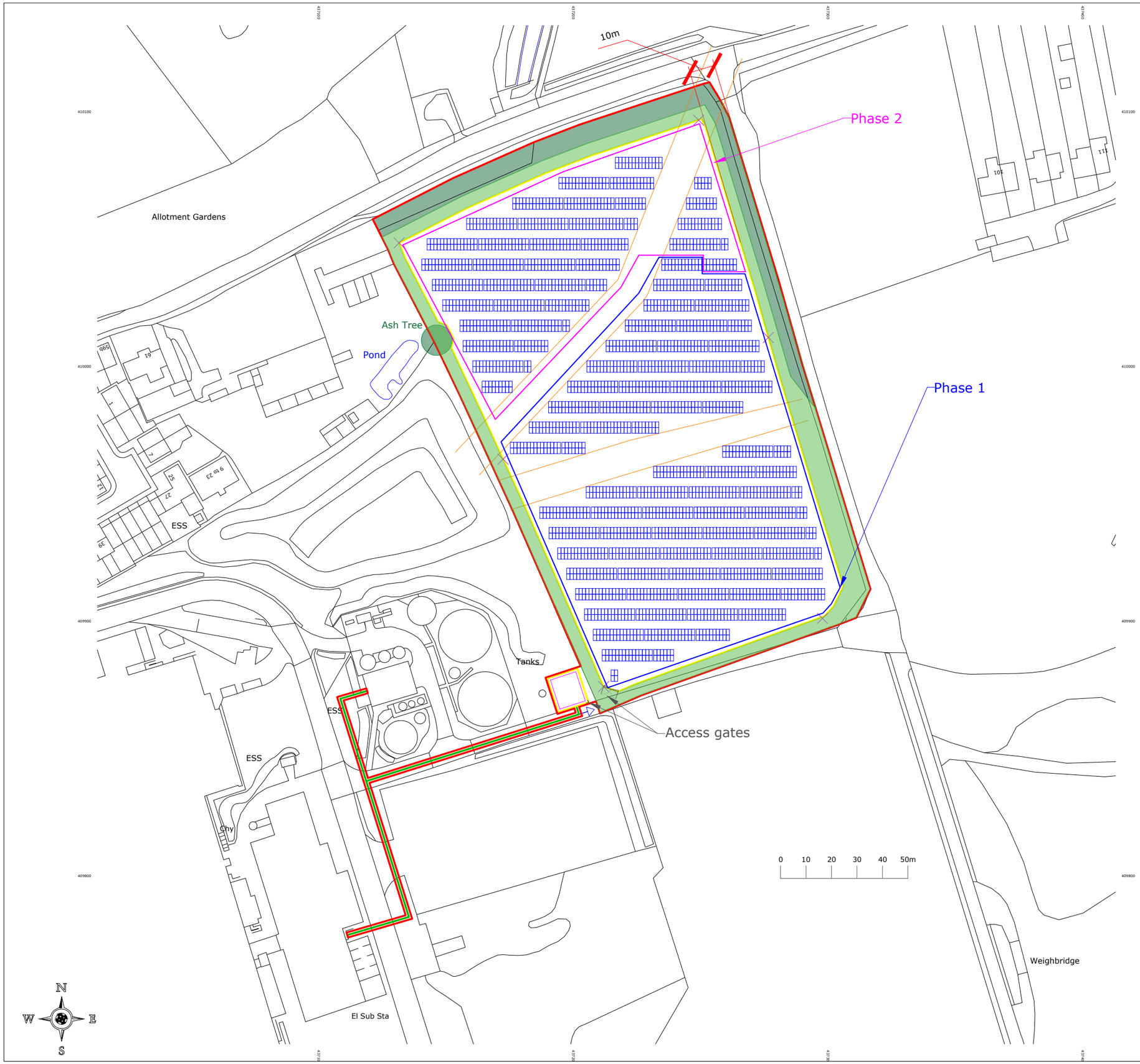
6.1.3. The site is located with an accessible location where construction workers can access the site through public transport, cycling, and on foot. The presence of numerous footways and cycle routes within the vicinity provides a permeable network for active travel that connects the site to a range of surrounding residential areas. Further to this, regular bus services connect the site to the centre of Barnsley as well as Royston and Wakefield, and services to Barnsley connect to the Barnsley Interchange Railway Station which in turn provides long-distance travel options to destinations such as Sheffield, Leeds, Lincoln, and Huddersfield.

6.1.4. The highway network within the vicinity of the site has been reviewed, taking into account the suitability for HGV use as well as a review of PIA data. Given that the proposed construction route would follow the same route as the majority of current bakery HGVs would follow (Fish Dam Lane / West Green Way / A628), the route is considered suitable to accommodate construction traffic in terms of carriageway widths and weight restrictions. Further to this, given that the number of vehicle movements associated with the construction phase is anticipated to be marginal and is likely to fall within day to day variations currently experienced on the local highway network, there are not considered to be any existing highway safety issues that would be exacerbated by the proposed development.

6.1.5. The existing field entrance will be utilised to facilitate occasional operational traffic as well as construction traffic. To accommodate construction vehicles minor widening of the field gate access may be utilised during the construction phase, however this is anticipated to comprise of small scale hedge removal which would be reinstated following completion of the construction phase. The internal highway network within the Carlton Bakery site is considered safe and suitable for use as part of the construction phase and once the proposed development is operational.

6.1.6. Given the existing use at the site, the proposed construction vehicle movements will not be perceptible compared with baseline movements. The proposed development is therefore not considered to result in a severe residual impact nor would it create an unacceptable impact on highway safety, in accordance with national, regional and local policy documents and guidance, including the Barnsley Local Plan and the NPPF.

Appendix A – Proposed Site Layout



DRAWING LEGEND

1. System Details
   - 1.1. Installed Power: 1992.58 kWp
   - 1.2. Installed Modules: 2974
   - 1.3. Module Power: 670Wp each
   - 1.4. Module Inclination: 20°
   - 1.5. Mounting System: Hi-tech

PV Modules: STP670S-D66/Wmh
Power: 670Wp
Dimensions: 2384x1303x35mm

Landscape screening / biodiversity enhancement zone

H2A - Hedgerow (priority habitat)

Application Site Boundary

2.4m Mesh weld fencing in colour: moss green

Substation area (transformer enclosed within 2.4m green mesh weld fencing with single access gate)

Existing secure access retained

Double leaf gate - 2 x 3m wide green mesh gates with green frame

6m high CCTV poles

Easement zone due to pipes

Cable Routes

Rev	Description	Dwn	Chck	Date
G	Revised gate position	SA	JP	06/09/2023
F	Orange MH omitted	CR	FB	29/08/2023
E	Phase 2 boundary amended	FB	CR	24/08/2023
D	Changed type of fence	SA	CR	22/08/2023
C	Hatched green area redone	SA	CR	16/08/2023
B	Revised layout with easement zones	SA	CR	14/08/2023
A	Revised Biodiversity boundary	SA	CR	20/06/2023

PHOTON ENERGY

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Project Number: I2010

Project Name: Premier Foods

Drawing By: Sara Abdel Ahad

Scale: 1:1500 @ A3

Checked By: Cathy Ross

Date: 15/06/2023

Drawing Name: Planning PV layout

Drawing No: I2010-000-01

Rev: G