Transport Planning Associates

A Planning Application by

SPRING DEV 08 LIMITED

In respect of

Purton Landfill Solar Farm, PURTON

Construction Traffic Management Plan

June 2023



Document Management

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Issued by:

Bristol
Cambridge
London
Oxford
Welwyn Garden City

Transport Planning Associates
25 King Street
Bristol
BS1 4PB

0117 925 9400
bristol@tpa.uk.com
www.tpa.uk.com

[a]
[b]

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A Construction Compound

1 Introduction

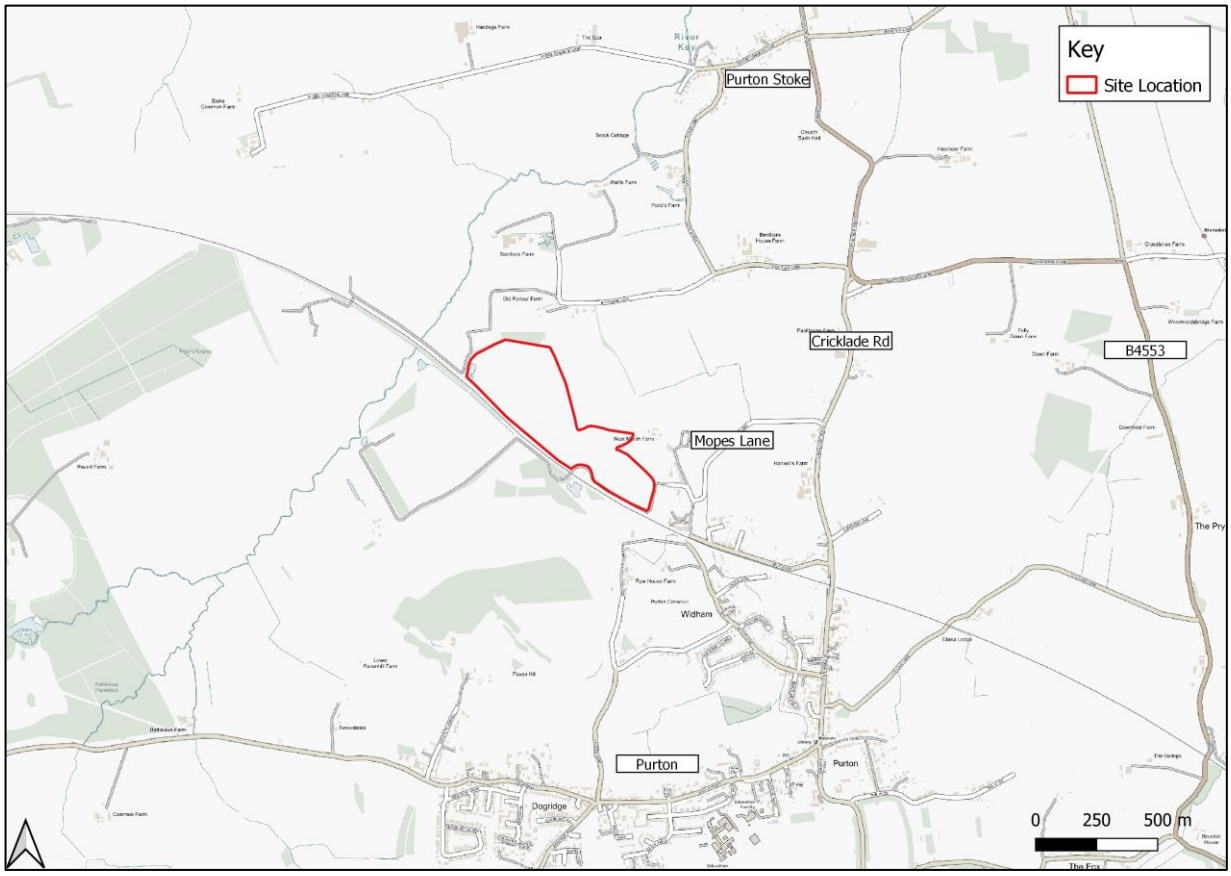
1.1 This Construction Traffic Management Plan (CTMP) has been prepared by Transport Planning Associates (TPA) on behalf of Spring Dev 08 Ltd (the 'Applicant') in relation to a new solar farm development at Purton Landfill, near Purton, Wiltshire.

1.2 The Local Planning and Highway Authority is Wiltshire Council.

Site Location and Proposed Development

1.3 The Site location is shown in **Figure 1.1**.

Figure 1.1 Site Location



1.4 The Site is located approximately 1.3 kilometres north of Purton and seven kilometres north west of central Swindon. To the north, the Site is bound by agricultural land, to the east by an industrial estate, and to the south and west by a railway line. In the context of the local highway network, the Site is located to the west of Mopes Lane and to South of Bentham Lane.

1.5 The Development obtained planning permission in April 2023 (planning reference PL/2021/10405). It comprises the construction, operation, management and decommissioning of a ground mounted photovoltaic solar development on a restored landfill site. The Development will have an output capacity of up to 20MW.

