

Construction Environment Management Plan (CEMP)

(application reference 25/01911/DOC)

Tophams Solar

Client:

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Site Address:

Land west of Ashwell Road
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DOCUMENT CONTROL

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1. INTRODUCTION

1.1. PURPOSE & OBJECTIVES

This Construction Environment Management Plan (CEMP) is prepared to enable the Local County Council (North Hertfordshire Council), to understand and agree specific construction management arrangements to enable the construction of the Tophams Solar as per relevant consents in Planning Permission 22/00741/FP (17th June 2024). It includes mitigation measures along those set out in section 5.17 of the Noise Assessment provided by 24 Acoustics for the application [25/01911/DOC](#).

1.2. CONSTRUCTION - SCOPE OF WORKS

The scope of works under the construction Contract includes all works necessary to design, construct, test, commission, energise, decommission, and train staff in the operation of a 40.00 MW Export and 8.00 MW Import co-located facility.

The site element of the scope of works consists of (but is not limited to):

- Site preparation - mowing the site (if required) and setting/marking out the installation;
- Erecting the fencing and gates;
- Construction of internal access tracks (including access/egress)
- Installing closed circuit television CCTV system;
- Inserting the Solar PV frames into the ground;
- Affixing the Solar PV panels to the mounting frames;
- Installation of the inverters, battery energy storage system BESS and transformer cabinets/containers;
- Distribution Network Operator (DNO) substation building;
- Switchgear/ control room building;
- Trenching for the cable runs, to a depth of approximately 1m, and laying of the cables;
- Connecting all the cables up and backfilling the cable trenches;
- Planting of approved landscaping and mitigation works.

2. ON-GOING CONSULTATION

The Principal Contractor is committed to ongoing dialogue with the local community and key stakeholders throughout the construction project to ensure that local views continue to be taken account of and the construction is carried out in as sensitive a way as possible.

The following consultation related activities will take place during the construction period:

- Principal Contractor to meet and introduce themselves to landowner prior to construction start date;
- Principal Contractor to meet and introduce themselves to neighbouring residential dwellings prior to construction start date;
- Principal Contractor to provide regular project progress reports to North Hertfordshire Council planning team members;
- Principal Contractor will be responsible for receiving, investigating and actioning all local community complaints and concerns during the project construction period;
- Consider welcoming North Hertfordshire Council for a site tour once construction is complete.

The above consultation related activities can be adjusted or added to at any point during the construction process.

3. CONSTRUCTION TRAFFIC MANAGEMENT

3.1. EXISTING ENVIRONMENT AND CONSTRUCTION INTERFACE

The site comprises approximately 53.62 ha and is located in the region of Hertfordshire with the following coordinates: latitude 52.017 and longitude -0.163. The nearest postcode is SG7 5EB. The site is primarily used for agriculture.

An Access Road Condition Survey will be carried out and any abnormal wear to the access route caused by the construction project traffic will be repaired following construction or as required.

Wheel washing facilities will be provided on site at the entrance to ensure that vehicles leaving the site do so with clean wheels and minimise the transportation of muck/dust off site and onto the highway. The wheel washing facility is to be used for the cleanliness of wheels and axles leaving the site. It is not intended as an area to wash out concrete wagons, and therefore there are no provisions for concrete residue disposal. This policy will be made clear to concrete wagon drivers.

The construction management team will also be able to arrange for a sweeping vehicle to visit the site / local highway, should debris need to be cleaned during the construction process. Should this be required, liaison with the local highway authority shall take place, as appropriate.

3.2. THE CONSENTED ROUTE TO SITE

The consented route to the site is as follows.

Construction traffic will flow from the A1 Northbound (Stotfold Interchange) marked A to the Site entrance marked B (Source: Google Maps).

