



AQUIND Limited

AQUIND INTERCONNECTOR

Draft Statement of Common Ground
(Onshore) Between Aquind Limited and
Environment Agency

Agreed Draft

The Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010, Rule 8(1)(e)

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DOCUMENT

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1. INTRODUCTION AND PURPOSE

1.1. PURPOSE OF THIS STATEMENT OF COMMON GROUND

- 1.1.1.1. A Statement of Common Ground ('SoCG') is a written statement produced as part of the application process for an application for a Development Consent Order ('DCO') and is prepared jointly by the applicant and another party. A SoCG sets out the matters of agreement between both parties, matters where there is not agreement and matters which are under discussion.
- 1.1.1.1. The aim of a SoCG is to assist the Examining Authority to manage the examination of an application for a DCO by providing an understanding of the status of matters at hand and allowing the Examining Authority to focus their questioning. The effective use of a SoCG is expected to lead to a more efficient examination process.
- 1.1.1.2. This SoCG relates to an application made by AQUIND Limited to the Planning Inspectorate under section 37 of the Planning Act 2008 ("Act"). The application was made on 14th November 2019 and accepted on 12th December 2019. The SoCG has been prepared with the Environment Agency ('EA') to show where agreement has been reached with AQUIND Limited ('the Applicant') during the pre and post Development Consent Order ('DCO') application consultation and in the course of the DCO Examination.
- 1.1.1.3. This SoCG has been prepared by the Applicant and EA, collectively referred to in this SoCG as 'the parties', in respect of the onshore components of the Proposed Development; where onshore components comprise of activities within the onshore extent of the Order Limits only (above Mean Low Water Springs). A separate SoCG has been prepared by the Applicant and EA in respect of the marine aspects of the Proposed Development (below Mean High Water Springs).
- 1.1.1.4. This draft reflects the status of discussions between the parties at Deadline 4. Throughout this document points of agreement and disagreement between the parties are clearly indicated. Points that are not agreed will be the subject of ongoing discussion wherever possible to resolve, or refine the extent of disagreement between the parties.
- 1.1.1.5. The purpose and possible content of SoCGs is set out in paragraphs 58-65 of the Department for Communities and Local Government's guidance entitled "Planning Act 2008: examination of applications for development consent" (26 March 2015). Paragraph 58 of that guidance explains the basic function of SoCGs:

“A statement of common ground is a written statement prepared jointly by the applicant and another party or parties, setting out any matters on which they agree. As well as identifying matters which are not in real dispute, it is also useful if a statement identifies those areas where agreement has not been reached. The statement should include references to show where those matters are dealt with in the written representations or other documentary evidence.”

- 1.1.1.6. This SoCG comprises a record of agreement which has been structured to reflect topics of interest to EA on the AQUIND Interconnector DCO Application ('the Application'). Topic specific matters agreed, not agreed and actions to resolve between the parties are included and presented in a tabular form.
- 1.1.1.7. Due to the proposed Converter Station site located above a groundwater Source Protection Zone 1 and aquifers from which local public water supply is provided, a number of points in this SoCG refer also to the involvement of Portsmouth Water ('PW') who are the responsible authority for the public water supply and with whom the parties have worked closely with throughout the process. A separate SoCG is being worked on by the Applicant with PW.

1.2. THE DEVELOPMENT

- 1.2.1.1. This SoCG relates to an application made by the Applicant to the Planning Inspectorate ('PINS') under the Planning Act 2008 ("Act").
- 1.2.1.2. The Application seeks development consent for those elements of the AQUIND Interconnector (the 'Project') located in the UK and the UK Marine Area (the 'Proposed Development').
- 1.2.1.3. The Project is a new 2,000 MW subsea and underground High Voltage Direct Current ('HVDC') bi-directional electric power transmission link between the South Coast of England and Normandy in France. By linking the British and French electric power grids it will make energy markets more efficient, improve security of supply and enable greater flexibility as power grids evolve to adapt to different sources of renewable energy and changes in demand trends, such as the development of electric vehicles. The Project will have the capacity to transmit up to 16,000,000 MWh of electricity per annum, which equates to approximately 5 % and 3 % of the total consumption of the UK and France respectively.
- 1.2.1.4. The Proposed Development includes:
- HVDC Marine Cables from the boundary of the UK Exclusive Economic Zone to the UK at Eastney in Portsmouth;
 - Jointing of the HVDC Marine Cables and HVDC Onshore Cables;
 - HVDC Onshore Cables;

- A Converter Station and associated electrical and telecommunications infrastructure;
- High Voltage Alternating Current ('HVAC') Onshore Cables and associated infrastructure connecting the Converter Station to the Great Britain electrical transmission network, the National Grid, at Lovedean Substation; and
- Smaller diameter Fibre Optic Cables ('FOC') to be installed together with the HVDC and HVAC Cables and associated infrastructure.

2. CONSULTATION

- 2.1.1.1. The parties have been engaged in consultation since the inception of the Proposed Development. Early correspondence dates back to Q1 2018 with significant consultation also occurring between May 2019 and October 2019.
- 2.1.1.2. A summary of recent key meetings and correspondence between the parties can be found in Table 2.1.

Table 2.1 – Summary of Key Correspondence between the parties

| Date | Form of Contact | Summary |
|------------|---|--|
| 28/03/2018 | Meeting | <ul style="list-style-type: none"> Initial engagement pre-development of PEIR with initial discussion over the general flood risk environment. Discussion in relation to the Ground Investigation undertaken to inform the Proposed Development PEIR and ES. |
| 17/07/2018 | Various (Flood Risk) | <ul style="list-style-type: none"> PEIR Flood Risk Advice. |
| 18/06/2019 | Meeting (Converter Station Engineering) | <ul style="list-style-type: none"> Indicative converter station site layout and arrangement of buildings and electrical equipment was presented and discussed. Site constraints and their impact on locating the compound was discussed. Potential source of contamination within converter station along with proposed mitigations discussed and agreed in principle. Temporary and permanent site surface drainage system discussed and agreed in principle. |

| Date | Form of Contact | Summary |
|------------|--------------------------------|--|
| | | <ul style="list-style-type: none"> • Sustainable drainage including filter drains, infiltration drains, infiltration swales, detention basin, infiltration basin and soakaway system discussed and agreed in principle. • Karst features along with treatment strategy was discussed with both PW and EA and agreed in principle. • Foul drainage system was discussed and agreed in principle. • Oily water drainage and oil containment discussed and agreed with both PW and EA in principle. • Site investigation findings and foundation solution was discussed and agreed in principle. |
| 23/07/2019 | Meeting (Flood Risk Workshop) | <ul style="list-style-type: none"> • Workshop to discuss the Proposed Development. • Expected Surface Watercourse Crossings. • Proposed Construction Principles in relation to flood risk and surface water quality. <p>Minutes of Meetings, as agreed with the EA can be found in Appendix 1 of APP-436 (ES Appendix 20.1 Consultation Responses).</p> |
| 23/07/2019 | Meeting (Groundwater Workshop) | <ul style="list-style-type: none"> • Workshop discussed temporary dewatering. |