1.6 This Construction Traffic Management Plan has been prepared in order to satisfy condition 7 of the planning permission. Condition 7 states:

"Notwithstanding the contents of the Construction Traffic Management Plan (June 2022) by Transport Planning Associates, no development shall commence on site (including any works of demolition), until a detailed Construction Traffic Management Plan (CTMP) has been submitted to and approved in writing by the local planning authority. Thereafter, the approved CTMP shall be implemented and adhered to throughout the entire construction period. The CTMP shall provide details as appropriate, including the following:

- *mitigation measures at the access points and public rights of way throughout construction;*
- *the signing and routing of all construction traffic with particular reference to HGVs and deliveries;*
- *the number of contractor/staff vehicle movements;*
- *the parking of vehicles of site operatives and visitors;*
- *the number and size of delivery/construction vehicles;*
- *the loading and unloading of plant and materials;*
- *the storage of plant and materials used in constructing the development;*
- *the erection and maintenance of security hoarding including decorative displays and facilities for public viewing, where appropriate;*
- *wheel washing facilities;*
- *measures to control the emission of dust and dirt during construction;*
- *a scheme for recycling/disposing of waste resulting from demolition and construction works;*
- *measures for the protection of the natural environment;*
- *hours of construction, including deliveries;*
- *details of public engagement both prior to and during construction works; and*
- *a photographic pre-commencement highway condition survey carried out along Mopes Lane.*

REASON: To protect the amenities of the occupiers of neighbouring residential properties, the amenities of the area in general, the natural environment, and in the interests of highway safety".

Construction Traffic Management Plan

1.7 This CTMP sets out the management measure for construction vehicle movements to and from the Site, to ensure that the effect of the construction phase on the local highway network is minimised.

1.8 This CTMP sets out the strategy for the following;

- Site access and construction compound;
- Construction vehicle routing;
- Site compound and internal routing;
- Construction vehicle trip generation; and
- Proposed mitigation measures.

2 Site Access Arrangements and Construction Compound

2.1 This section sets out the details of the construction phase access arrangements.

Construction Access

2.2 Access into the Site will be taken via the existing landfill access within the industrial estate at the western extent of Mopes Lane. The access is already regularly used by HGVs. The largest vehicle required for the delivery of equipment to the solar development is a 16.5m articulated vehicle.

2.3 An image of the proposed construction vehicle access is shown in **Image 2.1.**

Image 2.1 Proposed Site Access, Utilising the Existing Landfill Access



2.4 Banksmen will be positioned near to the Site access to assist vehicles when entering or departing the Site, to ensure the safety of all users.

Temporary Signage

2.5 Temporary signage will be erected in the vicinity of the junction during the construction phase. Diagram 7301 'WORKS TRAFFIC' in the Traffic Signs Regulations and General Directions (TSRGD) will be used to indicate the access and will read 'WORKS TRAFFIC LARGE VEHICLE TURNING'. These signs will be white text and red background 1050 x 750 mm mounted in 'A' frames. The temporary signs will be in place for the duration of the construction phase.

3 Temporary Construction Compound

Temporary Construction Compound Arrangement

3.1 A temporary construction compound will be set up within the Site. The temporary construction compound arrangement is shown in **Drawing SK01**, contained in **Appendix A.** It will accommodate the following facilities:

- 20 car parking spaces;
- An HGV turning circle;
- A loading/unloading area;
- A storage area for equipment and materials;
- Welfare facilities and offices.

3.2 No parking by contractors, visitors or delivery vehicles will be permitted on the local highway network at any time during the construction phase, and visitors will be advised of the parking arrangements in advance of travelling to the Site. The Site Manager will monitor that parking is taking place in the designated area on a regular basis.

Storage of Materials

3.3 All materials necessary to construct the solar farm and energy storage facility will be stored within the temporary construction compound. Materials will be stored only for a short time period prior to being utilised on Site, after being delivered at regular intervals throughout the construction phase. Certain equipment may also be delivered directly to their install location, such as inverter stations, which require to be directly unloaded onto foundations.

Security

3.4 The Site will be secured using a perimeter fence. Heras fencing (or similar) may also be required to secure the construction compound and any other areas of the Site until the perimeter fence is completed.

Wheel Washing

3.5 A wheel wash facility, in the form of a drive through bath system, will be provided on the internal access track, prior to vehicles re-entering the industrial estate and Mopes Lane. This is also shown in **Drawing SK01**. Excess water from the wheel wash facility will be appropriately disposed of.

Artificial Lighting

3.6 No external lighting is expected to be required during the construction phase, except for the doorways of the welfare cabins and other temporary buildings, within the temporary construction compound. These will be externally illuminated utilising PIR sensor lighting, activated by pedestrian movement. Such lighting would be appropriately shielded/cowls fitted to prevent light spill away from the doorways.