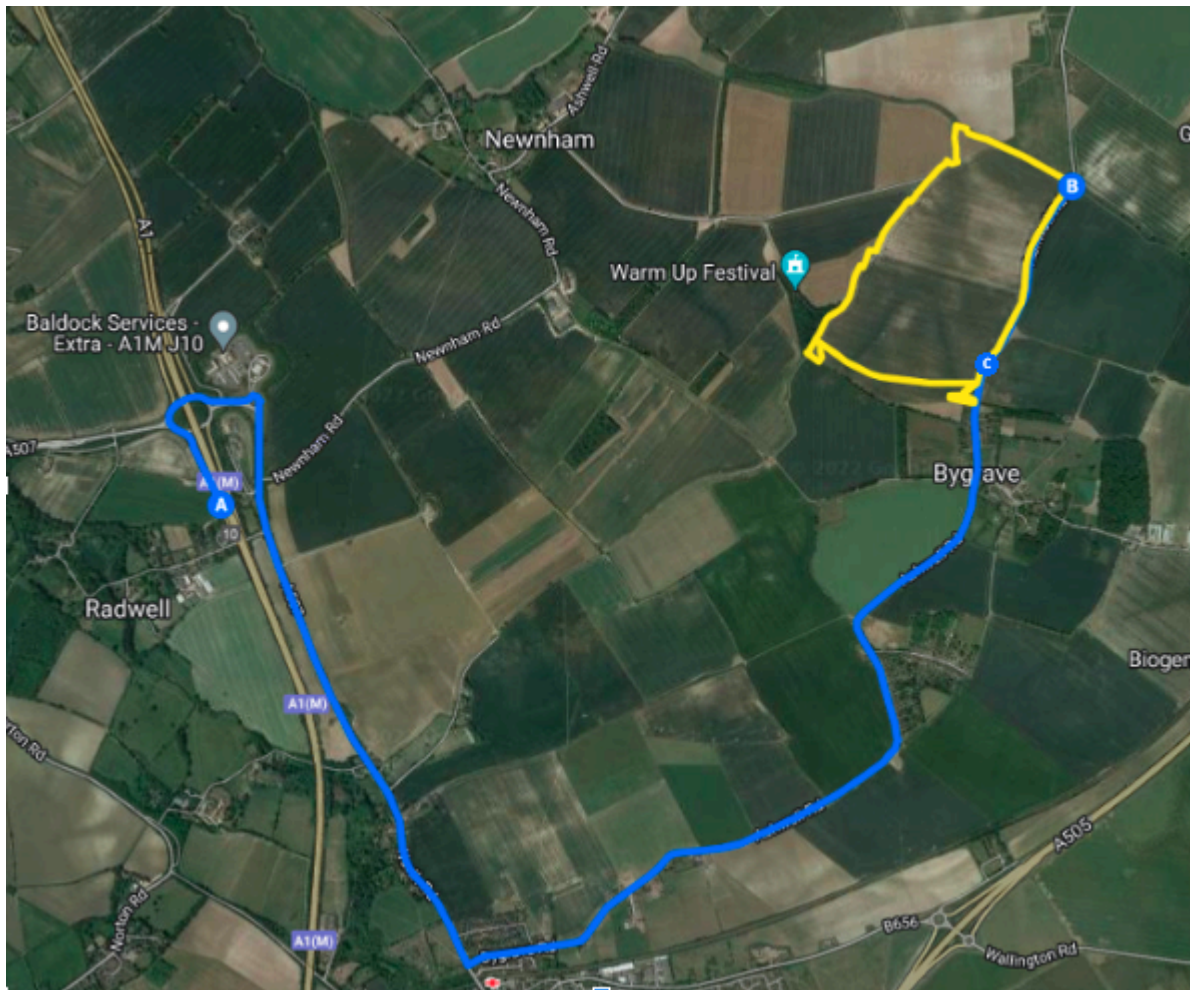


Figure 1 - The consented route to site follows A - C (construction Entrance), point B is emergency access

All construction traffic will be provided with a site access route plan, which clearly identifies the consented route. In addition to this, the Principal Contractor will ensure suitable 'Solar Farm Traffic' signs will be placed at strategic locations on this proposed route.

No work (and therefore project vehicle movements) will take place during the following times.

- 18:00 to 08:30 Monday to Friday;
- 18:00 Friday to 08:00 Saturday;
- 13:00 Saturday to 07:30 Monday;
- deliveries only between 9:30 - 14:30
- at any time on Bank Holidays.

