

Project name	North Dairy Farm, Pulham, Dorset		
Design note title	Preliminary Assessment Report		
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1. TRAFFIC AND ACCESS ROUTES

1.1 Site Location

1.1.1 The site is located 12km south of Sherbourne and some 17km north of Dorchester. The hamlet of Pulham is some 2km west of the site.

2. EXISTING CONTEXT

2.1 Current Site Use

2.1.1 The site is currently used as an agricultural field, which is provided with an existing gated access onto the farm private access track. The site access with Cannings Court Lane is some 5m in width and hard surfaced.

2.2 Local Road Network

2.2.1 Cannings Court Lane provides access to the wider highway network and is some 900m in length between the site access and the junction with the B3143. Cannings Court Lane is on average some 3.0m in width and provided with a single formal as well as a number of informal passing places along its length. No pedestrian footway or street lighting is provided and high hedge rows with grass verges line the carriageway.

2.2.2 There is an existing presence of agricultural machinery utilising the local and wider road network in the vicinity of the development site, which is typical of a rural location.

3. DEVELOPMENT PROPOSALS

3.1 Scheme Details

3.1.1 The proposals are for the construction, operation, management and decommissioning of North Dairy Farm Solar Park, comprising ground-mounted solar panel PV panels together with all associated works, equipment and necessary infrastructure.

3.2 Permanent Site Access

- 3.2.1 Infrequent visits by the DNO (Distributor Network Operator) or the developer for maintenance would occur after commissioning of the site. Visits would be made by van or 4X4 vehicles, and are carried out around 1-2 times per year on average. The existing farm access from Cannings Court Lane would be used as the permanent site access for maintenance purposes.
- 3.2.2 The existing farm access is suitable to accommodate the construction traffic, future maintenance as well as the existing agricultural use associated with North Dairy Farm. Service tracks are then provided for the internal farm access track to the site in the form of a compacted aggregate.

4. CONSTRUCTION PHASE

4.1 Construction Route

- 4.1.1 The Strategic Road Network (SRN) is some 64km west of the site at Junction 25 M5 also known as the Blackbrook Roundabout with key routes to the site via the A358 and A303 (T) for eastbound vehicles. To the east of the site Junction 1 M27 also known as the Cadnam Interchange offers a route for westbound arrivals via the A31 (T) and A350 or A35 (T).
- 4.1.2 There are no vehicle restrictions approaching the site from the east or south via the B3134 or A350 respectively. Vehicles approaching the site from the west would be required to continue on the A3030 to the junction with the B3143 some 2km north of hamlet of King's Stag. This is to avoid an existing narrow bridge structure on Comford Hill, which has a width/length restriction.

4.2 Management of Construction Vehicles

- 4.2.1 Delivery vehicles are to adhere to the agreed construction route. All appointed haulage and supply companies will be advised of the precise routing to and from the development site. Temporary signs will also be in place on Cannings Court Lane and the B3143 on approach to the site.
- 4.2.2 Deliveries by large vehicles would not be permitted to the site during the hours of 0800 and 0900 and 1700 and 1800.
- 4.2.3 All delivery drivers would remain in telephone contact with onsite staff so that deliveries are managed from Cannings Court Lane to the site access. HGV's arriving from the south via Dorchester and the A35 and B3143 would ring the site office from the existing lay-by on the B3143 some 4.8km of the site to allow the site office to put in place HGV management measures along Cannings Court Lane.
- 4.2.4 Banksmen will be positioned at the junction with the B3143 and Cannings Court Lane as well as the site access road.
- 4.2.5 HGV's approaching the site from the north via Yeovil/Sherbourne via the A3030 and B3143 would use the existing lay-by on the A3030 some 11.2km north of the site prior to contacting on-site staff. When delivery vehicles are on approach banksmen will ensure no vehicle leaves the site at the same time.
- 4.2.6 Any delivery vehicle anticipated to arrive at the site prior to the specified hours of delivery will be advised to remain at the existing lay-bys to the north or south of the site. Drivers will be requested to remain at the holding area until a suitable time to approach the site. Banksmen will be located at the site access when delivery vehicles are on approach to inform all road users of the construction vehicle.

4.3 Construction Access

- 4.3.1 Construction traffic will utilise the existing private farm track from Cannings Court Lane. Construction traffic will continue from the site access via the existing internal farm access track through agricultural fields to the proposed site.
- 4.3.2 Cannings Court Lane is some 3.0m in width along its 900m length from the sites private access track to its junction with the B3143. The maximum vehicle width associated with the construction traffic is some 2.5m. Swept path analysis of the largest vehicle would confirm suitability.
- 4.3.3 The existing priority skew junction of Cannings Court Lane and the B3143 offers flexibility for larger vehicles approaching from the north or south. Visibility for vehicles emerging from the junction on to the B3143 are provided with 2.4m x 43m to the nearside carriageway edge to the north and south of the access in line with guidance from the Manual for Street based on the existing 30mph speed limit in place on the B3143 adjacent to the junction.
- 4.3.4 No abnormal loadings are proposed as part of the development.

