

## **Botley West Solar Farm**

STATEMENT OF COMMON GROUND -

**Environment Agency** 

EN010147/APP/11.7/3

04 June 2025

NPI-12426 Statement of Common Ground - Environment Agency v1 04 06 2025





#### Approval for issue

Jon Alsop 4 June 2025

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#### **Appendices**

Appendix A Record of Relevant Correspondence





## **SIGNATURES**

This Statement of Common Ground has been prepared and agreed by SolarFive Ltd and the Environment Agency.

#### **Environment Agency**

[Signature]

[Name]

[Title]

[Organisation]

[Date]

#### PDVP on behalf of SolarFive

[Signature]

[Name]

[Title]

[Organisation]

[Date]



#### 1 Introduction

#### 1.1 DCO Reference

1.1.1 EN010147/APP/11.7/3

#### 1.2 Date of Examination

1.2.1 May 2025 – November 2025

#### 1.3 Proposed Development

- 1.3.1 The Applicant is seeking development consent for Botley West Solar Farm (the 'Project'), which in summary will comprise the construction, operation, maintenance and decommissioning of a photovoltaic ('PV') solar farm and associated infrastructure with a total capacity exceeding 50 megawatts ('MW'), in parts of west Oxfordshire, Cherwell and Vale of White Horse districts. The Project will export electricity for connection to the National Grid at Botley West.
- 1.3.2 The Project is classed as a 'nationally significant infrastructure project' ('NSIP') for the purposes of the Planning Act 2008 (PA 2008) and requires an application for a DCO. The application for development consent is being submitted to the planning inspectorate ('PINS'), with the decision on whether to grant a DCO to be made by the Secretary of State for Energy Security and Net Zero (the 'Secretary of State'), as required under the PA 2008.
- 1.3.3 This Statement of Common Ground (SoCG) has been prepared to support the DCO application made to the Secretary of State under section 37 of the PA 2008 for the proposed Project. The Application has been submitted by SolarFive Ltd (the Applicant).
- 1.3.4 A Location Plan can be found in the Examination Library at [AS-024] and a full description of the Project can be found at ES Chapter 6 Project Description [APP-043].

#### 1.4 Statement Overview

- 1.4.1 This Statement of Common Ground ('SoCG') is a working draft document. It comprises a record of consultation held with the relevant SoCG organisation to date as appropriate, and is designed to evolve, representing the ongoing nature of these discussions throughout the Examination period.
- 1.4.2 An overarching Statement of Commonality **[EN01047/APP/11.6]** has been submitted alongside this document and should be referred to in conjunction with this SoCG.
- 1.4.3 For the avoidance of doubt, this SoCG comprises contributions from the following environmental topic disciplines:
  - Ecology and Nature Conservation
  - Hydrology and Flood Risk

- 1.4.4 This statement addresses the following areas of common ground in relation to the Applicant Project Team's engagement with the Environment Agency to date:
  - a. Relevant submission documents and plans
  - b. Record of relevant correspondence to date
  - c. Matters that are agreed
  - d. Matters yet to be agreed
  - e. Matters that are not agreed

#### 2 Relevant Submissions Documents and Plans

2.1.1 A list of DCO documents and plans of relevance to engagement with the Environment Agency is identified in the tables below for ease of reference.

Table 2.1: Draft DCO submission documents and plans record pursuant to Environment Agency discussions – Ecology and Nature Conservation

Document/Plan Ref.	Title	Examination Library reference (EN010147)	Rev./Dated
EN010147/APP/2.2	Streets, Access and Rights of Way Plans	<u>APP-005</u>	November 2024
EN010147/APP/2.6	Statutory and Non-Statutory Sites - Features of Nature Conservation Plan	<u>APP-009</u>	November 2024
EN010147/APP/2.8	Habitats of Protected Species Plan	<u>APP-010</u>	November 2024
EN010147/APP/2.9	Statutory and Non-Statutory Features of Historic Environment Plan	APP-012	November 2024
EN010147/APP/2.10	Hedgerow Removal Plans	<u>APP-013</u>	November 2024
EN010147/APP/3.1	Draft Development Consent Order	APP-015	November 2024
EN010147/APP/6.2	ES Volume 0, Non-Technical Summary	<u>APP-037</u>	P0/ November 2024
EN010147/APP/6.3	ES Volume 1, Chapter 9 Ecology and Nature Conservation	<u>APP-046</u>	P0/ November 2024
EN010147/APP/6.4	ES Volume 2, Figure 9.1Statutory Designated Sites	<u>APP-086</u>	November 2024
EN010147/APP/6.4	ES Volume 2, Figure 9.2 Non-Statutory Designated Sites	<u>APP-087</u>	November 2024
EN010147/APP/6.4	ES Volume 2, Figure 9.3 a b & c Phase 1 Habitat Map	<u>APP-088</u>	November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.1 Desk Study	APP-150	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.2 Phase 1 Habitat Survey Report	<u>APP-151</u>	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.3 Hedgerow Survey Report	<u>APP-152</u>	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.4 Bat Survey Report	<u>APP-153</u>	P0/ November 2024

Document/Plan Ref.	Title	Examination Library reference (EN010147)	Rev./Dated
EN010147/APP/6.5	ES Volume 3, Appendix 9.5 Great Crested Newt (GCN) Survey Report	<u>APP-154</u>	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.6 Invertebrate Survey Report	<u>APP-155</u>	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.7 Reptile Survey Report	<u>APP-156</u>	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.8 Badger Survey Report [CONFIDENTIAL]	<u>APP-157</u>	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.9 Breeding Bird Survey Report	<u>APP-158</u>	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.10 Wintering Bird Survey Report	<u>APP-159</u>	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.11 Dormouse Survey Report	APP-160	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.12 Arable Weeds Survey Report	APP-161	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.13 Biodiversity Net Gain Assessment	<u>APP-162</u>	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.14 Habitats Regulations Assessment Report	<u>APP-163</u>	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.15 Veterans Tree Survey Report	<u>APP-164</u>	P0/ November 2024
EN010147/APP/6.5	ES Volume 3, Appendix 9.16 Section 42 Consultation Responses	<u>APP-165</u>	P0/ November 2024
EN010147/APP/7.3.3	Landscape, Ecology and Amenities Plan	APP-228	November 2024
EN010147/APP/7.6.1	Outline Code of Construction Practice – Part 1	<u>APP-232</u>	P0/ November 2024
EN010147/APP/7.6.1	Outline Code of Construction Practice – Part 2	<u>APP-233</u>	P0/ November 2024
EN010147/APP/7.6.2	Outline Operational Management Plan	<u>APP-234</u>	P0/ November 2024
EN010147/APP/7.6.3	Outline Landscape and Ecology Management Plan	<u>APP-235</u>	P0/ November 2024
EN010147/APP/7.6.4	Outline Decommissioning Plan	<u>APP-236</u>	P0/ November 2024

Table 2.2: Draft DCO submission documents and plans record pursuant to Environment Agency discussions - Hydrology and Flood Risk

Document/Plan Ref.	Title	Examination Library reference	Rev./Dated
6.3 - ES Chapter 10 - Hydrology and Flood Risk	Hydrology and Flood Risk	APP-047	November 2024
6.4 ES - Figure 10.1	Study Area	APP-089	November 2024
6.4 ES - Figure 10.2	Hydrological Features	APP-090	November 2024