| Date | Form of Contact | Summary |
|-------------------|--|--|
| | | <ul style="list-style-type: none"> • Discharges to surface water and groundwater: environmental permits. • Groundwater emergence within a trench would need to be considered on a case by case basis depending on the volumes encountered and may require temporary dewatering consent. • Some discussions on what provisions are anticipated to manage groundwater in HDD pits and/or open trenching, so as not to increase flooding off-site. • ES would set out principles for the management, however the specific measures taken forward at each location would be contractor led and developed post planning through a permit. |
| 23/07/2019 | Meeting (Water Framework Directive Workshop) | <ul style="list-style-type: none"> • Workshop to discuss the Proposed Development. • Presentation given on each watercourse crossing in relation to WFD quality elements and potential impacts. • Discussion relating to potential impacts. • Discussion relating to WFD mitigation measures set for the potentially impacted WFD water bodies. • Discussion relating to the EA's expectations with regard to WFD |

| Date | Form of Contact | Summary |
|-------------------|---|--|
| | | <p>mitigation and contribution to biodiversity net gain.</p> <ul style="list-style-type: none"> • Discussion relating to proposed Construction Principles in relation to WFD. |
| 02/09/2019 | Meeting (Converter Station Engineering) | <ul style="list-style-type: none"> • PW and EA comments Discussed • WSP proposal in response to PW and EA comments were discussed and agreed. |
| 05/08/2020 | Meeting | <ul style="list-style-type: none"> • PW comments on the applicant response to Relevant Representation was discussed. • Supplementary karst report was discussed and further explanation relating to HDD works and the method of dealing with unknown karst features were explained • Proposed piling solution and piling risk assessment (draft) discussed. • Proposed temporary car park and associated temporary surface water drainage discussed • Converter station drainage system and SuDS explained. • Explanation was provided relating to fire deluge system and how the surface water drainage system will be designed to account for its operation. |
| 02/09/2019 | Meeting (Converter Station Engineering) | <ul style="list-style-type: none"> • PW and EA comments discussed. • WSP proposal in response to PW and EA comments were discussed and agreed. |

| Date | Form of Contact | Summary |
|---------------------------|--|---|
| 11/09/2020 | Meeting | <ul style="list-style-type: none"> Proposed site level and associated Earthworks methodology discussed. Construction water management and earthwork water management discussed. Generic method statement and its table of contents discussed. |
| Various (email and calls) | Various (Flood Risk) | <ul style="list-style-type: none"> Agreement of Flood Risk Workshop Minutes of Meeting. Agreement of proposed principles for (tidal) flood risk management at Optical Regeneration Station. |
| Various (email and calls) | Various (Converter Station Optioneering) | <ul style="list-style-type: none"> Agreement of Aquifer contamination Workshop Minutes of Meeting. Various correspondence with PW and EA during design development of the preliminary drainage strategy drawings and report. Various correspondence with EA during the on-going development of draft SoCG. |
| 10/11/2020 | Meeting | <ul style="list-style-type: none"> Meeting to discuss the content of the Generic Method Statement following draft submission to the EA on 30/10/2020. |

2.2. SUMMARY OF TOPICS COVERED BY THE STATEMENT OF COMMON GROUND

2.2.1.1. The following topics discussed between the Applicant and the EA are commented further in this SoCG:

- Environmental Statement (“ES”) Chapter 19: Groundwater (APP-134):
 - Baseline and Methodology
 - Predicted Impacts
 - Mitigation:
 - Converter Station Area
 - Onshore Cable Corridor
 - Landfall
 - Residual Effects
- ES Chapter 19 (**APP-134**) Supplementary Assessments (Technical Appendices), which includes:
 - Appendix 19.3: The Hydrogeology of Kings Pond and Denmead Meadows (**APP-434**)
 - Supplementary Karst Report which has been updated as part of the ES Addendum (**REP1-139**) in Appendix 7 (**REP1-156**)
 - Onshore Outline Construction Environmental Management Plan (‘OOCEMP’) (**APP-505**) which has been updated (**REP1-087**)
- ES Chapter 20: Surface Water Resources and Flood Risk (**APP-135**)
 - Baseline and Methodology
 - Predicted Impacts
 - Mitigation
 - Converter Station Area
 - Onshore Cable Corridor
 - Landfall
 - ES Chapter 20 (**APP-135**) Supplementary Assessments (Technical Appendices), which includes:
 - Appendix 20.2: Onshore Water Framework Directive (**APP-437**)
 - Appendix 20.3: Watercourses Summary (**APP-438**)

- Appendix 20.4: Flood Risk Assessment & Flood Risk Assessment Addendum (**REP1-157**)
- OOCEMP (**APP-505**), which has been updated (**REP1-087**)
- Residual Effects
- ES Appendix 3.6: Converter Station Surface Water Drainage and Aquifer Contamination Mitigation Strategy (**APP-360**) which has been updated and now forms Appendix 7 to the updated OOCEMP (**REP1-087**), referred to as 'Appendix 7 of the OOCEMP (**REP1-087**)' hereafter; which includes:
 - Surface Water Drainage
 - Foul Water Drainage
 - Oil Containment and Oily Water Drainage
 - SuDS and Water Quality System
 - Temporary Surface Water Management
 - Foundation Design
 - OOCEMP (**APP-505**), which has been updated (**REP1-087**)

2.2.1.2. For the avoidance of doubt, matters not covered in this SoCG in relation to the onshore elements of the Proposed Development have not been discussed between the parties as they have not been raised by the EA.

3. AGREEMENTS

3.1. ES CHAPTER 19: GROUNDWATER & ASSOCIATED APPENDICIES

Table 3.1 – Groundwater

| Ref. | Description of matter | Current Position | RAG |
|--|---|---|--------------------------|
| Baseline and Methodology | | | |
| EA 3.1.1.1 | Area of Study - Groundwater | The area of study identified in section 19.1.2 of ES Chapter 19 Groundwater (APP-134) is agreed. | Agreed as at Deadline 1 |
| EA 3.1.1.2 | Baseline - Groundwater | The baseline environment identified in section 19.5 of ES Chapter 19 Groundwater (APP-134) is agreed. | Agreed as at Deadline 1 |
| EA 3.1.1.3 | Assessment Methodology – Groundwater | It is agreed that section 19.4 of ES Chapter 19 Groundwater (APP-134) clearly outlines the approach to creating the baseline and assessing impacts of the development. | Agreed as at Deadline 1 |
| Predicted Impacts | | | |
| EA 3.1.2.1 | Groundwater | It is agreed that the predicted impacts as set out in section 19.6 of ES Chapter 19 Groundwater (APP-134) clearly outlines the impacts following embedded mitigation measures. | Agreed as at Deadline 1 |
| Mitigation - Converter Station Area | | | |
| EA 3.1.3.1 | Watching Brief (karst dissolution features) | <p>It is agreed that a watching brief should be kept during construction for karst dissolution features when any cable trench excavation work is undertaken in the Source Protection Zone 1 (SPZ1), and this is to be secured in the Generic Method Statement (see EA 3.3.8.1) which will be an appendix to the OOCEMP in a subsequent submission during examination. This is also covered in Section 12 (Groundwater) of the ES Addendum (REP1-139). The EA need to review and provide comments upon the updated OOCEMP (REP1-087), which will be done in due course through the examination, further commentary on the OOCEMP is provided within EA 3.1.9.1.</p> <p>The requirement for the submission of a Construction Environment Management Plan in relation to all works, which accord with the OOCEMP, is secured via Requirement 15 (Construction Environmental Management Plan) to the draft DCO ('dDCO') (APP-019 which has been updated to REP1-021 and subsequently REP3-003).</p> | Ongoing as at Deadline 4 |
| EA 3.1.3.2 | Karst Dissolution Features | <p>Control of surface water drainage and drainage within the ground is to be carefully considered during detailed design to avoid increasing the risk of dissolution, with ground stabilisation and treatment by grouting as the preferred solution in-line with CIRIA C574, to minimise influence of grouting on the SPZ1.</p> <p>It is proposed to use a grout mix, of suitable composition, control and cure time to be approved in consultation with the EA (and PW), for the purposes of ground stabilisation (as per paragraph 1.1.3.13 of Surface Water Drainage and Aquifer Mitigation Strategy (Appendix 7 to the</p> | Agreed as at Deadline 1 |