Staff and construction operatives will travel to site in light vehicles, and car/minibus pooling will be actively encouraged. All general site vehicles will travel to the project site via the consented route.

3.3. ON-SITE TRAFFIC AND SITE ACCESS/EGRESS ARRANGEMENTS

New access tracks (figure 4) will be implemented to facilitate traffic movements within the site, for both construction and future maintenance. Figure 2 shows the turning circle vehicles make to leave the compound (access to the south). Sufficient parking, lay-down and vehicle turning areas will ensure that no vehicle waiting or designated vehicle waiting areas are necessary on the highway and that vehicles are always able to leave the site in the forward gear.

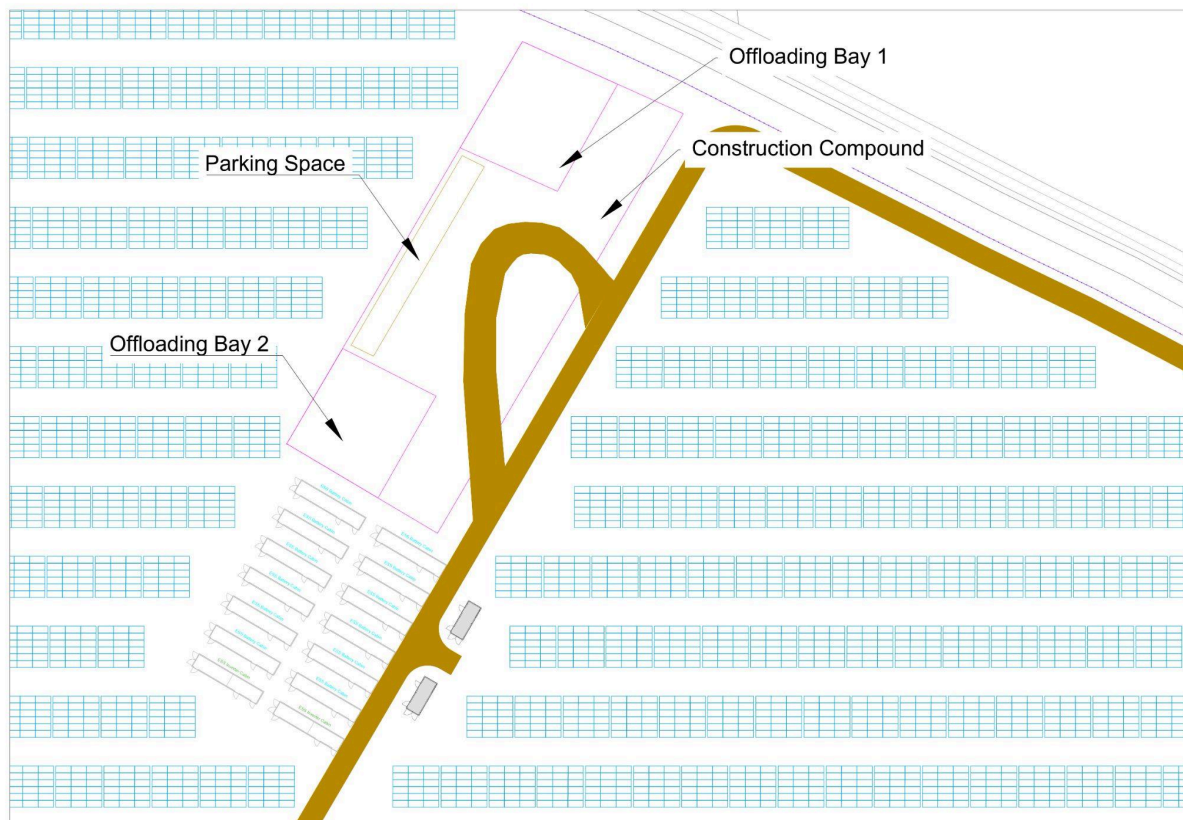


Figure 2 – Construction Compound

New tracks and traffic areas will be constructed in accordance with County Council specifications and drainage as recommended in the Flood Risk Assessment and Surface Water Management Plan. Topsoil layers will be excavated to expose a suitable base on which to build the track. The tracks will then be built up by laying crushed stone, rolled in layers.