Document/Plan Ref.	Title	Examination Library reference	Rev./Dated
6.4 ES - Figure 10.3	WFD Catchments (surface water)	APP-091	November 2024
6.4 ES - Figure 10.4	Flood Warnings Alerts	APP-092	November 2024
6.4 ES - Figure 10.5	Drinking Water Protected Areas and Nitrogen Vulnerable Zones	APP-093	November 2024
6.4 ES - Figure 10.6	BGS 150k Bedrock Geology	APP-094	November 2024
6.4 ES - Figure 10.7	BGS 150k Superficial Geology	APP-095	November 2024
6.4 ES - Figure 10.8	WFD Catchments (groundwater)	APP-096	November 2024
6.4 ES - Figure 10.9	Designated Sites	APP-097	November 2024
6.4 ES - Figure 10.10	EA Flood Map for Planning	APP-098	November 2024
6.4 ES - Figure 10.11	Hydraulic Modelling Results	APP-099	November 2024
6.4 ES - Figure 10.12	Water Abstractions, Pollution Incidents and Discharge Consents	APP-100	November 2024
6.5 ES - Appendix 10.1	Flood Risk Assessment	APP-166	November 2024
6.5 ES - Appendix 10.2	Conceptual Drainage Strategy	APP-167	November 2024
6.5 ES - Appendix 10.3	Hydraulic Modelling Report	APP-168, APP-169 and APP-170	November 2024
6.5 ES - Appendix 10.4	Hydrology report	APP-171	November 2024
6.5 ES - Appendix 10.5	Surface Water Modelling Report	APP-172	November 2024
6.5 ES - Appendix 10.6	Surface water and Groundwater abstractions, pollutions incidents and discharge consents Report	APP-173	November 2024
6.5 ES - Appendix 10.7	Water Framework Directive Assessment	APP-174	November 2024

## **3** Record of Relevant Correspondence

- 3.1.1 The Project has been the subject of pre-application engagement with the Environment Agency, and both parties continue to engage throughout and beyond the submission of the DCO application for the Project.
- 3.1.2 **Appendix A** identifies the discussions and correspondence that have taken place between the Applicant's project team and the Environment Agency to date.

## 4 Matters That Are Agreed

Table 4.1: Record of Matters of Specific Agreement to Date – Ecology and Nature Conservation

Date	Matter	Comment	Outcome
	Methodology		
Up to DL1	Survey methodology	Other than where noted below, survey scope and methodology agreed	Agreed
Up to DL1	Assessment approach, scope and methodology	Other than where noted below, assessment approach, scope and methodology agreed	Agreed
	Legislation		
Up to DL1	Volume 1 Chapter 9: Ecology and Nature Conservation: 9.2: Environmental legislation does not list some recent (2024) legislation pertaining to BNG. The following should be included: Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024, for completeness.	Noted.	Agreed.

Table 4.2: Record of Matters of Specific Agreement to Date - Hydrology and Flood Risk

Date	Matter	Comment	Outcome
N/A	N/A	N/A	N/A

## 5 Matters Yet to be Agreed

Table 5.1: Record of Matters yet to be Agreed to Date – Ecology and Nature Conservation

Date	Matter	Comment	Outcome
	Methodology		
Up to DL1	Issue: The impacts on protected species are not understood. Species-specific water vole and otter surveys have not been completed.  Impact: The applicant does not provide enough evidence to assess the likely negative effects on riparian mammals. The purpose of ecology surveys is to provide baseline information presence/absence, utilisation of habitat, etc.) to determine whether a project will have a negative impact on a protected species, and	Although not surveyed for specifically, otter have been recorded using the Evenlode and it is possible that water vole may also be present. Therefore, both species were considered as receptors within ES Chapter 9 Ecology and Biodiversity [APP-046]. This assessed the potential impacts of the Project on both species, including with respect to potential disturbance during construction. The conclusion of that assessment was that while there may be some short term and localised disturbance from noise at a distance to these species, there would be no significant effect from any potential impact.	Discussions ongoing.
	to inform whether mitigation is required.  Solution: Conduct otter and water vole surveys to establish the presence or absence of said species, the potential risks and any mitigation and compensation required. The surveys should follow best practice guidelines. The development should also consider potential enhancement opportunities for the species within the design. For example, potential enhancement may include habitat improvements or connectivity of the riverine corridor through the development.  Table 9.10.1 should also be updated following otter and water vole surveys if evidence of shelters are discovered, as both species		
	may need to be monitored as part of a mitigation licence.  Additional Comments: The provision of a buffer alone is not enough to avoid potentially negative impacts to otters and water voles, due to the potential to disturb either species during construction on or near watercourses (e.g. installing watercourse crossings, riparian enhancement works, etc.). In addition by law its an offence for	The use of a buffer zone of between 3-5 m from the toe of banks around water courses to avoid impacts to water vole is recommended within the Water Vole Mitigation Handbook (Dean et al 2016). The Project includes buffer zones of at least 8m from all watercourses, well above this recommended minimum. As such, the Applicant does not agree that further surveys for water vole or otter are necessary since all impacts are avoided.  The Project includes enhancement with respect to both species through the provision of the buffer zones and the	

#### Date Matter Comment Outcome

Riparian mammal shelters (burrows, holts and couches) are protected from disturbance.

enhanced Evenlode Corridor. Some of the smaller water courses on the Project site are currently farmed up to the top of the embankment and will be subject to agricultural run off from fertiliser and other chemical additions. The removal of these agricultural inputs and the provision of a much wider buffer along the top of the bank will help ensure that both species are protected and their aquatic and terrestrial habitats enhanced.

#### Water vole habitat

**Issue:** Assessment of effects section does not include an assessment of the impact of temporary and permanent habitat loss during construction and decommissioning on water vole.

Impact: Lack of consideration regarding the sensitivity of water voles to impacts during the construction and decommissioning stages, There are multiple records of water voles on main rivers and ordinary watercourses that are connected to the site (e.g. Rowel Brook).

**Solution:** Amend Section 9.9 to consider the impact of construction and decommissioning on water voles.

As set out in section 9.6.77 of ES Chapter 9 Ecology and Biodiversity [APP-046], the potential presence of water vole on the Project site is considered by virtue of the consideration of their habitat within the impact assessment (i.e. water courses and water bodies). All such habitat that could be used water vole within the Project site is to be maintained with an appropriate buffer and will be protected during both construction and decommissioning. As such, there would be no impacts to water vole during these phases of development.

Discussions ongoing.

#### **Biodiversity Net Gain**

**Issue:** The BNG assessment is incorrect, The baseline habitat scores have only been calculated for on-site area and hedgerow habitats.

Impact: Watercourses within the Scoping Boundary have not been assessed as part of BNG, on the basis that "none are being impacted by the project" (Section 9.1.6 oLEMP), even though watercourses may be impacted during the construction and decommissioning phases (e.g. installation of crossings, riparian works, etc.). There is also a lack of ambition with regards to leaving a measurably positive impact on watercourses following the development.

**Solution:** Measure watercourse lengths within the scheme and use the watercourse metric to calculate baseline habitat scores and

The Statutory Biodiversity Metric (DEFRA, 2024) is completed and appended to Appendix 9.13 Biodiversity Net Gain Assessment [APP-162]. Appendix 9.13 will be updated to include the watercourse section of the metric which will be assessed and completed for all watercourse associated units on the Project site.