| Ref. | Description of matter | Current Position | RAG |
|--|---|---|-------------------------|
| | | <p>OOCEMP (REP1-087)). The submission of this information is secured via Requirement 15 (Construction environmental management plan) of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003).</p> <p>Further karst feature may be discovered during construction. Where such findings occur the risk of impact will be managed through a risk assessment and construction management plan which shall be submitted to and approved by the relevant local planning authority in consultation with the EA and PW, in accordance with Requirement 15 (Construction environmental management plan) of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003).</p> | |
| EA 3.1.3.3 | Oil Containment and oily water drainage | <p>It is accepted that the information on the Converter Station design is submitted in outline for detailed approval post grant of the DCO. This will include the final design of the oily water drainage and size of dump tank(s) which will be defined during detailed design of the system in accordance with the details within Section 4 (Oil Containment and Oily Water Drainage) of the Surface Water Drainage and Aquifer Contamination Strategy (Appendix 7 to the OOCEMP (REP1-087)).</p> <p>The design will be fully developed and submitted to the EA and PW for review and agreement in accordance with paragraph 4.3.3.8 of the Surface Water Drainage and Aquifer Contamination Strategy (Appendix 7 to the OOCEMP (REP1-087)) and secured in Requirement 15 of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003).</p> | Agreed as at Deadline 1 |
| EA 3.1.3.4 | Foundation Design | <p>The extent of existing ground conditions and proposed foundation was discussed and agreed in principle with the EA (and PW) at a meeting on 18/06/2019. Considering the ground conditions encountered, piling is identified as the likely foundation design to be utilised subject to detailed design development post consent of the DCO. The use of pre-cast driven piles are likely to be one of the design options that will have the lowest impact on the chalk aquifer and restrictions set by PW around the SPZ1 designation.</p> <p>The foundation solution will be required to be in accordance with the details within Section 7 (Foundation Solution) of the Surface Water Drainage and Aquifer Contamination Strategy (Appendix 7 to the OOCEMP (REP1-087)), which is secured in Requirement 15 of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003).</p> | Agreed as at Deadline 1 |
| Mitigation - Onshore Cable Corridor – General | | | |
| EA 3.1.4.1 | Dewatering | <p>Dewatering permits may be required during construction as high groundwater levels are likely to be encountered at points along the cable route during trench excavation works. Dewatering permits may therefore be required (unless an exception applies). Permits will be applied for at the relevant time. ES Chapter 19 in Section 19.6.1.4. states that “the water management permitting, licenses and agreements will be completed by the appointed contractor, with the quantities of groundwater management determined at the detailed design stage.”</p> | Agreed as at Deadline 1 |
| EA 3.1.4.2 | Watching Brief (karst dissolution features) | <p>It is agreed that a watching brief should be kept for karst dissolution features when any cable trench excavation work is undertaken in the SPZ1, and this is to be secured in an update to the OOCEMP submitted at Deadline 1 of the Examination. The requirement for the submission of construction environment management plans in relation to all works, which accord with the OOCEMP, is secured via Requirement 15 (Construction environmental management plan) to the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003).</p> | Agreed as at Deadline 1 |
| Mitigation - Onshore Cable Corridor – HDD works | | | |
| EA 3.1.4.3 | Presence of mud engineer and use of inert drilling fluids | <p>To ensure drilling fluids do not break out into the groundwater environment nor groundwater seeps into the bore, a mud engineer will be present at all times during the HDD drilling process to monitor drilling fluid viscosity, density, annual pressure, solids contents, filter cake quality and total mud volume and thereby ensuring the filter cake remains intact and that drilling fluid is not lost to the ground and that</p> | Agreed as at Deadline 1 |

| Ref. | Description of matter | Current Position | RAG |
|-------------------|---|---|--------------------------------|
| | | groundwater does not seep into the bore annulus. In addition, a review of the proposed drilling fluid and inert polymers will also be completed before ground is broken. All drilling fluids, including polymers, will be Centre for Environment Fisheries and Aquaculture Science (Cefas) rated products (OOCEMP Section 6.2.5.5). | |
| EA 3.1.4.4 | Avoidance of karst dissolution features in the Chalk | The scheme design in the first instance ensures that the trenchless construction avoids karst dissolution features (in the Chalk) as much as possible. At HDD-5 (Kings Pond), the drilling will be kept in the overlying Lambeth Group only. The contractor will ensure that when drilling HDD-5 there will always be at least a 5m standoff between the proposed HDD alignment and the Chalk (OOCEMP Section 6.2.5.7). | Agreed as at Deadline 1 |
| EA 3.1.4.5 | Briefing drill crew on SPZ1 sensitivity, monitoring fluid pressures, identifying karst features and watching brief presence | The drilling team will also need to be briefed on the environmental sensitivity of the SPZ1 and the importance of identifying karst dissolution features prior to work commencing and during the works. They will need to monitor the fluid pressures and observe for significant pressure drops throughout the works. A significant pressure drop would indicate that loss of fluid, potentially to fractures/dissolution features, may be occurring. A watching brief will also need to be implemented to identify any elements of karst dissolution features at any time during the works (OOCEMP Section 6.2.5.8). | Agreed as at Deadline 1 |
| EA 3.1.4.6 | Temporary pause of drilling in the event a karst dissolution feature is detected. Notification of EA. | Should [karst dissolution] features be detected, drilling will be paused temporarily, until the Engineer on site can determine the most suitable course of action for mitigation, from a catalogue of actions already agreed with PW and the EA. A number of actions can be taken to seal the area of loss, for example increasing the drilling fluid viscosity or introducing a cement grout. Real time downhole annular pressure monitoring should be completed to allow for these observations. The exact pressure change parameters and procedures to evaluate mitigation would need to be agreed with EA (and PW) at detailed Design Stage. The EA (and PW) will also be notified immediately of any loss of drilling fluid. Once the risk from the dissolution feature has been satisfactorily mitigated (i.e. to no risk of contamination), works will then resume (OOCEMP Section 6.2.5.9). | Agreed as at Deadline 4 |
| EA 3.1.4.7 | Inclusion of sheet piled walls toes into the Chalk to reduce groundwater ingress. Sump pumping from base of pits. | The launch and receptor pits for the HDD-4 (Farlington Railway Crossing (Trenchless)) will include perimeter sheet piled walls toed into the Chalk to reduce groundwater ingress from the superficial River Terrace Deposits. Groundwater seepage at the base of the pits could occur and this will be sump pumped during operation. The potential consents and permits required to manage this water will be completed by the appointed contractor. The method of discharge has yet to be determined. The groundwater collected will either be discharged back to ground, to surface water, sewer, disposed of off-site or a combination of these methods. If the water is to be discharged to ground, a surface waterbody or sewer then a discharge consent(s) may be required. The permitting process will be completed by the contractor, after detailed design, once a dewatering and discharge management methodology has been agreed upon. The appointed contractor will be responsible for acquiring the relevant consents and adhering to the conditions of said consents. Any contaminated water would require off-site disposal (OOCEMP Section 6.2.5.10). | Agreed as at Deadline 1 |
| EA 3.1.4.8 | Dewatering quantities to be determined at detailed design | The required groundwater dewatering quantities for HDD-4 pits will be determined at detailed design. The designer must ensure the discharge quantities are accurate or conservative to ensure no flood risk will be increased due to surplus groundwater encountered during construction (OOCEMP 6.2.5.11). | Agreed as at Deadline 1 |

