

# Priory Farm Solar Array, Great Wymondley

## Condition 17 and Condition 18

### Clarification Note

|                     |                                                                                       |
|---------------------|---------------------------------------------------------------------------------------|
| <b>Project ref:</b> | 5208                                                                                  |
| <b>Prepared by:</b> | James Aldridge BEng (Hons) MSc MCIWEM <i>Director</i>                                 |
| <b>Approved by:</b> | Kevin Tilford BSc (Hons) MSc (Eng) PhD MBA C.WEM CEnv FCIWEM <i>Managing Director</i> |
| <b>Date:</b>        | 3 October 2025                                                                        |
| <b>Version:</b>     | Final v1.0                                                                            |

#### Introduction

1. Weetwood Services Ltd ('Weetwood') has been instructed by AGR Solar 4 Limited to prepare a Clarification Note in association with the proposed development of a solar array and associated battery storage containers on Land at Graveley Lane, to the east of Great Wymondley ("the site").
2. Weetwood prepared a Surface Water Drainage and Overland Flow Management Plan and Pollution Prevention Plan report (v1.4, May 2025) to accompany applications to discharge planning condition 17 (surface water drainage scheme) and planning condition 18 (interim and temporary drainage measures) of planning permission 21/03380/FP.
3. Hertfordshire County Council (as LLFA) objected to the applications to discharge planning condition 17 (25/01093/DOC) and planning condition 18 (25/01209/DOC) by way of consultation response letters dated 3 June 2025 and 2 June 2025 respectively. The matters raised by the LLFA included the following:

#### Condition 17

- *Incorrect climate change allowance used for simulation of drainage network*
- *No calculations provided for greenfield runoff rate*
- *No simulation calculation provided for [3.3% AEP] plus climate change allowance event*
- *Cv value of 1 required to be used*

#### Condition 18

- *Attenuation basin required to be designed for [1.0% AEP] plus climate change allowance event*
  - *Evidence to be provided to ensure the temporary drainage does not increase flooding elsewhere*
4. Weetwood prepared an email response to the LLFA consultation response letters on 26 June 2025. The response included a justification for the use of the 'Central' climate change allowance, greenfield runoff calculations, updated simulation calculations based on a Cv value of 1 and including the 3.3% AEP plus climate change event, and also provided an explanation of how the temporary drainage scheme would be expected to perform. The email response was submitted to North Hertfordshire District Council on 27 June 2025.
  5. The LLFA issued supplementary consultation response letters on 28 July 2025, in which it maintained its objection to the applications to discharge planning condition 17 and planning condition 18 and requested the following information:

#### Condition 17

Matter 1 - *Evidence of agreement in principle from the relevant body in relation to the proposed discharge rate discharging to the existing culvert (titled "Land East of Great Wymondley, by Weetwood, drawing no. 100) is required.*

Matter 2 - *Upper end climate change allowance still required to be used for simulation and hydraulic modelling of drainage network that [1.0% AEP] plus 40% climate change allowance required to be used as in PPG guidelines paragraph 6 mentions that the lifetime of a non-residential development depends on the characteristics of that development but a period of 75 years is likely to form a starting point for assessment. Hence upper end allowance required to be used moreover the facilities that go along with the solar panels may have a lifespan greater than*

*the allowed 40 years. Hence a precautionary measure upper end allowance is required to be used for simulation of drainage network.*

*Matter 3 - Total area of each of the drainage network (network 1, 2 & 3) required to be provided to ensure that the greenfield runoff rates are maintained for each network.*

#### Condition 18

*Matter 4 - The temporary attenuation basin is currently designed for the 50% AEP rainfall event and LLFA still requires further explanation on how the flow and storage will be managed for higher return period flood events. The explanation provided by the applicant is for water quality, but LLFA is concerned on offsite flow in event of higher return period.*

*Matter 5 - LLFA still requires evidence and calculations to be submitted to ensure the temporary works do not cause flooding elsewhere.*

6. Weetwood issued an email response to the LLFA consultation response letters on 21 August 2025 and sought to arrange a meeting to discuss the outstanding issues.
7. A meeting took place on 29 September 2025 attended by James Aldridge (Weetwood), David Uncle (Hertfordshire County Council – LLFA) and Alex Jones (WSP – LLFA). In the meeting the LLFA agreed in principle to the removal its objection, subject to submission of a Clarification Note expanding on the responses contained in the email of 21 August 2025.
8. **This document presents the additional information requested by the LLFA to enable it to remove its objections to the applications to discharge planning condition 17 and planning condition 18.**

#### **Planning Condition 17**

*Matter 1 - Evidence of agreement in principle from the relevant body in relation to the proposed discharge rate discharging to the existing culvert (titled “Land East of Great Wymondley, by Weetwood, drawing no. 100) is required.*

9. The existing 300 mm diameter culvert crossing the northern part of the site is an ordinary watercourse. As such, the LLFA is the consenting authority and is responsible for providing agreement in principle of the proposed discharge rate. In addition, applications for ordinary watercourse consent will be submitted to the LLFA prior to the commencement of works affecting the culvert. By way of clarification, the proposed discharge rate to the culvert from the overland flow management area is 38.0 l/s. This is based on a discharge rate of 2.0 l/s/ha for the 19 ha of the site draining to the overland flow management area.