#### **Date** Matter Comment **Outcome** propose to achieve a BNG target of at least 10% for watercourses. Additional Comments: For potential BNG opportunities, we recommend the applicant refers to both the mitigation measures within the Water Framework Directive and opportunities identified within any Local Nature Recovery Strategies. **Issue:** Monitoring and inspection The Statutory Biodiversity Metric (DEFRA, Discussions section includes a plan to conduct 2024) is completed and appended to ongoing. river condition assessments, to Appendix 9.13 Biodiversity Net Gain "ensure that the assumptions with Assessment [APP-162]. Appendix 9.13 will respect to biodiversity net gain be updated to include the watercourse were being achieved.". section of the metric which will be assessed and completed for all **Impact:** The statement is watercourse associated units on the contradictory to Section 9.1.6, Project site. which states that BNG is not being delivered for watercourses. **Solution:** Whilst we support the delivery of river condition assessments, we encourage that these are done with a plan to deliver watercourse BNG enhancements. River Evenlode habitat enhancement Issue: Proposal to maintain The delivery of the Evenlode Corridor will Discussions existing river corridor habitat within provide over 100ha of wet grassland ongoing. Zone 2 (Evenlode Corridor), habitat and other riparian features. The including marginal and aquatic Project order limits do not include the River Evenlode channel itself and, as such, planting. works within the channel are not being Impact: Not ambitious enough to considered as part of the Corridor only consider the riparian habitat. enhancement. Proposal only appears to be focus on the River Evenlode, despite other watercourses be present within the scheme boundary (e.g. River Thames, Limb Brook, Chil Brook, etc.). **Solution:** The proposal needs to include in-channel habitat enhancements measures. This could be achieved through increasing the in-channel habitat diversity, improving channel morphology and removing barriers. **Watercourse buffers**

The use of 8m minimum buffers with

Project is standard best practice with

respect to most watercourse through the

respect to such features. As such, this has been adopted, where it is possible to do so.

watercourses will have a minimum

buffer of 8m maintained during

works to protect the feature.

Issue: The majority of

Discussions

ongoing.

**Impact:** Buffer strips less than 10m are not effective at allowing space for commuting by mammals and the maintenance of a natural river corridor.

**Solution:** Riparian buffer strips measure a minimum of 10m from the bank-top for all watercourses on the site, unless existing physical constraints prevent this, and that this is defined in the Outline CoCP. This will allow for the natural river corridor to be maintained and free movement of riparian mammals up and down the system.

This includes both within the illustrative masterplan as a design principle and also during construction to protect these features. The provision of these buffers is set out in section 8.2 of the oLEMP [APP-235] and section 1.10.12 of the outline Code of Construction Practice [APP-232].

#### Fish effects

**Issue:** Fish have not been included in the assessment of the construction of the cable route corridor which is proposed to cross the River Evenlode and River Thames.

**Impact:** Although Horizonal Directional Drilling is less impactful that open trench cable laying, there is still the potential for continuous noise associated with vibrations from the drilling to impact on fish species in the River Evenlode and River Thames, especially where it has been proposed to last up to one year. Impacts from noise and vibration are more likely where the drill depth is relatively shallow. Impacts on fish from noise lasting up to a year could result in fish avoiding key lifecycle habitat and thus impact on long term recruitment.

Solution: An assessment on fish species from the impacts of any noise during the cable laying must be detailed in the ES. Where necessary mitigation measures should be included to make any impacts negligible and detailed in the OCEMP and CEMP. This may involve a timing restriction to avoid any key spawning or migratory periods and/or drilling to a greater depth to ensure a sufficient buffer.

#### **Additional Comments:**

Underwater noise or vibration may affect natural migratory fish behaviour and in extremities, kill fish. If it is assumed that noise and

Even for the longest HDD under the River Thames, the period the drilling would be near or under the river would only be circa 2 weeks. As such, any vibration impact would be very short term. Notwithstanding this, at this stage, the final depths of the HDDs to be used to cross water courses has not been determined as the ground conditions are not vet known. As set out in section 3 of ES Appendix 6.2 Cable Laying Methodology and HDD Crossing Locations, the depth of the HDD could be between 1.5 and 30m. The final depth will therefore be chosen to ensure that there are no potential vibration impacts to water courses once the ground conditions (and therefore transmission of vibration) has been determined.

Matter		
INIALLEI	Comment	Outcome
vibration from HDD is negligible to fish, then this needs to be backed up with evidence. Guidance on assessing the impacts on fish can be found in Sound Exposure Guidelines for Fishes and Sea Turtles (Popper et al., 2014). These guidelines provide recommendations for setting criteria (including injury and behavioural criteria) for fish. HDD would class as a continuous noise source for fish.		
Issue: Fish have not been included in the assessment of the operation of the cable route corridor which is proposed to cross the River Evenlode and River Thames.	All cables will be appropriately shielded typically using metallic sheaths or armouring as per industry standards to prevent increase in EMF.	Discussions ongoing.
Impact: Electromagnetic fields (EMFs) emitted from high voltage cables can have behavioural impacts and impacts on fish egg development.		
<b>Solution:</b> Appropriate measures are to be put in place by the developer, so that EMFs are not detectable by fish from the installation of underground cables.		
Additional Comments: Studies have found EMF's can affect individual organisms during embryonic and larval stages. Lamprey spp. (present in the River		
Thames and Evenlode), spend their juvenile stages on the bed of the river (normally in silty areas). As such this could lead to localised impacts on any fish near the power cables, where there could be an increase in EMF. Additionally, the behaviour of migratory species (brown/sea trout, European eel) present in the River Thames and Evenlode may be impacted by any increase in EMF. It is noted that shielding of cables and depth of		
	up with evidence. Guidance on assessing the impacts on fish can be found in Sound Exposure Guidelines for Fishes and Sea Turtles (Popper et al., 2014). These guidelines provide recommendations for setting criteria (including injury and behavioural criteria) for fish. HDD would class as a continuous noise source for fish.  Issue: Fish have not been included in the assessment of the operation of the cable route corridor which is proposed to cross the River Evenlode and River Thames.  Impact: Electromagnetic fields (EMFs) emitted from high voltage cables can have behavioural impacts and impacts on fish egg development.  Solution: Appropriate measures are to be put in place by the developer, so that EMFs are not detectable by fish from the installation of underground cables.  Additional Comments: Studies have found EMF's can affect individual organisms during embryonic and larval stages.  Lamprey spp. (present in the River Thames and Evenlode), spend their juvenile stages on the bed of the river (normally in silty areas). As such this could lead to localised impacts on any fish near the power cables, where there could be an increase in EMF. Additionally, the behaviour of migratory species (brown/sea trout, European eel) present in the River Thames and Evenlode may be impacted by any increase in EMF. It is noted that	up with evidence. Guidance on assessing the impacts on fish can be found in Sound Exposure Guidelines for Fishes and Sea Turtles (Popper et al., 2014). These guidelines provide recommendations for setting criteria (including injury and behavioural criteria) for fish. HDD would class as a continuous noise source for fish.  Issue: Fish have not been included in the assessment of the operation of the cable route corridor which is proposed to cross the River Evenlode and River Thames.  Impact: Electromagnetic fields (EMFs) emitted from high voltage cables can have behavioural impacts and impacts on fish egg development.  Solution: Appropriate measures are to be put in place by the developer, so that EMF's are not detectable by fish from the installation of underground cables.  Additional Comments: Studies have found EMF's can affect individual organisms during embryonic and larval stages. Lamprey spp. (present in the River Thames and Evenlode), spend their juvenile stages on the bed of the river (normally in silty areas). As such this could lead to localised impacts on any fish near the power cables, where there could be an increase in EMF. Additionally, the behaviour of migratory species (brown/sea trout, European eel) present in the River Thames and Evenlode may be impacted by any increases in EMF. It is noted that shielding of cables and depth of cables under the watercourse may

#### **Table 5.2:** Record of Matters yet to be Agreed to Date – Hydrology and Flood Risk

**Date** Matter Comment **Outcome Inspections & Surveys** 

assets near cable crossings.