| Ref. | Description of matter | Current Position | RAG |
|--|---|--|--------------------------|
| EA 3.1.4.9 | Cleaning of drilling equipment | All drilling equipment will be checked and cleaned before use. This will prevent cross contamination (OOCEMP 6.2.5.12). | Agreed as at Deadline 1 |
| EA 3.1.4.10 | Use of Filter Cake to prevent cross-contamination of groundwater bodies | Drilling through alternative geologies can transfer existing contamination from one source to another. Drilling can also generate fines which can increase sediment in the water column, creating turbidity contamination. The Filter Cake will prevent the mobilisation of contaminants from one groundwater body to another, as the cake 'self-seals' as the drilling progresses. Therefore, no cross contamination is anticipated. Following the embedded mitigation measures the drilling fines and fluids will be contained in the drilling cake, preventing contamination from spreading between sources and drilling fines entering the local groundwater receptors (OOCEMP 6.2.5.13). | Agreed as at Deadline 1 |
| EA 3.1.4.11 | Presence of flexible hose pump at breakout compound | To ensure surface breakout is not lost to the environment a flexible hose pump will be contained at the exit compound site so breakout fluid can be retained on site. A sufficiently sized Intermediate Bulk Container or similar will be stored on site to store such a breakout (OOCEMP 6.2.5.14). | Agreed as at Deadline 1 |
| Mitigation - Onshore Cable Corridor – Onshore Cable Route Trench Excavation Works | | | |
| EA 3.1.5.1 | Dewatering for trench construction | The required groundwater dewatering quantities for trench construction will be determined at detailed design. The designer must ensure the discharge quantities are accurate or conservative to ensure no flood risk will be increased due to surplus groundwater encountered during construction. This applies to all sections (OOCEMP 6.4.3.2). | Agreed as at Deadline 1 |
| EA 3.1.5.2 | Catalogue of detailed descriptions of mitigation measures in the event an unexpected karst dissolution feature is discovered during cable trench excavation works in Sections 1, 2 and 3. | Sections 1, 2 and 3 of the Order Limits have been identified as areas which may contain dissolution features. Previous investigations suggest a very low likelihood of encountering such features. Such features would represent potential contaminant transport pathways (directly to public water abstractions) and have been raised as a concern by the EA (and PW). Although no dissolution features have been identified within the Order Limits for Sections 1, 2 and 3, there may be features present which are as yet unidentified (OOCEMP 6.4.3.3). A catalogue of detailed descriptions of mitigation measures will be agreed with PW and the EA prior to construction of Sections 1, 2 and 3. A list of possible measures have been included in OOCEMP Section 6.4.3.4. The EA are yet to review the updated OOCEMP (see EA 3.1.9.1). | Ongoing as at Deadline 4 |
| Mitigation - Landfall | | | |
| EA 3.1.6.1 | Requirement for dewatering/abstraction license | The excavations proposed in the superficial River Terrace Deposits, Storm Beach Deposits and Wittering Formation will likely intercept groundwater meaning trench construction will require groundwater dewatering. The detailed Design Stage will consider groundwater seepage rates into the proposed trenches and inform upon whether an abstraction licence and/or a discharge consent will be required (Chapter 19 Groundwater, Section 19.6.4.57). | Agreed as at Deadline 1 |
| Appendix 19.3: The Hydrogeology of Kings Pond and Denmead Meadows | | | |

| Ref. | Description of matter | Current Position | RAG |
|---|---|---|--------------------------|
| EA 3.1.7.1 | Possible presence of karst dissolution features around Kings Pond, vulnerability of PW sources and control of activities in Denmead Meadows | <p>The conceptual model developed by the BGS indicates that karst is likely to be present in low-lying areas around Kings Pond. Groundwater sources (boreholes and springs) are vulnerable to contamination from surface when:</p> <ul style="list-style-type: none"> • There is no overlying geology; • The water table is close to surface; • The groundwater catchment is small; and • Groundwater flow paths are short. <p>These are characteristics of karst aquifers and it follows that the Bedhampton and Havant springs are vulnerable to contamination. Therefore, project activities in the area of Denmead Meadows need to be carefully controlled (see OOCEMP Section 6.4.3.).</p> | Agreed as at Deadline 1 |
| Supplementary Karst Report | | | |
| EA 3.1.8.1 | Proposed mitigations for impacts related to karst dissolution features | The Supplementary Karst Report proposed mitigation measures for dealing with impacts related to the presence of karst dissolution features. These have been carried over into the OOCEMP (see Section 6.4.3. Groundwater). | Agreed as at Deadline 1 |
| Onshore Outline Construction Environmental Management Plan | | | |
| EA 3.1.9.1 | OOCEMP comments | <p>During the Relevant Representation process the EA made various comments with regards to the OOCEMP (APP-505), which include:</p> <ol style="list-style-type: none"> 1. Limited reference to groundwater (in particular SPZ1, and ES Groundwater Position Statements) 2. Piling Works Risk Assessment 3. Listed receptors 4. Spill management procedure 5. Permits 6. Drilling fluid losses <p>WSP has reviewed the comments and has updated the OOCEMP accordingly and forms part of the updated OOCEMP (REP1-087). Instances where the OOCEMP has been amended to address these issues has been detailed in the EA Relevant Representation response. The EA need to review and provide comments upon the updated OOCEMP (REP1-087), which will be done in due course through the examination.</p> <p>In addition, the Applicant and EA are discussing the wording of Requirement 6 & 15 of the dDCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003) to ensure that Portsmouth Water and EA consultation, alongside the relevant planning authority approval, is appropriately provided for in relation to matters contained within this SoCG regarding the construction environmental management and detailed design of the Converter Station Area phase of works.</p> | Ongoing as at Deadline 4 |
| Residual Effects | | | |

| Ref. | Description of matter | Current Position | RAG |
|----------------|--------------------------------|---|-------------------------|
| EA 3.1.10.1 | Residual effects - groundwater | It is agreed that section 19.8 and Table 19.7 of ES Chapter 19 Groundwater clearly identifies the residual effects of the Proposed Development. | Agreed as at Deadline 1 |