Refuse and Recycling

3.7 Refuse and recycling will be collected on Site and stored within the construction compound. It will be collected, as appropriate, every few days. The burning of waste on the Site is not permitted.

Internal Access Track

3.8 The Proposed Development will include internal access roads throughout the Site allowing for the movement of construction and maintenance vehicles. It is proposed that the internal access road will be completed during the initial stages of construction.

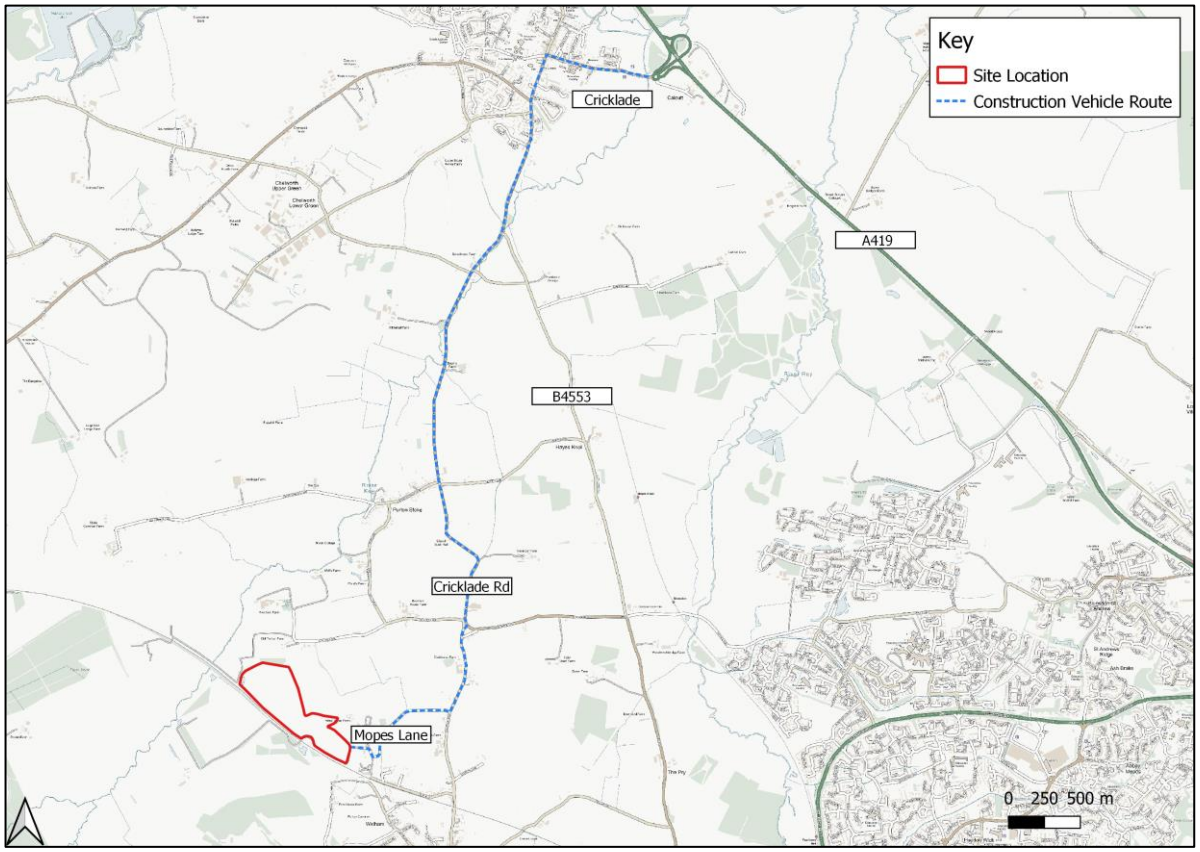
4 Construction Vehicle Routing

4.1 The details of the construction vehicle route are set out below. Drivers will be made aware of the route in advance of driving to the Site.

Route Overview

4.2 The construction vehicle route is shown in **Figure 4.1**.

Figure 4.1 Construction Vehicle Route



4.3 Construction vehicles will exit the A419 and proceed west along the B4040 Calcutt Street, which enters Cricklade as a single carriageway two-way road subject to a 20mph speed limit. Calcutt Street adjoins the B4040 High Street via a three-arm roundabout and construction vehicles will turn left at this junction, before proceeding south along High Street.

4.4 The B4040 High Street maintains a 20mph speed limit throughout and is posted for both through traffic and as an advisory diversion route in the event of an A419 closure. It is therefore considered suitable to carry HGV traffic.

4.5 At its southern extent, the B4040 High Street adjoins a three-arm roundabout and construction vehicles will take the first exit and continue south along the B4533. The B4533 is posted as a HGV route to Chelworth Industrial Estate and routes southwards as a single carriageway two-way road subject to a 50mph speed limit.