#### **Impact**

Potential damage to flood assets, increasing flood risk vulnerability

Unknown condition and geometry of flood The inclusion of pre-works and post-works Discussions surveys of flood assets are to be added as ongoing. a commitment to an updated version of 6.3 - ES Chapter 10 - Hydrology and Flood Risk [APP-047] as embedded mitigation as embedded mitigation.

#### Solution

Conduct pre-works and post-works surveys of flood assets, considering settlement and vibration impacts. Include remediation for defects.

#### **Additional Comment**

The Applicant should consider as-built drawings and will need to carry out an investigation to determine the flood asset geometry and whether buried elements are present.

EAREQ-001: We request the inclusion of a DCO Requirement to provide a preworks and post-works survey of the flood assets intersected by the cable crossings with consideration of settlement and adverse effects from vibration. Remediation for defects identified, HDD offsets should be informed by as-built drawings and surveys.

#### **Horizontal Directional Drilling Cable** Depth

#### Issue

Proposed HDD depth may restrict adaptability of flood assets

#### **Impact**

The shallow depths of HDD may lead to increased flood risk if future flood defence assets cannot be adequately designed and installed.

#### Solution

Require a minimum HDD depth of 5m general arrangement drawings showing proximities.

#### **Additional Comments**

The Applicant confirms that HDD depth under main rivers would be at least 1.5m below flood assets and 2m below hard bed. The minimum depths were established by EA guidance published on Gov.UK which states "the service crossing is at least 1.5m below the riverbed along its whole length, and the same height is maintained for at least 5m beyond each bank (measured from the top)." This has been presented and committed to as commitment 10.4 within 6.3 - ES Chapter 10 - Hydrology and Flood Risk [APPbelow hard bed and flood assets. Provide 0471 as embedded mitigation. The actual depth of the HDD at main rivers would likely be deeper. Drill profiles will be determined and confirmed depths provided during detailed design.

We are seeking a cable depth of 5m below hard bed and flood assets for main rivers to allow for future replacement of flood assets (e.g. sheet piling) and allow dredging of the watercourse in future. The Applicant has proposed a HDD depth of 2m below hard bed and 1.5m below flood assets. The proposed depth below a flood asset will need to be demonstrated to be safe.

EAREQ-002: We request the inclusion of a DCO Requirement to ensure HDD occurs at a minimum cable depth of 5m below hard bed and flood assets.

#### **Horizontal Directional Drilling Horizontal Distance (Entry / Exit Pits)**

#### Issue

Unclear compliance with local plan for main rivers.

#### **Impact**

Inadequate buffer from watercourses, increasing flood risk.

#### Solution

Maximise HDD entry and exit pit distances from watercourses, measured from top of bank or most landward extent of the flood asset (whichever is more conservative).

#### **Additional Comments**

The Applicant should look to maximise the distance of the HDD entry and exit pits distances from the watercourse, we would therefore look for there to be compliance with the local plan for main rivers. Note that this distance should be measured from the top of bank or most landward extent of the flood asset (whichever is more conservative). We would advise consistency across the whole site where feasible e.g., 10m. EAREQ-003: We request the inclusion of a DCO Requirement to maximise the distance of the HDD entry and 5 exit pits distances from the watercourse compliant with the local plan for main rivers.

The inclusion of a 10m buffer distance to be provided across the development from the banks of the watercourses, or the leeward extent of the flood asset (whichever is most conservative. This will be added as commitment to an updated version of 6.3 - ES Chapter 10 - Hydrology and Flood Risk [APP-047] as embedded mitigation.

Discussions ongoing.

#### **Spoil from Excavation**

#### **Date** Matter Comment Outcome

#### Issue

Potential placement of spoil in floodprone areas.

#### **Impact**

Increased flood risk from displaced floodwaters.

#### Solution

Store spoil outside the design flood extent wherever possible.

#### **Additional Comments**

EAREQ-004: We request the inclusion of a DCO Requirement to ensure spoil is stored outside the design flood extent and outside of Flood Zone 3b.

The majority of temporary facilities will be Discussions placed outside of Flood Zone 3. However, ongoing. 2 HDDs (two options in Swinford bridge HDD 6), and another one (HDD 12) have HDD construction compounds that are within flood zone 2/3. In these locations, any temporary spoil material during construction will be stored outside of Flood Zone 3.

#### Freeboard to Solar PV Panels

#### Issue

Proposed 200mm freeboard is insufficient to address flood risk.

#### **Impact**

Inadequate protection from flooding for PV panels and sensitive equipment.

#### Solution

A requirement regarding this issue is necessary. Please see Issue ref. EAREQ-005

Solar panels will be located within Flood Zone 1. As such will sit outside of fluvial flood extents. The lowest leading edge of the panels will be set at 0.8m across the height.

There are limited areas of the site where surface water flood depths could reach 600m in accordance with published surface water maps. At these limited locations, the panels will still have a freeboard, but this is less than 300mm. The area in question constitutes less than 1% of the total site area. Therefore, only a small portion of the solar panels would experience flooding at their base, and the depth of flooding is limited.

A freeboard of 200mm is deemed appropriate in these locations, given the nature of the development feature type, which is waterproof. The design team and client were comfortable with the impact that any minor flooding in these areas could have on the development and the operational capacity.

Discussions ongoing.

#### Code of Construction Practice, Operational Management Plan, Decommissioning Management Plan

#### Issue

**Detailed Code of Construction Practice** (CoCP), Operational Management Plan (OMP), and Decommissioning Management Plan (DMP) not yet developed. The construction phase flood [APP-047] as embedded mitigation. The

Provision for preparation of a Flood Risk Management Plan to be prepared as part of the Outline CoCP, has been included as commitment 10.10 within 6.3 - ES Chapter 10 - Hydrology and Flood Risk

risk management depends on the Outline inclusion of this and the details during the CoCP.

Detailed CoCP preparation will include consultation with the EA.

#### **Impact**

Potential oversight in flood risk management and inadequate mitigation of construction-related flood risks.

#### Solution

Flood risk management to be included within the CoCP.

#### **Additional Comments**

The Environment Agency should be consulted on the detailed CoCP, OMP, and DMP.

## **Design Life / Time-limited Agreement and Decommissioning Management Plan**

#### Issue

Uncertainty in decommissioning phase impacts on flood risk and the potential extension beyond 2069 without reassessment.