3.2. ES CHAPTER 20: SURFACE WATER RESOURCES AND FLOOD RISK & ASSOCIATED APPENDICIES

Table 3.2 – Surface Water Resources and Flood Risk

| Ref. | Description of matter | Current Position | RAG |
|--|---|---|--|
| Baseline and Methodology | | | |
| EA 3.2.1.1 | Area of Study - Surface Water Resources and Flood Risk | The area of study identified in section 20.1.2 of ES Chapter 20 Surface Water Resources and Flood Risk (APP-135) is agreed. | Agreed as at Deadline 1 |
| EA 3.2.1.2 | Baseline – Surface Water Resources and Flood Risk | The baseline environment identified in section 20.5 of ES Chapter 20 Surface Water Resources and Flood Risk (APP-135) is agreed. It is also agreed that the identified sensitive receptors in section 20.6 have been adequately identified. | Agreed as at Deadline 1 |
| EA 3.2.1.3 | Assessment Methodology – Surface Water Resources and Flood Risk | It is agreed that section 20.4 of ES Chapter 20 Surface Water Resources and Flood Risk clearly outlines the approach to creating the baseline and assessing impacts of the development in line with advice from the EA (in section 20.3 and Appendix 20.1). | Agreed as at Deadline 1 |
| Predicted Impacts | | | |
| EA 3.2.2.1 | Predicted Impacts – Surface Water Resources and Flood Risk | It is agreed that the predicted impacts as set out in section 20.7 of ES Chapter 20 Surface Water Resources and Flood Risk clearly outline the impacts following embedded mitigation measures. | Agreed as at Deadline 1 |
| Mitigation - Converter Station Area | | | |
| EA 3.2.3.1 | Surface Water (Construction) | (Additional mitigation) Principles of temporary surface water run-off management during construction are detailed within the Surface Water Drainage and Aquifer Contamination Mitigation Strategy, Appendix 7 to the OOCEMP (REP1-087). For further detail refer to Table 3.3. | For Information – Refer to Table 3.3 for further detail. |
| EA 3.2.3.2 | Surface Water (Operation) | (Embedded mitigation) Principles of the surface water drainage strategy are provided in Section 2 of the Surface Water Drainage and Aquifer Contamination Strategy Appendix 7 to the OOCEMP (REP1-087). For further detail refer to Table 3.3. | For Information – Refer to |

| Ref. | Description of matter | Current Position | RAG |
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| | | | Table 3.3 for further detail. |
| Mitigation – Onshore Cable Corridor | | | |
| EA 3.2.4.1 | Watercourse Crossings (Construction) | (Embedded & additional mitigation) The principles for Main River watercourse crossings are detailed in ES Appendix 20.3 (Watercourses Summary) (APP-308), section 20.7 (embedded mitigation) and 20.9 (mitigation and enhancement) of ES Chapter 20 and are replicated within section 5.8 of the OOCEMP (REP1-087). These principles are supported by the EA, see EA 3.2.11 onwards. | Agreed as at Deadline 1 |
| | Works within Flood Zone 2 & 3 (Construction) | (Embedded & additional mitigation) The principles for works located within Flood Zone 2 and Flood Zone 3 are detailed in section 6 of the Flood Risk Assessment (APP-439) and as supplemented by the FRA Addendum, section 20.7 (embedded mitigation) and 20.9 (mitigation and enhancement) of ES Chapter 20 and are replicated within section 5.8 of the OOCEMP (REP1-087). These principles are supported by the EA, see EA 3.2.7.1 onwards. | Agreed as at Deadline 1 |
| EA 3.2.4.2 | Works Adjacent/ Under Flood Defences (Construction) | (Embedded & additional mitigation) The principles for works within 8 meters of a fluvial watercourse/ flood defence and 16m of a tidal watercourse/ flood defence and works crossing under flood defences are detailed in section 6 of the Flood Risk Assessment (APP-439) and as supplemented by the FRA Addendum, section 20.7 (embedded mitigation) and 20.9 (mitigation and enhancement) of ES Chapter 20 and are replicated within section 5.8 of the OOCEMP (APP-505). These principles are supported by the EA, see EA 3.2.7.1 onwards. | Agreed as at Deadline 1 |
| Mitigation - Landfall | | | |
| EA 3.2.5.1 | Tidal Flood Risk Management – ORS (Operation) | (Embedded & additional mitigation) In-built tidal flood risk mitigation for the Optical Regeneration Station(s) (“ORS”), which is located within the tidal Flood Zone 3 extent following an update to the Flood Map for Planning in January 2020, is detailed within the Flood Risk Addendum. The in-built tidal flood risk mitigation measures presented within the Flood Risk Assessment (APP-439) are now supplemented by those within section 4 of the FRA Addendum. These principles are supported by the EA, see EA 3.2.7.1 onwards. | Agreed as at Deadline 1 |
| Appendix 20.2: Onshore Water Framework Directive | | | |
| EA 3.2.6.1 | Onshore Water Framework Directive | Based on the principles in ES Appendix 20.3 (Watercourses Summary) and Section 5.7 of the OOCEMP (APP-505) it has been agreed that the Main River watercourse crossings would not have a significant impact upon Water Framework Directive features. | Agreed as at Deadline 1 |
| Appendix 20.3: Watercourses Summary | | | |

| Ref. | Description of matter | Current Position | RAG |
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| EA 3.2.7.1 | Main River Watercourse Crossing | <p>The principles for Main River watercourse crossings are detailed in ES Appendix 20.3 (Watercourses Summary) (APP-308), section 20.7 (embedded mitigation) and 20.9 (mitigation and enhancement) of ES Chapter 20 and are replicated within section 5.8 of the OOCEMP (REP1-087).</p> <p>Where:</p> <p>Use of HDD supported on open watercourses, including crossing of:</p> <ul style="list-style-type: none"> a) Soake Farm East (Main River) [WC.02] – Kings Pond (HDD) HDD-5; b) Broom Channel (Transitional/ Tidal Watercourse) [WC.13] – Langstone Harbour (HDD) HDD-3. <p>Use of open trench supported over culverts, including crossing of:</p> <ul style="list-style-type: none"> a) Old Park Farm (Main River) [WC.04] – Carriageway Culvert; b) North Purbrook Heath (North) (Main River) [WC.09] –Carriageway Culvert; and c) Great Salterns Drain (Main River) [WC.14] –Carriageway Culvert. <p>These principles are supported by the EA and are detailed within the OOCEMP.</p> <p>It is acknowledged that culverts are critical assets and as such the methodology of such works will require EA approval via an environmental permit, HDD works under watercourses will also require EA approval or exemption of an environmental permit. Whilst the EA cannot guarantee approval of permits until all permit application information, with full details of the proposed construction methodology, has been submitted; the Applicant and EA are in agreement of the general principles to be adopted with regards to open trench works over Main River culverts and HDD works under open channel Main Rivers to ensure there is unlikely to be any impediment to a permit/exemption being provided to enable construction of the Proposed Development. Further information on permits and consents is provided within EA 3.2.10.2.</p> <p>Requirement 15 (Construction environmental management plan) of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003) requires the submission of a construction environment management plan, in accordance with the OOCEMP, therefore securing the principles for Main River watercourse crossings.</p> | Agreed as at Deadline 1 |
| Appendix 20.4: Flood Risk Assessment and Flood Risk Assessment Addendum | | | |
| EA 3.2.8.1 | Flood Risk Assessment & Flood Risk Assessment Addendum | <p>The Flood Risk Assessment (APP-439) is now supplemented by the FRA Addendum, of which the assessment methodology including consideration of climate change, on and off site impacts and proposed mitigations relevant to the tidal and fluvial environment which is supported by the EA. Proposed inbuilt design measures and other mitigation measures and included within the Design and Access Statement and OOCEMP (REP1-087).</p> <p>Requirement 15 (Construction environmental management plan) of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003) requires the submission of a construction environment management plan, in accordance with the OOCEMP (REP1-087), and Requirement 6 (Detailed design approval) of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003) requires the design of the Proposed Development to be in accordance with the Flood Risk Assessment measures therefore securing the principles within the Flood Risk Assessment and Flood Risk Assessment Addendum.</p> | Agreed as at Deadline 1 |