4.6 Approximately four kilometres south of Cricklade, construction vehicles will turn right at the priority T-junction with Cricklade Road, which is subject to the national speed limit, before turning right at the next priority T-junction with Mopes Lane. It is noted that Cricklade Road is subject to a 7.5 tonne weight limit south of the Mopes Lane junction. Construction vehicles associated with the construction phase will not route via Cricklade Road, south of the Mopes Lane junction.

4.7 Mopes Lane continues west towards the Site and serves the existing landfill operation, industrial estate and sewage works. The carriageway measures approximately six metres throughout, however priority is afforded to eastbound vehicles at both bends. The road is subject to a 20mph speed limit, with low vehicle speeds encouraged with speed humps.

4.8 Upon egressing the Site, outbound construction vehicles will follow the reverse of the above described route.

Route Signage

4.9 Temporary road signage will be implemented along the designated route to inform background traffic of the ongoing construction works and to direct construction traffic to and from the Site. The signs will be located at key points on the route, such as at junctions.

4.10 All signage will be compliant with Chapter 8 of the Traffic Signs Manual where applicable. The following points will be considered when locating signage:

- The position of the sign in relation to the highway;
- Possible distraction to drivers; and
- The proximity to junctions.

Management of Deliveries

4.11 Due to the relatively low number of vehicles associated with the construction phase at the Site, there is not anticipated to be any delay to background traffic.

4.12 All deliveries will be scheduled in advance using a booking system. Drivers will be instructed to stop in an appropriate layby and make contact if they are likely to miss their allotted slot to allow the schedule to be adapted in as much as possible.

4.13 The following procedure will be initiated when deliveries are made to the Site:

Procedure for Arrival to Site

- Drivers to be notified of scheduled arrival time ahead of delivery to the Site;
- When the delivery vehicle is due the banksmen will be mobilised and will go to position at the Site access;
- The driver will be informed that the operators are in place and it is appropriate to travel to the Site via the agreed route;
- All operatives will communicate with each other, as necessary; and
- Banksmen will assist HGV's to manoeuvre from Mopes Lane into the Site access, but will not direct general traffic.

4.14 The following procedure will be initiated when HGVs are leaving the Site:

Procedure for Leaving the Site

- Before drivers depart, the Site Manager will be notified. They will then mobilise the banksmen at the Site access;
- Drivers will be advised when the banksmen are in place; and
- Banksmen will guide the drivers exiting the Site on to Mopes Lane.

5 Construction Vehicle Trip Generation

5.1 The construction phase will last for approximately 17 weeks. Construction activities and deliveries will be carried out Monday to Friday 08:00-18:00 and between 08:00 and 13:30 on Saturdays. No construction activities or deliveries will occur on Sunday or Public Holidays.

HGV Movements

5.2 The construction period will include the use of HGVs to bring the equipment onto the Site and this will be strictly managed to ensure that vehicle movement is controlled and kept to a minimum. The largest vehicle that will be used to deliver equipment to the Site will be a 16.5m articulated vehicle.

5.3 Deliveries to the Site shall be reported to the Site Manager and will be made by the smallest possible vehicles for that particular item of plant or material.

5.4 The anticipated HGV movements associated with the construction of the proposed development is summarised in **Table 5.1**.

Table 5.1 Purton Landfill Solar Farm: HGV Deliveries

Activity	Type of Vehicle	Total Number of Deliveries
Solar Modules & Mounting Structures	Max 16.5 Articulated	155 (310 two-way movements)
Inverters/Transformers	10m Rigid	12 (24 two-way movements)
Substation	10m Rigid and 16.5m Articulated	2 (4 two-way movements)
Internal Access Tracks	10m Rigid/Tipper	10 (20 two-way movements)
Other (sand, gravel, waste etc)	Max 16.5 Articulated	40 (80 two-way movements)
Total		**219** deliveries (average of **two** deliveries per day or **four** two-way movements per day) *

** Deliveries taking place over a 17-week period (102 working days)*

Construction Worker Trips

5.5 In addition to the HGV movements identified in **Table 4.1**, there will also be a number of construction movements associated with smaller vehicles for the transportation of construction workers and sub-contractors.

5.6 Approximately 30 to 40 construction workers are anticipated to be required on Site on an average day. This may increase slightly during peak construction. The location where staff will travel from is unknown at this stage as it will depend on the appointed contractor. However, it is envisaged that the majority of the workforce will stay at local accommodation and be transported to the Site by minibuses to minimise the impact on the strategic and local highway network.

5.7 During peak construction, it is expected that up to 80 workers could be on-Site at any time. Outside of the peak period, the number of construction workers will be below 80.

5.8 A total of 20 parking spaces will be provided for use by construction workers and visitors. Therefore, it is expected that there will be approximately 20 arrivals and 20 departures per day by car/LGV during the construction phase.

Construction Vehicle Movements Timings

5.9 Where possible, construction deliveries will be coordinated to avoid construction vehicle movements during the traditional AM peak hour (08:00-09:00) and PM peak hour (17:00-18:00). Due to the Site operational hours (08:00-18:00), construction worker travel will occur outside of the peak hours.