#### **Impact**

Adverse effects on flood risk during decommissioning and Increased flood risk due to outdated climate change projections.

#### Solution

Consult the Environment Agency on the DMP before decommissioning. Clarify timelines and components to be removed or retained.

#### **Additional Comments**

We would expect the Environment Agency to be consulted on the DMP prior to the decommissioning phase commencing. We note the inclusion of a requirement for decommissioning to be commenced no later than 37.5 following the date of final commissioning. However, if there are delays in construction and commissioning and the proposal is extended beyond 2069 (inclusive of the decommissioning phase), the reassessment of flood risk and mitigation will be needed as it would extend into the next climate change

We note the comment regarding the potential for construction delays to potentially require a reassessment of flood risk and mitigation for the decommissioning phase. Should this occur then the EA will be reconsulted as part of a resubmission of flood risk and mitigation requirements.

projection epoch

https://www.gov.uk/guidance/flood-riskassessments-climatechange-allowances

#### **Evidence Gap(s) and the Placement of Component**

#### Issue

Flood risk hasn't been adequality assessed. There exist evidence-gaps relating to flood risk, notably for watercourse catchments of less than  $3km^2$ 

#### **Impact**

Inappropriate placement of components, potentially increasing flood risk.

#### Solution

Address evidence gaps using appropriate the EA on the 24th July to discuss the methods. Place permanent development technical note. Most of the comments in Flood Zone 1, outside of the design flood extent, and 1000-year Surface Water Flood (SWF) proxies. Conduct site-specific hydraulic modelling where needed.

#### **Additional Comments**

The Applicant should ensure that where there are evidence gaps relating to flood method to ensure that the permanent development is outside of areas of flood risk. This should be a combination of placing components within Flood Zone 1, placing outside of the site-specific hydraulic modelling design flood extent, and placing outside of the 1000-year SWF proxies used for the fluvial flood risk of a watercourse (where the climate change uplift has been demonstrated to be conservative). Note that we would expect site specific hydraulic modelling of fluvial flood risk for main rivers. We need clarity about where the Applicant is proposing to use SWF modelling as a proxy for fluvial flood risk, this should be represented on a map for clarity. Similarly, it should be demonstrated where the Applicant is stating that the flood risk if purely SWF risk, as they are proposing permanent components in some of these extents. Notably the proposed substation(s) are potentially within an area which may be at risk of

The comment regarding catchments less than 3 km2 was received as part of the PEIR comments dated 30 November 2023 – 8 February 2024 (reference: XA/2024/100059/01-L01). Following receipt of these comments, RPS provided a technical note under reference: HLEF 82808 WestBotley ResponsetoEA TN v1-FINAL dated 11th June 2024. This note provided further information regarding the points raised by the EA in the consultation comments. Following the submission of this note, a meeting was held by RPS with

were agreed to have been resolved and clarified within the Technical Note during the meeting. However, additional information was requested for several outstanding comments, including catchments less than 3 km2. A further technical note was submitted on the 23rd August 2024 (reference:

XA/2024/100059/01-L01). This latest risk that they have applied an appropriate surface water extents are used as a proxy technical note details how 1000-year to assess catchments of a small size using ReFH2 to assess the peak flows, as discussed and agreed in the aforementioned meeting.

**Technical Note** has been provided which addresses this comment, please confirm receipt and approach.

flooding, but this has not been modelled – this will need site-specific hydraulic modelling. As the flood risk in this area is complicated, it would be helpful to have a meeting to talk through which methods are considered acceptable for each watercourse where evidence-gaps exist within the study area.

By way of example: FRA 3.4.15 which suggests that the section of the Central Site Area located in the Cherwell Council boundary is wholly located in Flood Zone 1. Along the Rowel Brook at coordinates (446312, 214649), the Flood Map for Planning (FMfP) does not show a representation of fluvial flood risk as the catchment is less than 3km^2 and there is no existing site-specific hydraulic modelling. In cases like this within the study area, we need specificity on the approach taken to address the flood risk evidence-gap.

There exist at least three areas of concern within the southern parcel in the context of a fluvial flood risk evidencegap, namely watercourses at coordinates (444840, 205274), (445353, 205449), and (446472, 205824).

#### Issue

No consideration of flood risk in the upper reaches of the Rowel Brook has been provided within the Flood Risk Assessment other than a reference to the XA/2024/100059/01-L01). This latest technical note details how 1000-year

#### **Impact**

Flood risk to the development could be underestimated.

#### **Solution**

Consider the flood risk to the development associated with the Rowel Brook. The upper reaches of this watercourse do not have any Flood Zone mapping due to the small size of the catchment. Undertake an assessment of flood risk for the upper reaches of the Rowel Brook. Confirm if infrastructure is outside of the design flood extent. If infrastructure is being placed in areas of flood risk associated with this watercourse, then hydraulic modelling

The upper reaches of the Rowel Brook has a catchment less than 3 km2. A technical note was submitted on the 23rd August 2024 (reference: XA/2024/100059/01-L01). This latest technical note details how 1000-year surface water extents are used as a proxy to assess catchments of a small size using ReFH2 to assess the peak flows, as discussed and agreed in a meeting with the EA. As such, this assessment is included within the FRA surface water and ordinary watercourses section and considers the risk from this source; ES - Appendix 10.1 Flood Risk Assessment [APP-166].

Technical Note has been provided which addresses this comment, please confirm receipt and approach. will be required to quantify the risk to and from any development.

#### Issue

This section notes that permanent development and temporary development have been restricted to area outside the 100 year plus 46% fluvial and the 1000 year surface water flood extent associated with ordinary it is not clear what scenario the 100 year Risk Assessment [APP-166]. plus 46% fluvial extent relates to as the higher central scenario for the Gloucestershire and the Vale management catchment for the 2050s and 2080s epoch respectively is 19% and 41%. For the Cotswolds management catchment this is 21% and 43% respectively

Hydraulic modelling was undertaken to explore a greater developable area within the flood zones. The approach has since been simplified and development has been instead steered to Flood Zone (outside of the 1 in 1000 year extent). This updated approach will be detailed watercourses. This is welcomed although within an updated ES Appendix 10.1 Flood

**Discussions** ongoing.

#### **Impact**

Climate change allowances presented appear to be incorrect which could be misleading.

#### Solution

Correct the section of the report which refers to the 1 in 100 year plus 46% fluvial extent or provide clarity as to what this scenario relates to.

#### Issue

Watercourses have not been assessed the use of riparian buffers, even though easements and buffers are under 10m from the banktop (i.e. 20 within BNG riparian zone), e.g. watercourses having an 8m buffer during works. Some easements are calculated from the centreline of the channel (Appendix 10.1 provided to support the commitment. Sections 2.4.23/2.5.3)

#### **Impact**

Threats to the environment may not be properly quantified and possible BNG uplift for watercourses may not be achieved.

#### Solution

Either conduct MoRPh surveys/River Corridor Assessments to establish

Clarity will be added to updated 6.3 - ES Chapter 10 - Hydrology and Flood Risk due to conclusion of zero impact through [APP-047] and supporting appendices to confirm that a 10m development stand-off buffer includes the construction phase. This will be added as an updated commitment within embedded mitigation. Buffer will be taken from the top of the banks of the watercourses. A plan will be

correct BNG and increase the buffer/easement distance.