| Ref. | Description of matter | Current Position | RAG |
|--|--|--|-------------------------|
| Onshore Outline Construction Environmental Management Plan (APP-505) as updated to REP1-087 | | | |
| EA 3.2.9.1 | Surface Water Resources & Flood Risk Management (Construction) | <p>Whilst the permitting process will be completed after detailed design the general principles in relation to the surface water resources and flood risk environment as per ES Appendix 20.3 (Watercourses Summary) (APP-308), ES Chapter 20 Surface Water Resources and Flood Risk (APP-135), Appendix 20.2 (Onshore WFDa) (APP-438) have been embedded into the OOCEMP (REP1-087) and are acceptable in principle to the EA.</p> <p>Recommended mitigation measures relevant to ES Chapter 20 Surface Water Resources and Flood Risk are detailed within the OOCEMP (REP1-087). Requirement 15 (Construction environmental management plan) of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003) requires the submission of a construction environment management plan, in accordance with the OOCEMP, therefore securing the measures for Surface Water Resources & Flood Risk Management during construction.</p> | Agreed as at Deadline 1 |
| EA 3.2.10.1 | Flood Risk Management (Operation) | <p>Principles for flood risk management for inclusion within the Health and Safety File during operation are provided within the Flood Risk Assessment (APP-439) and as supplemented by the FRA Addendum, ES Chapter 20 Surface Water Resources and Flood Risk (APP-135), Appendix 20.2 are embedded in paragraph 4.1.3.16 of the OOCEMP ((REP1-087) and acceptable in principle to the EA.</p> <p>Recommended mitigation measures relevant to ES Chapter 20 Surface Water Resources and Flood Risk are detailed within the OOCEMP. Requirement 15 (Construction environmental management plan) of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003) requires the submission of a construction environment management plan, in accordance with the OOCEMP, therefore securing the measures for Flood Risk Management during construction.</p> | Agreed as at Deadline 1 |
| EA 3.2.10.2 | Environmental Permits/Licences Overview | <p>It is agreed that Environmental Permitting (under the Environmental Permitting (England and Wales) Regulations 2016) is separate to, and in addition to any grant of DCO consent.</p> <p>Whilst the permitting process will be completed after detailed design the general principles in relation to the surface water resources and flood risk environment as per the Flood Risk Assessment (APP-439) and as supplemented by the FRA Addendum, ES Appendix 20.3 (Watercourses Summary) (APP-308), ES Chapter 20 Surface Water Resources and Flood Risk (APP-135), Appendix 20.2 (Onshore WFDa) (APP-438) which have been embedded into the OOCEMP (REP1-087) are considered acceptable in principle to the EA.</p> <p>Whilst the EA cannot guarantee approval of permits until all permit application information, with full details of the proposed construction methodology, has been submitted; the Applicant and EA are in agreement of the general principles to be adopted to ensure there is unlikely to be any impediment to a permit/exemption being provided to enable construction of the Proposed Development.</p> <p>These principles will be used as the basis to ensure that the predicted impacts are managed to reduce any residual effects.</p> <p>Consents or exemptions are expected to be required for the following consents/ permits:</p> <ul style="list-style-type: none"> a) Temporary dewatering consent; b) Flood risk activities permit – environmental permits; and c) Discharges to surface water and groundwater: environmental permits. | Agreed as at Deadline 1 |

| Ref. | Description of matter | Current Position | RAG |
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| | | <p>Activities expected to require the above noted additional permits and consents are summarised below:</p> <ul style="list-style-type: none"> a) Temporary and/ or permanent works within 16 m and 8 m of a tidal and fluvial Main River or toe of associated flood defences; b) Temporary and/ or permanent works within the tidal and fluvial flood plain; c) Temporary and/ or permanent works through, under or above a Main River watercourse; and d) Temporary and/ or permanent works requiring temporary dewatering of surface water or groundwater. <p>Where appropriate, and where Environmental Permits are required, as detailed in the Other Consents and Licences document (APP-106), detailed information for the relevant Environmental Permitting will be submitted to the EA for review and approval and should follow the construction principles outlined within section 5.8 of the OOCEMP (REP1-087).</p> <p>The requirement to obtain relevant approval or exemption of Environmental Permits from the EA are detailed within the OOCEMP. Requirement 15 (Construction environmental management plan) of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003) requires the submission of a construction environment management plan and approval or exemption of Environmental Permits, in accordance with the OOCEMP, therefore securing the requirement to obtain approval or exemption of Environmental Permits prior to works in these locations.</p> | |
| Residual Effects | | | |
| EA 3.2.11.1 | Residual effects – surface water resources and flood risk | It is agreed that section 20.10 and Table 20.12 of ES Chapter 20 Surface Water Resources and Flood Risk (APP-135) is agreed. | Agreed as at Deadline 1 |

3.3. CONVERTER STATION SURFACE WATER DRAINAGE AND AQUIFER CONTAMINATION MITIGATION STRATEGY

Table 3.3 – Converter Station Surface Water Drainage and Aquifer Contamination Mitigation Strategy

| Ref. | Description of matter | Current Position | RAG |
|----------------------------|-----------------------|---|-------------------------|
| 3.3.1 Karst Feature | | | |
| EA 3.3.1.1 | Known Karst Features | <p>Following conductivity and resistivity geophysical survey three karst feature were identified within Converter Station Area. Two of them are within proposed Converter Station option B(i) and B(ii) and the other located approximately 500m southeast of the Converter Station option B. Following the geophysical survey, the features were further investigated for infilling by cone penetration testing (CPT), the CPT indicated the karstic features to be (naturally) infilled with a Grade D Chalk. If the nature of infilling material requires proving, further sample collections will be required or agreement with relevant authority will be sought to confirm that the CPT data sufficiently supports the interpretation. This should be reviewed at detailed design stage to inform any required mitigation measures.</p> <p>The control of surface water drainage and drainage within the ground shall be carefully considered during detailed drainage design by the Contractor to mitigate increasing risk of dissolution of bedrock and formation of karstic features. It was agreed by EA that, following further investigation by the Contractor, if necessary, ground stabilisation and treatment by grouting will be the preferred solution. To</p> | Agreed as at Deadline 1 |