The site establishment (main compound) will consist of the following:

- Offices;
- Meeting rooms;
- Canteen;
- Mess and changing facilities;
- Toilet and washing facilities;
- Storage containers;

- Fuel (bundled) and water bowsers;
- Temporary lighting;
- Temporary CCTV;
- Generator;
- Pedestrian segregation barriers;
- Emergency muster point;
- Fire extinguishers;
- Site Project Information Board.

In specific high-traffic locations temporary steel road plates may be utilised; this decision will be during the site mobilisation to use steel road plates or not will be made during site mobilisation.

There will be a reverse parking policy applied within the site compound to ensure quicker vehicle movements in the event of an emergency and minimise blind reversing incidents and accidents.

The most significant risk in this area will be the vehicle/operative interface. Therefore, to ensure segregation between pedestrian operatives and moving vehicles, a clear pedestrian route with barriers will be established.

Areas will be defined for specific plant, materials and equipment in segregated lay-down areas, when construction starts, will be co-ordinated by site management and will be subject to continual change as the project progresses.

For all site compound activities which involve lifting, risk assessments and lift plans will be formulated (i.e. office and welfare containers). Appointed persons and/or banksmen will be used to safely coordinate offloading and pickup activities.

An emergency muster point area will be established within the compound. This will be used in the event of an emergency roll call where all site-based operatives will muster and the site attendance list will be used to verify all operatives are safe. This muster point will be kept clear of vehicles, equipment and materials.

The Site Project Information Board will contain health & safety related information and other important information deemed necessary to communicate with the workforce. This board will also contain contact details for the Principal Contractor and site management team. It is also envisaged that a similar contact detail sign will be erected at the site entrances whereby the public and local community members can safely reach to gain contact details and get in touch with the site management team if they have a query or complaint.

3.4. (UN)LOADING ARRANGEMENTS

Figure 2 illustrates storage and (un)loading arrangements. All materials and plant associated with the development process will be stored within the footprint of the Application Site. A loading and unloading area for plant and materials will be provided within the site boundary (figure 2).

The offloading sites will be used to take materials from deliveries with telehandlers or equivalent plant once unpacked it will be taken to storage containers or left in the offloading sites as necessary. Plant will be left in the compound at the end of the day. Waste will be disposed of as appropriate,

using a mixture of roll-on-roll-off skips and static rental skips as required, removal will be carried out within the compound by plant/appropriate vehicles.

3.5. PARKING OF VEHICLES

Provision has been made for on-site parking for all construction-related vehicles. A total of 20 parking spaces will be provided within the main construction compound for use by site operatives and visitors throughout the construction period.

The designated parking area is located entirely within the site boundary, away from public highways, to prevent any risk of overspill parking onto Ashwell Road or surrounding local roads. The area will be surfaced with compacted stone and clearly delineated to ensure efficient vehicle management.

Should additional parking be temporarily required during peak delivery periods, a supplementary overflow area within the construction compound boundary will be made available. All parking arrangements will be managed under the supervision of the site manager to ensure safety and prevent congestion or obstruction.

3.6. CONSTRUCTION TRAFFIC SPEED LIMITS

The A1 (M) is a national speed limit road (dual carriageway, 70mph). Once you turn off this road onto Ashwell Road, the speed limit becomes variable, ranging from 40mph to 60mph. Once vehicles turn into the site entrances, the access road leading to the site establishments, will have a strict 10mph speed limit.



Sign 1: 10mph Sign

Speed signs will be posted as appropriate, in compliance with highway standards at the entrance to the site (figure 4, SE corner). Similarly horse and rider signs (sign 2) will be placed at the entrance to the sensitivity zones (figure 2). Risks will also be managed by including relevant management strategies in toolbox talks, including complying with posted speed limits and reducing speed to suit weather conditions.

1.1.1 HORSE AND RIDER WARNING SIGNS

Sensitivity buffer for horseriders (marked in grey) figure 2 entrances to these zones along paths and tracks will be marked with warning signage (sign 2) to forewarn plant operators and members of the public.