#### **Additional Comments**

BNG watercourse metric should be applied if there is a watercourse within, or in 10m proximity of, the development site Red Line Boundary (RLB) including the riparian zone. Therefore, if there are watercourses, including ditches, still within the site boundaries, a BNG watercourse assessment should be applied and watercourse metric calculated.

#### Issue

to SSSI site Rushy Meadows. It also discharges into the WFD waterbody "Oxford Canal" and as such takes its WFD classification from that waterbody. which is currently moderate, however it has not been assessed.

**Impact** 

Not properly assessing watercourses, especially those with hydrological connections to SSSI sites, could lead to damage to SSSI sites and missed opportunities for ecological uplift.

#### Solution

Assess watercourses properly.

6.3 - ES Chapter 10 - Hydrology and The Rowel Brook is hydrologically linked Flood Risk [APP-047] report will be updated to identify the location of the SSSI and proposed works upstream of this.

Discussions ongoing.

#### Flood Zone 3a and 3b

#### Issue

Unclear intersections of proposal with Flood Zones 3a and 3b.

#### **Impact**

Unknown impacts on flood risk from structures (temporary works, compounds, multiple routes in line with environmental or permanent structures) within Flood Zone 3.

#### Solution

The Applicant should provide mapping that shows Flood Zones 3a and 3b in the the chosen route. context of the proposed components and the cable corridor route. The corridor route should minimise interaction with

The Applicant has, where possible, sought to direct the development to areas assessed ongoing. as Flood Zone 1. However, there are, on occasion, other material constraints which direct development to a higher risk of flooding. An assessment of cable route corridor options was undertaken to assess constraints. However, appropriate mitigation measures are implemented in these situations. In each instance, the crossing of floodplain 3b is necessary to facilitate the crossings, and therefore, modelling would be unlikely to add any further information to

Discussions

Flood Zone 3b, and route selection should be informed by this consideration.

#### **Additional Comments**

Part of the application site is likely to lie within the 3.3% annual exceedance probability (AEP) flood outline, which is identified by the Table 1 of the Flood Zone and flood risk tables of the PPG as within Flood Zone 3b (the functional floodplain). Please be aware that development should be avoided within the 3.3% AEP (Flood Zone 3b) where possible, which is defined by the PPG as land where water from rivers, or the sea, has to flow or be stored in times of flood.

#### Reservoirs

#### Issue

Potential impact on nearby reservoir.

#### **Impact**

Increased flood risk from reservoir failure.

#### Solution

Liaise with reservoir undertakers to assess impacts and acceptability of works near reservoirs

#### **Additional Comments**

Contact the Undertaker of Farmoor reservoir for their input, especially in relation to acceptability of works in proximity to the reservoir as this may pose a risk and require input from a qualified engineer to ensure this is safe.

One reservoir has been identified within the study area, which is Farmoor Reservoir. Whilst we note the comment, Thames Water are responsible for Farmoor Reservoir and has been consulted as part of the DCO application. Thames Water have raised no concern regarding potential impact to this reservoir or additional detailed assessment beyond that made within 6.3 - ES Chapter 10 - Hydrology and Flood Risk [APP-047].

Discussions ongoing.

#### Flood Risk Assessment

#### Issue

Potential gaps in the FRA.

#### **Impact**

Incomplete understanding of flood risks and mitigation.

#### Solution

Cross-check the FRA against government guidelines to ensure comprehensive coverage.

The FRA details how flood risk has been assessed by the NPPF (set out in Table 1.4) and NPS (set out in Table 1.3) of the FRA; ES - Appendix 10.1 Flood Risk Assessment [APP-166]. These tables set out the key provisions that were undertaken in line with the guidance. Additional information was added to the FRA since the PEIR comments were received from the EA. These consultation comments and responses are detailed within 6.5 ES - Appendix 9.16 Section 42 Consultation Responses [APP-165].

#### Date Matter Comment Outcome **Temporary Facilities Plan** Issue Discussions The majority of temporary facilities ongoing. Lack of fluvial flood risk mapping in will be placed outside of Flood Zone 3. relation to temporary facilities. However, 2 HDDs (two options in **Impact** Swinford bridge HDD 6), and another one (HDD 12) have HDD construction Inadequate placement leading to compounds that are within flood zone increased flood risk. 2/3. The inclusion of a Temporary Solution Flood Management Plan will be added as a commitment within the updated Provide Temporary Facilities Plan 6.3 - ES Chapter 10 - Hydrology and relative to fluvial flood risk mapping, Flood Risk [APP-047] as embedded including hydraulic modelling and mitigation. proxies. **Additional Comments** A plan showing the location of the temporary facilities overlain on flood maps Provide the Temporary Facilities Plan will be provided relative to fluvial flood risk mapping used to inform the placement of components 10 (e.g., site specific hydraulic modelling flood extents and proxies for fluvial flood risk, and Flood Zones). **Crossing Schedule Map**

#### Issue

No map supporting watercourse crossings

#### **Impact**

Unclear assessment of impacts on watercourses and flood risks

#### Solution

Provide a map showing proposed crossings of watercourses within the Crossing Schedule.

A plan showing the location of the watercourse crossings will be overlain on flood maps and will be submitted.

Discussions ongoing.

#### **Buffers/ Easements**

#### Issue

No map supporting watercourse crossings

#### **Impact**

Unclear assessment of impacts on watercourses and flood risks

#### **Solution**

Clarity will be added to updated 6.3 - ES
Chapter 10 - Hydrology and Flood Risk
[APP-047] and supporting appendices to
confirm that a 10m development stand-off
buffer includes the construction phase.
This will be added as an updated
commitment within embedded mitigation.
Buffer will be taken from the top of the
banks of the watercourses. A plan will be
provided to support the commitment.

Date Matter Comment Outcome

Provide a map showing proposed crossings of watercourses within the Crossing Schedule.

#### Issue

The majority of watercourses will have a works to protect the feature.

#### **Impact**

Buffer strips less than 10m are not by mammals and the maintenance of a natural river corridor.

Solution

Riparian buffer strips measure a minimum of 10m from the bank-top for all watercourses on the site, unless existing physical constraints prevent this, and that this is defined in the Outline CoCP. This will allow for the natural river corridor to be maintained and free movement of riparian mammals up and down the system.

Clarity will be added to updated 6.3 - ES Chapter 10 - Hydrology and Flood Risk minimum buffer of 8m maintained during [APP-047] and supporting appendices to confirm that a 10m development stand-off buffer includes the construction phase. This will be added as an updated commitment within embedded mitigation. Buffer will be taken from the top of the effective at allowing space for commuting banks of the watercourses. A plan will be provided to support the commitment.

Discussions ongoing.

#### **Updated Risk of Flooding from Surface Water data**

#### Issue

This section notes that the identified surface water risk is shown in the online EA Risk of Flooding from Surface Water (RoFSW) dataset. Please note, an updated RoFSW dataset was published on the 28th January 2025 which does include climate change for the 2050s epoch. Further information is available online here: : Updates to national flood and coastal erosion risk information -GOV.UK

#### **Impact**

Updated data is available which may change the flood risk understanding for smaller ordinary watercourses

#### Solution

In the light of updated Risk of Flooding from Surface Water (RoFSW) data it would be prudent to confirm that the conclusions of the original assessment RPS are undertaking a technical note, which will assess the existing and updated ongoing. surface water mapping to confirm the approach remains valid. This will be supplied to the EA.