| Ref. | Description of matter | Current Position | RAG |
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| | | <p>minimise influence of grouting on the SPZ1, the Contractor in accordance with CIRIA C574 shall propose a ground mix that is of a suitable composition, control and cure time to responsible local authority for review and comment (in consultation with the EA and PW).</p> | |
| EA 3.3.1.2 | Proposed site platform level and Earthworks Design Approach | <p>The indicative proposed 84.80m AOD and 85.10m AOD site platform level and finished building level respectively were calculated from the recommendation of the flood risk assessment and, the site-specific initial cut and fill study:</p> <ul style="list-style-type: none"> To ensure the platform level lies within Structureless Chalk to minimise impact on the SPZ1. To make allowance within structureless chalk for installation of below ground services such as drainage, low-voltage ('LV') and high-voltage ('HV') cable ducts, drawpits and trenches. To Maximise retention of the excavated material on site to minimise offsite disposal and a lower environmental impact. The preliminary ground investigation data supports the proposed platform level and below ground services lie within the Structureless Chalk. To mitigate the risk of Aquifer contamination, the bulk earthwork shall remain within the Structureless Chalk. The Contractor shall review and, if necessary, shall adjust the proposed Converter Station platform level at the detailed design stage to suit the design requirement of the below ground services such as LV and HV ducts and draw pits and drainage to ensure all excavations will remain within the structureless chalk and the structured chalk will not be exposed. This requirement shall be reflected in the Contractor earthwork management plan which will be prepared in consultation with the responsible local authority. To ensure the building height will not exceed the parameter envelope assessed, an AOD threshold 111.10 meters is provided for the Converter Station and Telecommunications Building Parameter Plan 2.6 Converter Station and Telecommunications Buildings Parameter Plans Option B(i) and Option B(ii), [APP-012] which is required to be complied with in accordance with DCO Requirement 5. Amendments would be made to roof profile design to address any refinement to the site level for the Converter Station and ensure the building height does not exceed the parameter envelope assessed. | Agreed as at Deadline 1 |
| EA 3.3.1.3 | Unknown Karst Features | <p>The Contractor shall monitor the ground during bulk earthwork for any unknown and unidentified karst features. As part of site bulk earthwork management and sequencing of work, the Contractor shall develop a risk assessment methodology in consultation with the responsible local authority (in consultation with the EA and PW) as a basis for notifiable and un-notifiable karst features to use during bulk earthwork. The Contractor shall follow an agreed communication protocol for any identified features (to be specified in the OOCEMP). The Contractor shall prepare and submit information relating to the karst features including, but not limited to, exact location, type and agreed method of treatment as a record to the Employer and the responsible local authority, EA and PW at the end of the bulk earthwork. In general, the expectation is to treat karst features same as EA 3.3.1.1.</p> <p>This information will be included and detailed in the Generic Method Statement in meeting dated 05/08/2020. For Generic Method Statement see EA 3.3.9.</p> | Ongoing as at Deadline 4 |
| 3.3.2 Existing known underground services | | | |
| EA 3.3.2.1 | Existing underground services (Surface and Foul drainage) | There are no known record of existing foul drainage network and surface water drainage network with the Converter Station Area or in close proximity. | Agreed as at Deadline 1 |

| Ref. | Description of matter | Current Position | RAG |
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| 3.3.3 Flood Risk Management | | | |
| EA 3.3.3.1 | Flood Risk – Converter Station | Pluvial flood risk is to be managed via the submission and approval of written details pursuant to Requirement 12 of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003), which is required to accord with the Surface Water Drainage and Aquifer Contamination Strategy Appendix 7 to the OOCEMP (REP1-087). Section 2 of that strategy covers the principles as discussed and agreed with PW and Hampshire County Council Lead Local Flood Authority ('HCC LLFA'). It is agreed that these principles are acceptable to the EA with reference to the proposed drainage principles discussed hereafter in relation to protection against aquifer contamination. | Agreed as at Deadline 1 |
| 3.3.4 Drainage | | | |
| EA 3.3.4.1 | Surface Water Drainage System – Converter Station | There is no record of any known existing surface water drainage sewer network within the Converter Station Area or in close proximity to the Order Limits. The principles of the surface water drainage design have been discussed and agreed with the EA and PW and are included in sections 2.4 to 2.9 of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy Appendix 7 to the OOCEMP (REP1-087). Written details regarding the surface water drainage will be submitted to and approved by HCC LLFA in consultation with PW in accordance with Requirement 12 to the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003). | Agreed as at Deadline 1 |
| EA 3.3.4.2 | Foul Drainage System – Converter Station | There is no record of any known existing foul drainage network within the Converter Station Area or in close proximity to the Order Limits. The principles of the foul water drainage design have been discussed and agreed with the EA and PW and are included in section 3 of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy Appendix 7 to the OOCEMP (REP1-087). The design will be fully developed in accordance with section 4 of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy Appendix 7 to the OOCEMP (REP1-087). Written details regarding the foul water drainage will be submitted to and approved by HCC LLFA in consultation with PW in accordance with Requirement 12 to the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003). | Agreed as at Deadline 1 |
| EA 3.3.4.3 | Oily Water Drainage System – Converter station | The principles of the oily water drainage design have been discussed and agreed with the EA and PW and are included in section 4 of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy Appendix 7 to the OOCEMP (REP1-087). It is accepted that the information on the Converter Station design is submitted in outline for detailed approval post grant of the DCO. This will include the final design of the oily water drainage and size of dump tank(s) which will be defined during detailed design of the system and form part of Requirement 6 (Detailed design approval) of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003) in accordance with the details within Section 4 (Oil Containment and Oily Water Drainage) of the Surface Water Drainage and Aquifer Contamination Strategy Appendix 7 to the OOCEMP (REP1-087). | Agreed as at Deadline 1 |
| EA 3.3.4.4 | Active fire suppression system | Following explained to EA and PW and has been added to the Surface Water Drainage and Aquifer Contamination Mitigation Strategy Appendix 7 to the OOCEMP (REP1-087). Once the project specific site layout has been developed by the Contractor, a detailed and comprehensive fire risk assessment and fire strategy report for the converter station compound including buildings and all site infrastructure/assets will be undertaken by the Contractor. This will include determination of fire compartmentation, fire suppression requirements, fire detention and appropriate fire | Agreed as at Deadline 1 |