6 Mitigation Measures

6.1 The mitigation measures are set out below. It will be the responsibility of the Project Manager and Site Manager to oversee the implementation of the mitigation measures.

Signage

(i) Signs to direct construction vehicles associated with the development will be installed along the construction vehicle route. Delivery drivers, contractors and visitors will be provided with a route plan in advance of delivering to Site to ensure that vehicles follow the identified route;

(ii) All signage on the designated route will be inspected daily by the Site Manager, to ensure they are kept in a well-maintained condition and located in safe and appropriate locations;

Vehicle Movement

(iii) Construction deliveries by HGV will be coordinated to avoid the network peak hours of 08:00-09:00 and 17:00-18:00;

(iv) Banksmen will be provided at the Site accesses to indicate to construction traffic when it is safe for them to enter and exit the Site;

Booking System

(v) A booking system will be set up to manage arrivals and departures to the Site. A log will be kept as part of the booking system;

Public Rights of Way

(vi) Where the internal access track crosses a public right of way (in particular Footpath PURT 13, PURT 34 and PURT 129), the following measures will be adopted:

a. Speeds will be limited to 10mph;

b. Drivers will stop and give-way to any pedestrian, equestrian and cyclist that they encounter;

c. Appropriate signage will be installed along the footpaths to make users aware of the construction activity. This will include information on operating times;

d. Banksmen will also be present to ensure the safe movement of all users;

e. The footpaths will be kept clear outside of construction hours;

f. Any damage to the surface of the footpaths will be repaired immediately. The surface will be returned to its original condition following construction.

Parking

(vii) Advisory signs informing contractors and visitors that parking is not permitted on-street in the vicinity of the Site or on the Site access track. Contractors and visitors will be advised that parking facilities will be provided on-Site in advance of visiting the Site and that they should not park on-street;

Wheel Wash Facility

(viii) A wheel washing facility in the form of a drive through bath will be provided, if required. This will be located on the access track;

(ix) A visual inspection of vehicles will be undertaken before they depart the Site, to ensure that they are not carrying any residual debris onto the highway;

Noise Reduction and Air Quality

(x) When on Site and when not in use, vehicle engines will be switched off;

(xi) Vehicles carrying material off-Site will be sheeted to prevent the spread of dust;

(xii) In dry conditions, areas near to the Site access will be sprayed with water supplied to prevent the spread of dust;

Site Security

(xiii) The Site will be secured at all times via a perimeter fence or temporary fencing. CCTV will be operational within the construction compound;

Community Engagement

(xiv) The Construction Site Managers details will be provided on a Site-board at the Site access. If anyone in the local community has any issues during the construction phase, the Site Manager will be available to discuss.

Construction Site Management

(xv) The Construction Site Manager (CSM) will be responsible for the CTMP. Their main duties will include:

a. Managing the implementation of the CTMP;

b. Scheduling deliveries to the Site;

c. Checking for road works scheduled that may affect the construction route as well as for refuse collection to avoid conflict with construction vehicles;

d. Handling complaints received, if any;

e. To act as the point of contact between the employees and contractors;