**Discussions** 

using the 1 in 1000- year dataset still remain valid.

#### Flood Risk Summary Central Site reporting error

#### Issue

This section notes that permanent development and temporary development have been restricted to area outside the 100 year plus 46% fluvial and the 1000 year surface water flood extent associated with ordinary it is not clear what scenario the 100 year Risk Assessment [APP-166]. plus 46% fluvial extent relates to as the higher central scenario for the Gloucestershire and the Vale management catchment for the 2050s and 2080s epoch respectively is 19% and 41%. For the Cotswolds management catchment this is 21% and 43% respectively

Hydraulic modelling was undertaken to explore a greater developable area within the flood zones. The approach has since been simplified and development has been instead steered to Flood Zone (outside of the 1 in 1000 year extent). This updated approach will be detailed watercourses. This is welcomed although within an updated ES Appendix 10.1 Flood

Discussions ongoing.

#### **Impact**

Climate change allowances presented appear to be incorrect which could be misleading.

#### Solution

Correct the section of the report which refers to the 1 in 100 year plus 46% fluvial extent or provide clarity as to what this scenario relates to.

#### **Hydraulic Model (Fluvial)**

#### Issue

The hydraulic modelling report is incomplete. The hydraulic modelling report for the River Evenlode is fundamentally the same as the hydraulic modelling report which was reviewed by the Environment Agency in November 2023.. With regards to the hydraulic modelling, several comments were raised Risk Assessment [APP-166]. by the Environment Agency on the modelling. The Environment Agency has not received any response in relation to the comments on the River Evenlode hydraulic modelling. A key comment was with regards to a verification exercise of the model results, for example comparing

Hydraulic modelling was undertaken to explore a greater developable area within the flood zones. The approach has since been simplified and development has been instead steered to Flood Zone (outside of the 1 in 1000 year extent). This updated approach will be detailed within an updated ES Appendix 10.1 Flood

the median annual water level (L-med) at the gauge Cassington Mill gauge with the 2-year water level in the hydraulic model. Similarly, a sense check of design water levels in the hydraulic model against the historic water level record at Cassington Mill is required to verify the sensibility of the results

#### **Impact**

It is not possible to verify the model results.

#### Solution

Provide a response to the comments raised by the Environment Agency on the River Evenlode Hydraulic modelling in November 2023. A sense check of design water levels in the hydraulic model against the historic water level record is required This would involve extending the hydraulic model further downstream past the Cassington Mill gauge. If it is not possible a comparison of design flows at the model outlet with design flow estimates at the Cassington Mill gauge would provide some confidence that modelled flows are reasonable and of the right magnitude.

risk not understood.

A lumped flow estimation point is not included at the downstream end of the study extent, for example at the Cassington Mill gauge. This would enable comparisons to be undertaken with the flows at the outlet in the hydraulic model.

#### **Impact**

It is difficult to verify the model results as there is no flow estimation point at the catchment outlet.

#### Solution

Consider adding a lumped flow estimation point at the downstream end of the study extent, at the Cassington Mill gauge. This would help to verify the hydraulic model flows at the catchment

Hydraulic modelling and supporting Hydraulic model is incomplete thus flood hydrology was undertaken to explore a greater developable area within the flood zones. The approach has since been simplified and development has been instead steered to Flood Zone (outside of the 1 in 1000 year extent). This updated approach will be detailed within an updated ES - Appendix 10.1 Flood Risk Assessment [APP-166].

outlet and would add confidence to the model results.

#### Issue

The Cassington Mill gauge (National River Flow Archive Number 39034 pooling group which has been used in should be included within the hydrological assessment as it is located on the watercourse which has been modelled.

Baseline model files to be supplied to the EA for their consideration. The surface water modelling was undertaken to suitable for pooling) is not included in the support potential betterment upstream of Cassington and has been undertaken as the hydrological assessment. This gauge enhanced mitigation, commitment 10.14 within 6.3 - ES Chapter 10 - Hydrology and Flood Risk [APP-047]. At the detailed design stage, option modelling will be undertaken (where required) to quantify the betterment provided, and this will be submitted to the EA.

Discussions ongoing.

#### **Impact**

The hydrological assessment would have benefited from the inclusion of the Cassington Mill gauge within the pooling group. This is a gauge which is located on the River Evenlode and including it would help to improve confidence in the design flow estimates for the River Evenlode.

#### Solution

Clarify the rationale for not including the Cassington Mill gauge in the pooling group and undertaking an Enhanced Single Site Analysis (ESS). Confirm if design flow estimates vary significantly if Cassington Mill is included.

#### **Hydraulic Modelling (Cassington)**

#### Issue

for intervention measures are likely to be water modelling was undertaken to iterative and further stakeholder engagement is required. While this is welcomed, we appreciate that modelling has not been reviewed.

#### **Impact**

Flood risk is not understood.

#### Solution

Provide a copy of the hydraulic model files so that the baseline flood risk representation can be appraised. Once a proposed option is developed within the modelling water level and extent difference mapping should be presented so that any betterment can be quantified.

Baseline model files to be supplied to the This section notes that design proposals EA for their consideration. The surface support potential betterment upstream of Cassington and has been undertaken as enhanced mitigation, commitment 10.14 within 6.3 - ES Chapter 10 - Hydrology and Flood Risk [APP-047]. At the detailed design stage, option modelling will be undertaken (where required) to quantify the betterment provided, and this will be submitted to the EA.

е	Matter	Comment	Outcome
	Missing and outdated guidance and policy		
	Issue	ES will be updated to include the latest	Discussions
	Some key guidance and policy documentation is missing or has been updated since issue of the ES:	policy documentation. This will be included within 6.3 - ES Chapter 10 - Hydrology and Flood Risk [APP-047].	ongoing.
	• The Water Supply (Water Quality) (Amendment) Regulations 2018 not cited.		
	• Environmental Damage (Prevention an Remediation) (England) (Amendment) Regulations 2019 not cited.	d	
	21 National Planning Policy Framework (NPPF) was updated following issue of the Environmental Statement (ES), in December 2024. The Environment Agency's Approach to Groundwater Protection, February 2018.		
	Impact		
	Aspects of the ES may not adequately address current guidance and policy requirements.		
	Solution		
	Applicant to update references in the ES and ensure any relevant changes in policy or guidance are reflected		

#### Hydrogeology

appropriately.

#### Issue

The summary of the hydrogeological setting of the Proposed Development presented in the ES is very limited, presenting no discussion of groundwater depths (such as presented in Table 5.5 of Appendix 10.7), anticipated flows within the onsite superficial and bedrock aquifers and potential connectivity between groundwater and surface water bodies.

#### **Impact**

Limited groundwater characterisation information is presented or discussed, such that we do not consider the applicant has demonstrated a sufficient

The ES will be updated to include further details of the hydrogeology regime. This will be included within 6.3 - ES Chapter 10 - Hydrology and Flood Risk [APP-047].

understanding of the hydrogeological setting of the site and therefore may not adequately identify all potentially significant risks posed by the development.

#### **Solution**

Applicant to provide greater detail with respect to the anticipated groundwater regime present within the Study Area.