| Ref. | Description of matter | Current Position | RAG |
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| | | <p>rating of all buildings and equipment on site. The Contractor shall be required to interface with and seek the approval of the local fire authority, relevant statutory authorities, third parties and local authorities in relation to fire risk and mitigation and will comply with all relevant legislation and building regulation requirements. Subject to the outcome of the detailed fire risk assessment a fire active suppression system may be designed and installed on site. The size of the transformer bund will be determined based on volume of the oil in Transformer and water from active fire suppression system as well as appropriate factor of safety. In the event of a catastrophic failure, oil and potential water from the active fire suppression system will permeate through a flame trap into the oil drainage system through a cast in ductile iron (or an appropriate alternative material) U-bend syphon flame trap into underground oil containment where the oil and water will be stored and empty manually when it is safe to do so.</p> <p>The flame trap, manholes and pipes forming the interconnecting drainage system between the transformer bunds and the dump tank will be a closed free flowing gravity system capable of accommodating oil and water at temperature of 80°C at a rate of 7000 litres per minute. The pipework will be therefore designed to be capable of taking the suitable design flow rate. The route of the pipework will be continuing, closed system with shortest possible length with minimal vertical and horizontal deviation. 4 hours fire resistance will be provided to all pipework within the defined fire damaged zone. This will be generally best achieved by direct burring the pipework at suitable depth from finished converter station site level.</p> | |
| 3.3.5 SuDS and Water Quality System | | | |
| EA 3.3.5.1 | Sustainable Drainage and Water Quality System | <p>Surface water from oil containment areas and oily water areas will be directed through the proprietary system of an oil separator, with the use of SuDS to further reduce the hydrocarbon concentration of water discharged from the oil separator, prior to discharge via a soakaway to groundwater.</p> <p>The detailed design of these features will be in accordance with the description provided in the associated construction detail within Section 5 and the design drawings contained within Appendix 1 of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy Appendix 7 to the OOCEMP (REP1-087) (drawing reference AQD-WSP-OS-UK-DR-D-200140-141 & AQD-WSP-OS-UK-DR-D-200140-141). Written details regarding the surface water drainage will be submitted to and approved by HCC LLFA in consultation with the PW in accordance with Requirement 12 to the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003).</p> | Agreed as at Deadline 1 |
| EA 3.3.5.2 | Pollution Prevention Principles | <p>Pollution prevention principles, as set out in the Surface Water Drainage and Aquifer Contamination Mitigation Strategy report, deal with the different liquids and fuels on site that can contaminate the Aquifer if infiltrated directly/indirectly into the ground were discussed and agreed.</p> <p>For further information, please refer to the updated version of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy Appendix 7 to the OOCEMP (REP1-087) and secured under Requirement 15 of the dDCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003).</p> | Agreed as at Deadline 1 |
| EA 3.3.5.3 | Infiltration test | Infiltration survey to be undertaken to validate drainage design assumptions. | Ongoing as at Deadline 4 |
| 3.3.6 Temporary Surface Water Management | | | |
| EA 3.3.6.1 | Temporary Surface Water Management | <p>Temporary surface water run-off management during construction has been discussed and agreed in principle by the EA (and PW). Information in this regard is included in Surface Water Drainage and Aquifer Contamination Mitigation Strategy Appendix 7 to the OOCEMP (REP1-087), which requires the Applicant to develop a temporary surface water run-off management strategy including</p> | Agreed as at Deadline 1 |

| Ref. | Description of matter | Current Position | RAG |
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| | | <p>construction methodologies to ensure risk of flooding and contamination is controlled via appropriate mitigation measures. Recommended mitigation measures are detailed within the OOCEMP. Requirement 15 (Construction environmental management plan) of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003) requires the submission of a construction environment management plan, in accordance with the OOCEMP, therefore securing the measures for temporary management during construction.</p> | |
| EA 3.3.6.2 | Temporary Car Park | <p>The principles of the temporary car park design and associated surface water drainage to mitigate risk of contamination to the aquifer was discussed at the meeting on 05.08.2020. Design notes and indicative drawing will be submitted to PW and EA for review and comment.</p> <p>The information has added to the updated version of the Surface Water Drainage and Aquifer Contamination Mitigation Strategy Appendix 7 to the OOCEMP (REP1-087) and secured under Requirement 15 of the dDCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003).</p> <p>The EA are yet to review the updated OOCEMP see EA 3.3.8.1.</p> | Ongoing as at Deadline 4 |
| 3.3.7 Foundation Design | | | |
| EA 3.3.7.1 | Foundation Design | <p>The extent of existing ground conditions and proposed foundation was discussed and agreed in principle with the EA (and PW) at a meeting on 18/06/2019. Considering the ground conditions encountered, piling is identified as the likely foundation design to be utilised subject to detailed design development post consent of the DCO. The use of pre-cast driven piles are likely to be one of the design options that will have the lowest impact on the chalk aquifer and restrictions set by PW around the SPZ1 designation.</p> <p>The foundation solution will form part of Requirement 6 Detailed design approval of the draft DCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003) and will be required to be in accordance with the details within Section 7 (Foundation Solution) of the Surface Water Drainage and Aquifer Contamination Strategy Appendix 7 to the OOCEMP (REP1-087).</p> | Agreed as at Deadline 1 |
| EA 3.3.7.2 | Preliminary Piling Risk Assessment. | <p>Draft Preliminary Piling Risk Assessment issued to PW and EA on 1 July 2020 as an appendix 6 to Surface Water Drainage and Aquifer Contamination Mitigation Strategy Appendix 7 to the OOCEMP (REP1-087) as secured by Requirement 15 of the dDCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003).</p> | Ongoing as at Deadline 4 |
| 3.3.8 Onshore Outline Construction Environmental Management Plan (OOCEMP) | | | |
| EA 3.3.8.1 | Mitigation | <p>The EA are yet to review the updated OOCEMP, which within its appendices includes the updated Surface Water Drainage and Aquifer Contamination Mitigation Strategy which is subsequently secured as part of the updated OOCEMP (REP1-087) by Requirement 15 of the dDCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003).</p> <p>Alongside the review of the updated OOCEMP, the EA have stated that they need to consider further whether securing compliance with the Aquifer Contamination Mitigation Strategy via it being an appendix to the OOCEMP, which is in turn a Requirement, is sufficient or whether a specific Requirement(s) would be more direct/preferable approach given the highly sensitive nature of the Converter Station site.</p> | Ongoing as at Deadline 4 |
| 3.3.9 Generic Method Statement (GMS) | | | |

| Ref. | Description of matter | Current Position | RAG |
|---------------|--------------------------|---|-----------------------------|
| EA 3.3.8.1 | Generic Method Statement | <p>Following meeting with PW, EA and HCC's LLFA on 5th August, A construction Generic Method Statement covering following for converter station, HDD works, and onshore cable route will be prepared</p> <ul style="list-style-type: none"> • Outline construction water management • Outline earthwork management plan • Outline construction karstic feature method statement • Outline construction sequencing • Communication statement and strategy • Preliminary dynamic contact list <p>This document will be submitted as an appendix to the OOCEMP and will be secured under requirement 15 of dDCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003).</p> <p>The Applicant shared a draft of the GMS with the EA on 30/10/2020. The EA have reviewed the GMS and provided some technical feedback and suggested refinements as part of a joint meeting between the Applicant, EA, PW and HCC's LLFA on 10/11/2020.</p> <p>The Applicant is in the process of updating the GMS and neither party currently anticipates any impediment to agreeing a final version of the Statement as soon as is practicable during the course of the Examination.</p> <p>Once agreed upon, the GMS will form an Appendix to the OOCEMP (REP1-087) as secured by Requirement 15 of the dDCO (APP-019 which has been updated to REP1-021 and subsequently REP3-003) which has been updated (REP1-021 and subsequently REP3-003).</p> | Ongoing as at Deadline 4 |

4. SIGNATURES

| Ref. | Environment Agency | Aquind (the Applicant) |
|--------------|--------------------|------------------------|
| Signature | | |
| Printed Name | | |
| Title | | |
| On behalf of | Environment Agency | Aquind Limited |
| Date | | |