Sign 2: Horse and Rider

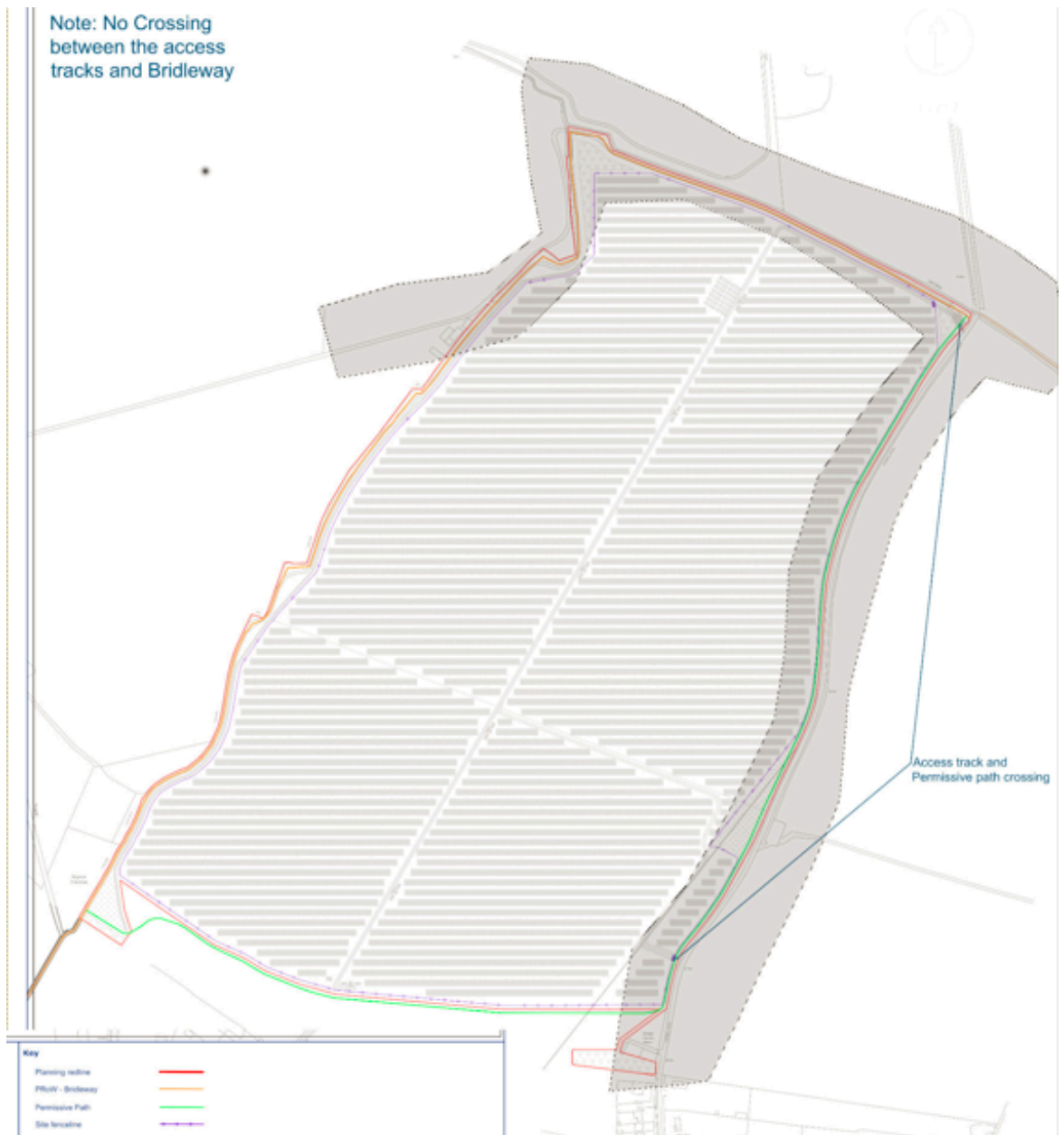


Figure 3: Sensitivity Buffer

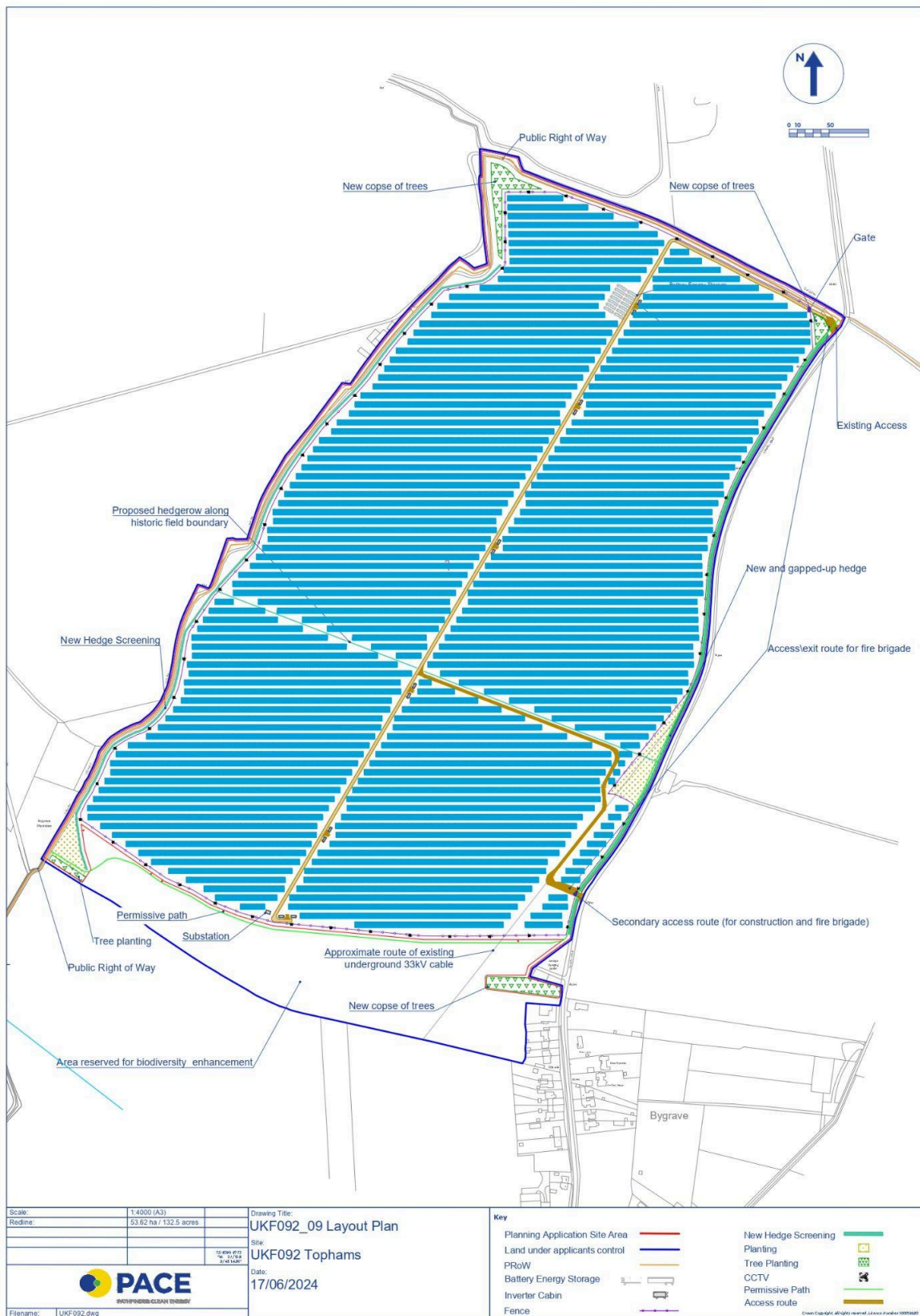


Figure 4: Site Layout: main entrance to SE. NE entrance for emergency access only. Vehicles will take a circular route and wait in the compound if necessary for oncoming traffic.

Speed signs will be posted as appropriate, in compliance with highway standards. Risks will also be managed by including relevant management strategies in toolbox talks, including complying with posted speed limits and reducing speed to suit weather conditions.