#### **Surface Water and Groundwater Abstractions**

#### Issue

The baseline identifying the surface abstraction licences. This will be included water abstraction licences currently in the within 6.4 ES - Figure 10.12 **[APP-100].** study area is incomplete.

Discussions ongoing.

#### **Impact**

Without establishing the abstraction licenses within the baseline conditions, the ES cannot properly assess the potential effects of the proposed development on water quality and water users.

#### **Solution**

The following abstraction licenses should be included in the baseline conditions of the hydrology and flood risk chapter.

- 28/39/16/0078 Potable Water Supply (Thames Water Utilities Ltd)
- 28/39/14/0294 Spray Irrigation (Storage) 28/39/14/0285 – Make-Up or Top Up Water (Amenity)

#### Temporary dewatering

#### Issue

The applicant proposes to scope out impacts associated with temporary dewatering to enable construction, based on adherence to best practice method statements, and informed by proposed site investigation and monitoring.

#### **Impact**

Risk that the proposed best practice method statements may not be sufficient

Groundwater monitoring requirements are to be added to 6.3 - ES Chapter 10 - Hydrology and Flood Risk [APP-047].

ES will be updated to include the noted

Further ground investigation will be undertaken in line with commitment 11.2, which will inform the design of the PV array foundations.

It is not expected that any dewatering will be required. However, if it is, ground water levels would be expected to recover after construction. Commitment 11.3 also relates to remediation.

to protect groundwater quality from detrimental impacts.

#### **Solution**

We recommend that the applicant provides confirmation of the proposed scope of site investigation and monitoring, in particular in areas of the site underlain by Principal and Secondary A aquifers. We consider post-consent groundwater monitoring to be important for reducing uncertainty.

#### **Additional Comments**

The BGS groundwater level data presented by the applicant to date (Table 5.5) is highly limited, comprising eight records and showing groundwater being absent in some exploratory holes in total and ranging from 1.70 to 18.22 metres below ground level across other locations. The data indicates groundwater levels locally within anticipated PV array foundation depth, which may necessitate temporary or permanent dewatering. This should be considered by the applicant.

## **Groundwater dependent terrestrial ecosystems**

#### Issue

Although the report makes brief reference to groundwater dependent terrestrial ecosystems (GWDTEs) in Section 2.2.4 and reproduces the results of chemical and quantitative GWDTE tests for the various WFD Groundwater bodies present within the study area, the report does not provide a summary of designated GWDTEs within the study area (available at GWDTEs England).

#### **Impact**

Potentially significant groundwater dependent ecological receptors within the study area may not be suitably identified.

#### Solution

The WFD Assessment should be amended to take account of any GWDTEs within the study area

WFD Chapter will be updated to include further details on GWDTE's. To be included within 6.5 ES - Appendix 10.7 Water Framework Directive Assessment [APP-174].

Date	Matter	Comment	Outcome
	WFD Screening		
	Issue	WFD Chapter will be updated to include	Discussions
	Matters screened in and out in Stage 1	the temporary dewatering, pollution risk	ongoing.

Matters screened in and out in Stage 1 are discussed in Table 5.4 of Appendix 10.7. Temporary dewatering to enable construction (construction phase) is screened out on the basis of adherence to best practice method statements, supported by site investigation and monitoring before, during and after dewatering and excavation activities. Pollution risk and altered drainage patterns from general construction activities (construction phase) are screened out based on adherence to best practice method statements and the temporary nature of the construction works. Creating or altering pathways along which existing poor quality groundwater can migrate (construction phase) is screened out based on adherence to best practice method statements and the temporary nature of the construction works. The information provided by the applicant to date is indicative that groundwater may be locally present at foundation depth

WFD Chapter will be updated to include the temporary dewatering, pollution risk and altered drainage and creating or altering pathways to be screened in. This will be included within 6.5 ES - Appendix 10.7 Water Framework Directive Assessment [APP-174].

#### **Impact**

Risk that there is insufficient characterisation of groundwater levels and flows, and of shallow ground conditions, to ensure that the proposed mitigation is sufficient to protect the Secondary A and Principal aquifers underlying the site.

#### Solution

We recommend that temporary dewatering, pollution risk and altered drainage and creating or altering pathways should be screened in for consideration in the WFD Assessment

# Water Supply Strategy Issue Comment noted. Water supply and demands for aspects of the construction phase of the project, such as Horizontal Directional Drilling Discussions ongoing.

(HDD) and dust suppression, have not been evaluated.

#### **Impact**

Access to water in the summer will not be possible outside of public water supply.

#### Solution

A Water Supply Strategy should be provided which provides an initial options appraisal of sources of supply, potential restrictions and plan to mitigate for water unavailability (e.g. on-site storage).

#### **Additional Comments**

The proposal description includes the need for HDD as a trenchless technique for the laying of below ground cables. This technique can require significant and continuous water supply which is not evaluated in the ES. Other consumptive 31 uses of water identified by the project description include dust suppression and washing.

Surface water or groundwater abstraction will require licences determined and issued by the Environment Agency. There is a bespoke Thames licensing strategy which applies to applications for the consumptive surface water abstractions and groundwater abstractions in direct hydraulic continuity with a river or water dependent habitat features. For abstraction below 2 Megalitres per day (MI/d), no abstraction can take place when the average of the daily mean flows of the preceding 5 days in the River Thames as gauged at Kingston is equal to or less than Q50 (1780 Ml/d). More information can be found in the Cotswolds and Thames Abstraction licensing strategies.

This may have practical implications for the construction phase of the project as access to water will be limited for much of the summer season and during periods of prolonged dry weather outside of the summer. It is at the applicant's risk if the water supply has not been considered adequately. Underestimated licence determination timescales and inadequate preparation for licence conditions restricting access to water pre-



## 6 Matters That Are Not Agreed

Table 6.1: Record of Matters that are Not Agreed – Ecology

Date	Matter	Comment	Outcome
N/A	N/A	N/A	N/A

Table 6.2: Record of Matters that are Not Agreed – Hydrology and Flood Risk

Date	Matter	Comment	Outcome		
['Topic': Insert subheadings where more than one]					
N/A	N/A	N/A	N/A		



## Appendix A Record of Relevant Correspondence

Date	Topic	Outcome	Status
Ecology			
8/11/2023	Ecology	EA was Ecologist not available	-
Hydrology and	Flood Risk		
November 2022	Attempted to establish the EA's opinion on placing solar panels in areas potentially at risk of river flooding (Flood Zone 3).	opinion on placing solar panels in	Agreed
July 2023	Detailed proposals to place solar panels within areas at risk of flooding from the 1 in 30-year and 1 in 100-year fluvial flood events.	Following development of the plans the site has been sequentially steered towards areas of low risk (Flood Zone 1). As such response from this is no longer relevant.	Agreed
September 2023	Provided a main point of contact by the EA and discussed timescales regarding data provision to the EA.	Discussed proposals and agreed to provide additional information as design information comes forward.	Agreed
June 2024	A technical note was issued to the EA following the PEIR consultation comments.	Followed up with a meeting.	Agreed
July 2024	Teams meeting to discuss the Technical Note in response to PEIR comments	Approach agreed verbally, determined to be followed up in a subsequent letter.	Agreed
August 2024	A technical note was issued to the EA following their PEIR consultation comments.	Awaiting response	In progress