f. Refuse/waste disposal; and

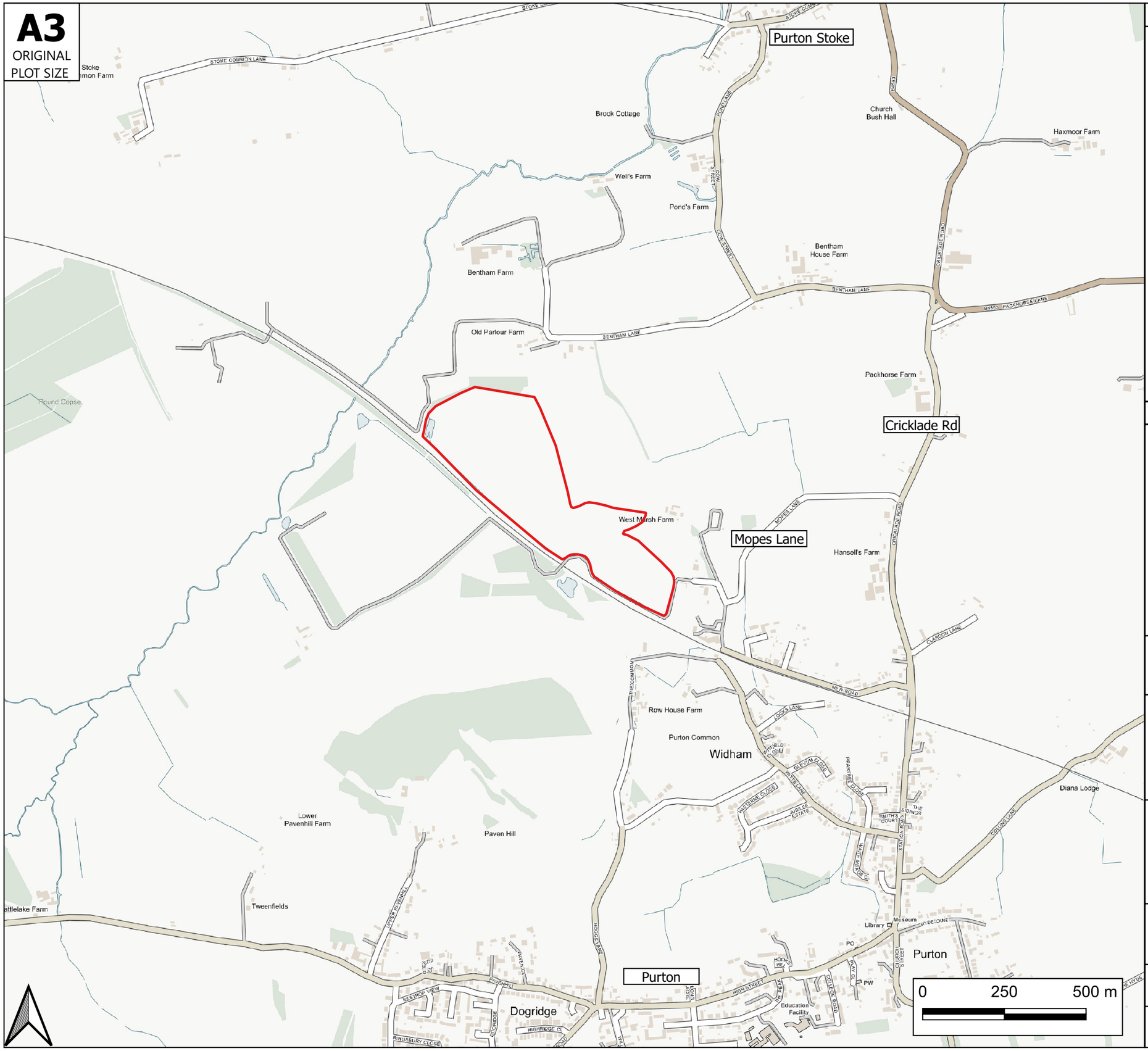
g. Community Engagement.

Photographic Condition Survey

(xvi) A photographic pre-commencement highway condition survey has been carried out along Mopes Lane. A post-construction survey will be undertaken once construction is complete to identify any remedial works reasonably attributable to construction activities.