3.7. SIZE OF VEHICLES

Most vehicles frequenting the site would be light vehicles and include employee vehicles, buses and utility vans. Larger vehicles required throughout the construction period including but not limited to will be articulated lorries, low-loaders, tele-handlers, dumpers, mobile cranes, and HI-ABS. These larger vehicles have been considered in the swept path analysis to ensure that the consented route is suitable (available in the construction traffic management plan) . Standard UK articulated lorries will be the largest of the vehicles employed during the construction project.

3.8. CUMULATIVE IMPACTS

At present the Principal Contractor is not aware of any local developments or construction projects which would have any impact on the construction management plan. If any such projects come to light, this section will be updated accordingly.

3.9. CLOSURES OF FOOTPATHS, FOOTWAYS, CYCLEWAYS OR ROADS

The site benefits from a dedicated access route located off Ashwell Road that avoids direct interaction with public rights of way or pedestrian/cyclist infrastructure. All construction traffic, including the delivery of plant and materials, will enter and exit the site exclusively via this designated route, thereby eliminating the need for any diversions, temporary closures or traffic management measures affecting the public highway or active travel networks.

As such, the development will not give rise to any interruption of public access routes during the construction period, and no Temporary Traffic Regulation Orders (TTROs) will be sought in relation to this project.

3.10. SECURITY HOARDING AND SCAFFOLDING AFFECTING THE HIGHWAY

All necessary fencing and hoarding for site security and safety will be installed entirely within the boundary of the site. These installations will not obstruct or encroach upon the adopted highway, footpaths, or verges, and will be maintained throughout the construction phase in accordance with relevant health and safety standards.

As there is no anticipated requirement for highway-based hoarding or scaffolding, no licence applications or highway authority consents will be sought in this regard. This ensures full compliance

with the condition and maintains unobstructed highway use for all road users. Figure 3 illustrates fencing locations (purple).

3.11. MATERIALS AND RESOURCE USE AND WASTE MANAGEMENT

Due to the nature of the construction works, very little waste is expected to be generated. In particular, the solar panels and frames will be delivered as pre-packed components that only need to be assembled in situ.

However, solar farm projects can produce small quantities of the following wastes:

- Cardboard
- Wood
- Pallets
- Paper
- Plastics (e.g., shrink wrap and banding)
- Metals (typically aluminium)
- Glass
- Concrete
- Gravel
- Waste soil

Most of this constitutes *packaging waste*, which if appropriate will be returned directly to the suppliers/manufacturers of the solar farm components. Other waste will be segregated, stored, and sent for off-site disposal or recycling through appropriate skips kept in the site compound. When waste is required to be collected, the site manager will liaise with nearby construction sites as per the construction traffic management plan to minimise risk of overlap of vehicle movements along the construction route.

The development is likely to require some excavation of soils associated with the construction compound, access roads, cable trenching, etc. Where soil stripping occurs:

- Storage methods will comply with aerodrome safeguarding and bird control requirements (e.g., STAL standards).
- Materials will be replaced separately to minimise soil damage and provide optimal conditions for future site restoration.

Site procedure for waste management will follow actions to meet the waste hierarchy in line with the Resources and Waste Strategy for England (2018). The aim is to minimise waste generated and exported from site by:

- First minimising,
- Then treating at source or compacting, and
- Finally disposing of off-site where necessary.
- Procedures for waste segregation:
 - Cardboard, timber, metal, and plastic will be returned to suppliers where possible.
 - Other wastes will be placed into skips for removal by a licensed waste carrier.

- Hazardous materials (including solvents and chemicals) will be:
 - Properly sealed in containers at the end of each day.
 - Stored in appropriately protected and bunded storage areas.
 - Thereby ensuring protection outside of site hours.

Timing for removal of waste will depend upon the rates at which waste is full, deliveries and pick ups of skips will be organised by the site manager to reduce the risk of overlap with other deliveries.

3.12. MAINTENANCE & EMERGENCY REPAIRS

A regular maintenance schedule for all plants and vehicles, including heavy vehicles will be implemented by the Principal Contractor and their relevant Sub-Contractors. The maintenance schedule would include but is not limited to the following:

- Plant and Vehicles will be maintained as per manufacturer's instructions;
- Records of maintenance and use of any consumables, tyres, oils, batteries etc will be maintained for relevant vehicles;
- Spillage kits will be provided to all relevant vehicles and/or placed around the site.
- All operators of plant and vehicle drivers will be trained regarding their responsibilities, policies, procedures and work instructions.