4.4 Construction Signage Strategy

- 4.4.1 A temporary signage scheme will be put in place to inform pedestrians and road users of potential construction traffic on the local road network. Directional signage including works traffic ahead and works access ahead will be in place on the B3143 on approach to the junction with Cannings Court Lane.

4.5 Construction Period / Duration

- 4.5.1 The total construction period for a site of this size is indicated to be 5 months, including pre-preparation of the site, fencing, assembly and installation of photovoltaic panels and grid connection.
- 4.5.2 The first four weeks of the construction phase would see the site pre-construction to create the construction compound and construction and future maintenance routes around the site.
- 4.5.3 The main stage of construction would include the arrival of the photovoltaic panels, sub-station equipment transformer, cabling and fencing whilst the final phase would see visits made by smaller vehicles. All plant and materials other than required for maintenance and repair and any temporary works will be dismantled and removed within two weeks following site operation.
- 4.5.4 Plant and materials will be delivered via the proposed construction site access.

4.6 Construction Traffic Movements

- 4.6.1 The main elements of the construction phase include:
 - solar photovoltaic (PV) panel installation;
 - 14 transformers;
 - perimeter fencing;
 - installation of security and monitoring CCTV;
 - underground cabling to connect the panels to the proposed substation; and
 - enclosed substation compound (for both the Developer and the Distribution Network Operator (DNO)).

- 4.6.2 During the first four weeks of pre-construction some 80 two-way HGV movements would occur, which equates to some 12-13 two-way HGV movements per day.
- 4.6.3 Following pre-construction, the main construction phase is anticipated to last four months. HGV movements would be typically be in the region of 8-10 two-way movements per day. The level of traffic during the main construction phase is not material and would not affect traffic or safety conditions in the local area particularly as the movements would be managed by the CEMP and Banksmen at the site accesses.

4.7 Construction Vehicle Delivery Periods

- 4.7.1 Hours of construction will be from 0700 to 1800 Monday to Friday and between 0700 to 1300 on Saturdays. Deliveries would be scheduled to avoid the highway network peak hours between 0800 to 0900 in the morning and 1700 to 1800 in the afternoon.

4.8 Construction Staff Car Parking

- 4.8.1 There will be a temporary area within the construction compound reserved for staff and visitor parking, together with an area of sufficient size for construction delivery vehicles to unload and turn around. Some 50 spaces for staff will be provided.
- 4.8.2 There will be no site staff parking on the public highway. This will be enforced by the site foreman and could form a Condition of Contract for those working on site.
- 4.8.3 It is anticipated that there will be between 30-250 staff on site at any one time. Staff would typically arrive between 0700 and 0800 and depart between 1800 and 1900 Monday to Friday. On Saturday's staff would typically arrive between 0700 and 0800 and depart between 1300 and 1400.

4.9 Site Compound

- 4.9.1 The site compound will include a hardstanding area for staff parking, welfare facilities and storage containers for materials.

4.10 Measures to Prevent Mud on Public Highway

- 4.10.1 Internal wheel-wash facilities to be provided adjacent to the site entrance.

4.11 Site Security

- 4.11.1 Construction of the boundary fence is expected to commence at the outset of the construction phase.

4.12 Condition Surveys

- 4.12.1 A road condition survey of the carriageway and adjacent highway verges will be carried out both before and after the construction period, which would incorporate a photographic record as appropriate. The survey, which would include the length of Cannings Court Lane to the B3143 would be agreed and carried out with Dorset Council.
- 4.12.2 A photographic record would be undertaken at the end of the construction stage in order to agree any remedial works which may be attributable due to construction traffic movements.

5. POST CONSTRUCTION

5.1 Site Operation

- 5.1.1 Infrequent visits by the DNO (Distributor Network Operator) or the developer for maintenance would occur after commissioning of the site. Visits would be made by van or 4X4 vehicles, and are carried out around once week.

6. SUMMARY AND CONCLUSION

- 6.1 The most traffic intensive period associated with the installation of a Photovoltaic Solar Park is the construction phase. It is identified that the construction periods will last between 4 months.
- 6.2 Some 940 two-way vehicle movements would occur during this period associated with the arrival and departure of a variety of road legal construction vehicles bringing materials to the site. This equates to some 8-10 two-way vehicle movements per day.
- 6.3 Suitable measures are to be put in impact to limit the disturbance to the local highway network, including wheel wash facilities, banksmen, stop and go, radio-coms and operational hour restrictions.
- 6.4 Following completion of the construction phase the site requires minimal maintenance and generates one movement per week. This level of traffic represents no material impact on the surrounding highway network.