Figures

A3
ORIGINAL
PLOT SIZE



NOTES

Key

Site Location

Rev	Date	Details	Drawn by	Checked by	Approved by

Bristol
Cambridge
London
Oxford
Welwyn Garden City

tpa Transport Planning Associates

25 King Street
Bristol
BS1 4PB

0117 925 9400
www.tpa.uk.com

CLIENT:
Spring Dev 08 Ltd

PROJECT:
Purton Landfill Solar Farm, Purton

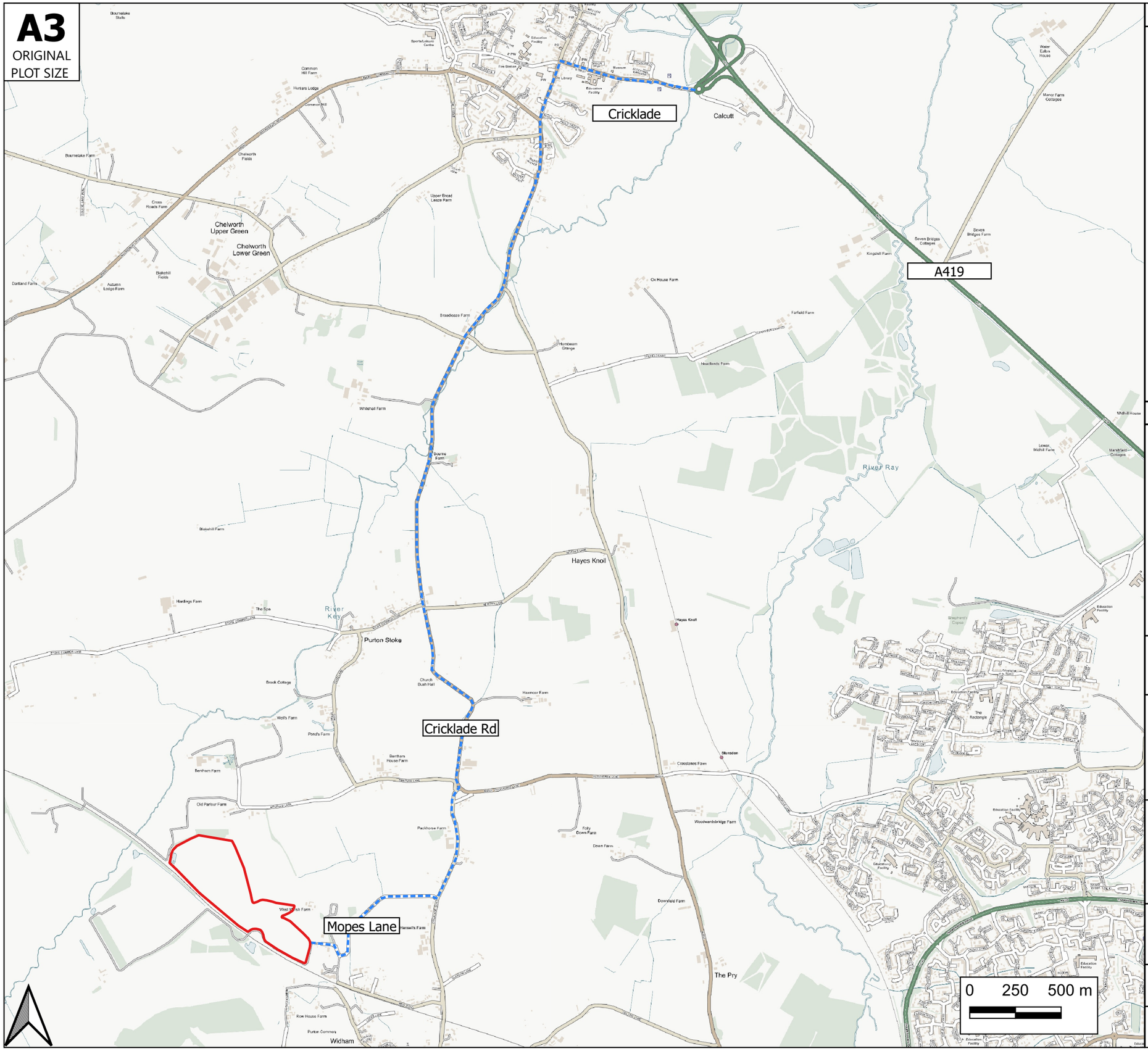
TITLE:
Site Location Plan

STATUS:
FOR INFORMATION

SCALE:	DATE:	DRAWN:	CHECKED:	APPROVED:
NTS	31/05/23	AG	RR	JD

JOB NO:	DRAWING NO:	REVISION:
2304-036	Figure 1.1	-

A3
ORIGINAL
PLOT SIZE



NOTES

Key

- Site Location
- Construction Traffic Route

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Bristol
Cambridge
London
Oxford
Welwyn Garden City