*Matter 2 - Upper end climate change allowance still required to be used for simulation and hydraulic modelling of drainage network that [1.0% AEP] plus 40% climate change allowance required to be used as in PPG guidelines paragraph 6 mentions that the lifetime of a non-residential development depends on the characteristics of that development but a period of 75 years is likely to form a starting point for assessment. Hence upper end allowance required to be used moreover the facilities that go along with the solar panels may have a lifespan greater than the allowed 40 years. Hence a precautionary measure upper end allowance is required to be used for simulation of drainage network.*

10. Planning condition 4 states “The development hereby permitted shall cease on or before the expiry of a 40 years period from the date of first export. The land shall thereafter be restored to its former condition in accordance with a scheme of decommissioning work and an ecological assessment report detailing site requirements in respect of retaining ecological features”. As such, the development life is 40 years and the ‘Central’ climate change allowance has been used in accordance with Environment Agency guidance. Specifically, the guidance states “For development with a lifetime between 2061 and 2100... use the central allowance for the 2070s epoch (2061 to 2125)”.

*Matter 3 - Total area of each of the drainage network (network 1, 2 & 3) required to be provided to ensure that the greenfield runoff rates are maintained for each network.*

11. The proposed impermeable areas served by drainage networks 1, 2 and 3 are presented by the Proposed Drainage Layout drawings (drawing no. 5208-100-104-P8 and 5208-105-P6). Drainage networks 1 and 3 serve

0.43 ha and 0.36 ha respectively of proposed impermeable surfaces and the proposed discharge rates have been based on the requirement to achieve “half drain down times for surface water drainage features within 24 hours” (refer Condition 17 viii). Drainage network 2 serves 0.13 ha of proposed impermeable surfaces and the proposed discharge rate has been based on a minimum orifice diameter of 50 mm to reduce the residual risk of flooding associated with a blockage of the vortex flow control device.

#### **Planning Condition 18**

*Matter 4 - The temporary attenuation basin is currently designed for the 50% AEP rainfall event and LLFA still requires further explanation on how the flow and storage will be managed for higher return period flood events. The explanation provided by the applicant is for water quality, but LLFA is concerned on offsite flow in event of higher return period.*

12. During the construction phase, runoff generated at the site would effectively be at greenfield rates due to the nature of the proposed development (i.e. solar array over managed grassland). As such, if the capacity of the temporary attenuation basins is exceeded, runoff would overtop the banks of the basins and continue to leave the site at greenfield runoff rates.

*Matter 5 - LLFA still requires evidence and calculations to be submitted to ensure the temporary works do not cause flooding elsewhere.*

13. The proposed temporary drainage scheme includes the creation of approximately 2,248 m<sup>3</sup> of surface water storage. Given that runoff rates at the site during the construction phase would effectively be at greenfield rates, the provision of significant additional storage would be expected to reduce the risk of flooding downstream, particularly during the more frequent flood events when the capacity of the temporary attenuations basins has not been exceeded.
14. It should also be noted that hydraulic modelling of the proposed overland flow storage areas that form part of the surface water drainage scheme but will also be used to manage runoff during the construction phase, reduce runoff rates leaving the site by 12.1% and 14.0% during the 3.3% AEP and 1.0% AEP events respectively (refer Table 1 of the Surface Water Drainage and Overland Flow Management Plan and Pollution Prevention Plan report).

#### **Conclusion**

15. The proposed surface water drainage scheme and interim and temporary drainage measures satisfy the requirements of planning condition 17 and planning condition 18.

*This document has been prepared solely as a Clarification Note for AGR Solar 4 Limited and is confidential to AGR Solar 4 Limited. Weetwood Services Ltd accepts no responsibility or liability for any use that is made of this document other than by AGR Solar 4 Limited for the purposes for which it was originally commissioned and prepared.*

Delivering client focussed services nationally

Flood Risk Assessments  
Flood Consequences Assessments  
Surface Water Drainage  
Foul Water Drainage  
Environmental Impact Assessments  
River Realignment and Restoration  
Environmental Permit and Land Drainage Applications  
Sequential, Justification and Exception Tests  
Expert Witness and Planning Appeals  
Discharge of Planning Conditions

[www.weetwood.net](http://www.weetwood.net)