In cases where plant and machinery breakdown on site, the Sub-Contractor responsible for this equipment will be contacted immediately, and a suitable and specific repair, recovery, and/or replacement plan will be formulated. Broken down plants and machinery will be suitably isolated and secured, and if necessary, will be fenced off.

In cases where maintenance and emergency repairs need to take place on site, this will be controlled through risk assessments and method statements, and will be supervised by the site management team.

More details of contact procedures are available within the construction traffic management plan.

3.13. END DAY OF PROCEDURE

In order to safeguard the amenity of the surrounding area and ensure that the site remains secure and environmentally compliant outside the approved construction hours, the Principal Contractor shall implement robust end-of-day tidying procedures. These procedures will include, but not be limited to, the following:

- All construction plant and equipment will be shut down, secured, and where appropriate stored within designated compounds.
- Materials will be safely stored in the offloading areas to prevent wind-blown debris, dust nuisance, or accidental encroachment beyond the site boundary.
- Temporary protective measures (e.g. fencing, sheeting, covers on stockpiles, spill protection for fuels and chemicals) will be checked and reinstated at the close of each working day.
- All access points will be inspected to ensure that gates, barriers, and wheel-wash facilities are left in a safe and secure condition.

- Waste and packaging materials will be cleared from working areas daily, with segregation and storage in line with the site waste management procedures to reduce environmental risks.
- Particular regard will be given to the protection of ecological buffers, drainage features, and neighbouring receptors to ensure no adverse environmental effects occur outside working hours.

All construction activities shall be designed and undertaken in accordance with the **Code of Best Practice set out in British Standard 5228**, or subsequent updated versions, unless otherwise agreed in writing by the Local Planning Authority.

These provisions will be incorporated into the site induction process and reinforced through regular toolbox talks, ensuring that all staff and subcontractors are aware of their responsibilities for protecting the site and its surroundings outside of construction hours.

3.14. NOISE CONTROL

Initial site preparation works are likely to involve the movement of soil, mini piling works, construction of infrastructure and installation of plant and PV equipment. It is considered that excavators, mini-piling rigs, JCB's, vehicles, dumpers, generators, compressors, concrete mixers and power tools etc. would be required to construct the site.

The level of noise generated by the construction activities will depend upon a range of factors, which include plant to be used, distance between source and receptor and % on-time for each item of plant. Expected plant generating noise:

- Mini-Piling Rig;
- Hand tools including angle grinders, circular saws and lump hammers;
- 20-75T Excavator;
- 16T Vibratory Roller;
- 25-30T Dumper;
- Generator;
- Dozers.

In consideration of the construction noise levels and in accordance with BS 5228-1:2009+A1:2014, the following mitigation options will be required as part the CEMP:

- Careful selection of plant, construction methods and programming. Only plant conforming with relevant national or international standards, directives and recommendations on noise and vibration emissions will be used; it will be driven in a low gear where appropriate with slow acceleration to keep revs down at no more than 10mph.
- Responsible site management;

- Regular contact with neighbouring properties to ensure that works are not causing unacceptable impact on their environment and, wherever possible, schedule work activities to suit any specific quiet periods that neighbours may require;
- Site personnel to be instructed on BPM (best practicable means) to reduce noise and vibration as part of their induction, with training as required prior to specific work activities;
- When plant is not being used, it shall be shut down and not left to idle;
- Construction vehicles and deliveries will be on a time slot basis;
- There will be no vehicles waiting on the public highway with their engines running;
- Regular maintenance of all plant to ensure optimal performance and minimised noise output;
- Switch-off policy for engines when not in active use;
- Plant to be located, as far as is reasonably practicable, away from adjacent occupied buildings or as close as possible to noise barriers or site hoardings where these are located between the plant and the buildings;
- Electrical equipment will be used, where possible, rather than diesel or petrol powered equipment;
- Where practicable, to phase the works to ensure that the noisier activities are not carried out concurrently (within the same site);
- Restricting delivery hours.