Transport Planning Associates

25 King Street
Bristol
BS1 4PB

0117 925 9400
www.tpa.uk.com

CLIENT:
Spring Dev 08 Ltd

PROJECT:
Purton Landfill Solar Farm, Purton

TITLE:
Construction Vehicle Routing Plan

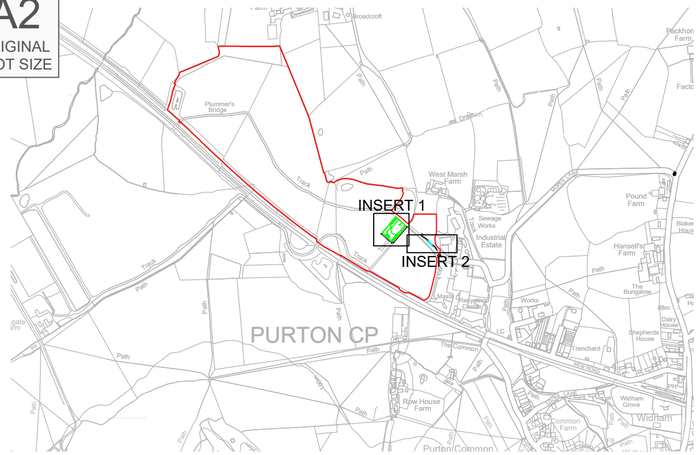
STATUS:
FOR INFORMATION

SCALE:	DATE:	DRAWN:	CHECKED:	APPROVED:
NTS	31/05/23	AG	RR	JD

JOB NO:	DRAWING NO:	REVISION:
2304-036	Figure 3.1	-

APPENDIX A

A2
ORIGINAL
PLOT SIZE



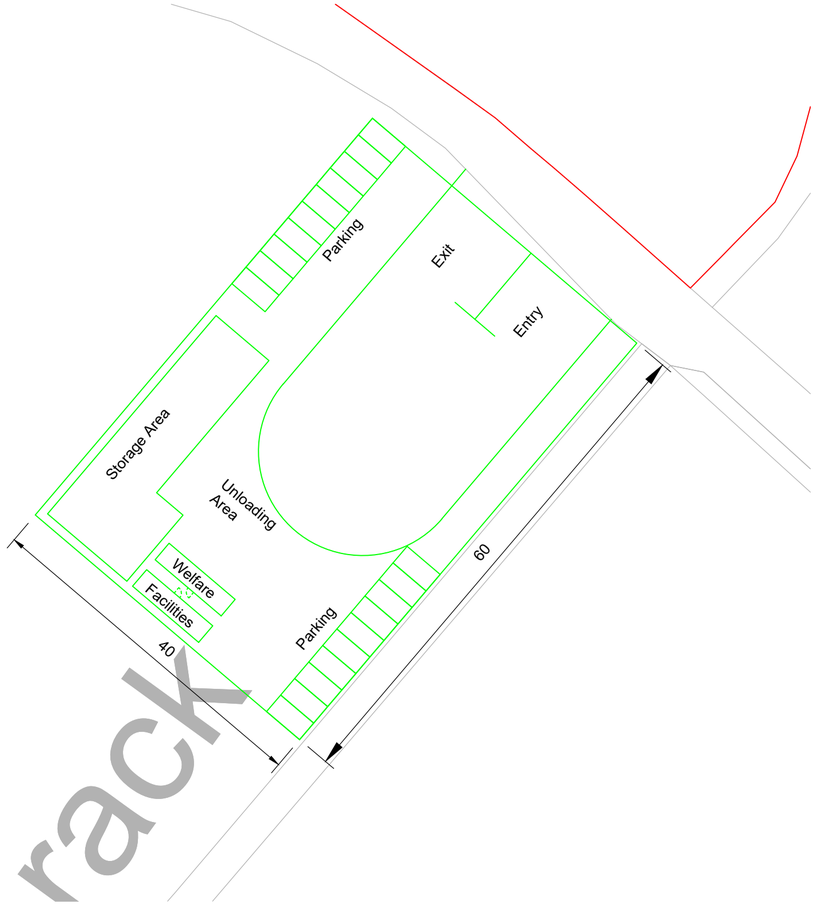
Location Plan

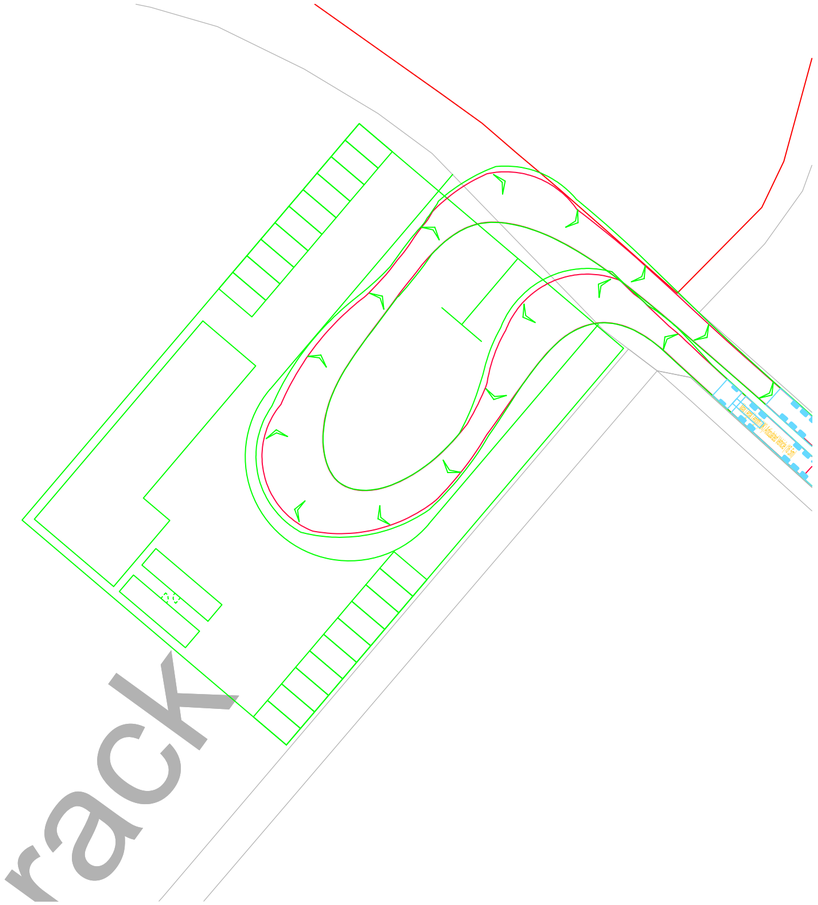
Scale 1:12,500



INSERT 2 - Proposed Wheel-Washing Facility

Scale 1:500





INSERT 1 - Proposed Construction Compound Layout

Scale 1:500

INDICATIVE

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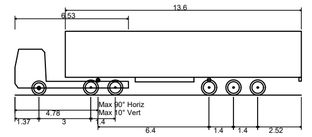
NOTES:

Site Boundary =

Wheel Wash =



Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m

Rev	Date	Details	Drawn by	Checked by	Approved by
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Bristol
Cambridge
London
Oxford
Welwyn Garden City

Transport Planning Associates

25 King Street
Bristol
BS1 4PB
0117 925 9400

www.tpa.uk.com

CLIENT:
SPING DEV 08 LTD

PROJECT:
PURTON LANDFILL SOLAR FARM

TITLE:
Proposed Construction Compound Plan

STATUS:
INFORMATION

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