The Planning Inspectorate
Yr Arolygiaeth Gynllunio

SCOPING OPINION:

Proposed AQUIND Interconnector

Case Reference: EN020022

Adopted by the Planning Inspectorate (on behalf of the Secretary of State for Housing, Communities and Local Government) pursuant to Regulation 10 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

December 2018

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1. INTRODUCTION

1.1 Background

1.1.1 On 29 October 2018, the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) received a scoping request from AQUIND Limited (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed AQUIND Interconnector (the Proposed Development).

1.1.2 In accordance with Regulation 10 of the EIA Regulations, an Applicant may ask the SoS to state in writing its opinion *'as to the scope, and level of detail, of the information to be provided in the environmental statement'.*

1.1.3 This document is the Scoping Opinion (the Opinion) provided by the Inspectorate on behalf of the SoS in respect of the Proposed Development. It is made on the basis of the information provided in the Applicant's report entitled AQUIND Interconnector EIA Scoping Report (the Scoping Report). This Opinion can only reflect the proposals as currently described by the Applicant. The Scoping Opinion should be read in conjunction with the Applicant's Scoping Report.

1.1.4 The Applicant has notified the SoS under Regulation 8(1)(b) of the EIA Regulations that they propose to provide an Environmental Statement (ES) in respect of the Proposed Development. Therefore, in accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development is EIA development.

1.1.5 Regulation 10(9) of the EIA Regulations requires that before adopting a scoping opinion the Inspectorate must take into account:

(a) any information provided about the proposed development;

(b) the specific characteristics of the development;

(c) the likely significant effects of the development on the environment; and

(d) in the case of a subsequent application, the environmental statement submitted with the original application.

1.1.6 This Opinion has taken into account the requirements of the EIA Regulations as well as current best practice towards preparation of an ES.

1.1.7 The Inspectorate has consulted on the Applicant's Scoping Report and the responses received from the consultation bodies have been taken into account in adopting this Opinion (see Appendix 2).

1.1.8 The points addressed by the Applicant in the Scoping Report have been carefully considered and use has been made of professional judgement and experience in order to adopt this Opinion. It should be noted that

when it comes to consider the ES, the Inspectorate will take account of relevant legislation and guidelines. The Inspectorate will not be precluded from requiring additional information if it is considered necessary in connection with the ES submitted with the application for a Development Consent Order (DCO).

1.1.9 This Opinion should not be construed as implying that the Inspectorate agrees with the information or comments provided by the Applicant in their request for an opinion from the Inspectorate. In particular, comments from the Inspectorate in this Opinion are without prejudice to any later decisions taken (eg on submission of the application) that any development identified by the Applicant is necessarily to be treated as part of a Nationally Significant Infrastructure Project (NSIP) or Associated Development or development that does not require development consent.

1.1.10 Regulation 10(3) of the EIA Regulations states that a request for a scoping opinion must include:

(a) a plan sufficient to identify the land;

(b) a description of the proposed development, including its location and technical capacity;

(c) an explanation of the likely significant effects of the development on the environment; and

(d) such other information or representations as the person making the request may wish to provide or make.

1.1.11 The Inspectorate considers that this has been provided in the Applicant's Scoping Report. The Inspectorate is satisfied that the Scoping Report encompasses the relevant aspects identified in the EIA Regulations.

1.1.12 In accordance with Regulation 14(3)(a), where a scoping opinion has been issued in accordance with Regulation 10 an ES accompanying an application for an order granting development consent should be based on *'the most recent scoping opinion adopted (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion)'*.

1.1.13 The Inspectorate notes the potential need to carry out an assessment under The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017 (the Habitats Regulations). This assessment must be co-ordinated with the EIA in accordance with Regulation 26 of the EIA Regulations. The Applicant's ES should therefore be co-ordinated with any assessment made under the Habitats Regulations.

1.2 The Planning Inspectorate's Consultation

1.2.1 In accordance with Regulation 10(6) of the EIA Regulations the Inspectorate has consulted the consultation bodies before adopting a scoping opinion. A list of the consultation bodies formally consulted by

the Inspectorate is provided at Appendix 1. The consultation bodies have been notified under Regulation 11(1)(a) of the duty imposed on them by Regulation 11(3) of the EIA Regulations to make information available to the Applicant relevant to the preparation of the ES. The Applicant should note that whilst the list can inform their consultation, it should not be relied upon for that purpose.

1.2.2 The list of respondents who replied within the statutory timeframe and whose comments have been taken into account in the preparation of this Opinion is provided, along with copies of their comments, at Appendix 2, to which the Applicant should refer in preparing their ES.

1.2.3 Due to an administrative error New Forest National Park Authority was not identified as a consultation body for the purposes of Regulation 10(6). However, on 3 December 2018, New Forest National Park Authority were notified of their duties under Regulation 11(3) to make available to the Applicant any information which is considered relevant to the preparation of the ES.

1.2.4 The ES submitted by the Applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.

1.2.5 Any consultation responses received after the statutory deadline for receipt of comments will not be taken into account within this Opinion. Late responses will be forwarded to the Applicant and will be made available on the Inspectorate's website. The Applicant should also give due consideration to those comments in preparing their ES.

1.3 Article 50 of the Treaty on European Union

1.3.1 On 23 June 2016, the United Kingdom (UK) held a referendum and voted to leave the European Union (EU). On 29 March 2017 the Prime Minister triggered Article 50 of the Treaty on European Union, which commenced a two year period of negotiations regarding the UK's exit from the EU. On 26 June 2018 The European Union (Withdrawal) Act 2018 received Royal Assent and work to prepare the UK statute book for Brexit has begun. The European Union (Withdrawal) Act 2018 will make sure that UK laws continue to operate following the UK's exit. There is no immediate change to legislation or policy affecting national infrastructure. Relevant EU Directives have been transposed into UK law and those are unchanged until amended by Parliament.

2. THE PROPOSED DEVELOPMENT

2.1 Introduction

2.1.1 The following is a summary of the information on the Proposed Development and its site and surroundings prepared by the Applicant and included in their Scoping Report. The information has not been verified and it has been assumed that the information provided reflects the existing knowledge of the Proposed Development and the potential receptors/ resources.

2.2 Description of the Proposed Development

2.2.1 The Applicant's description of the Proposed Development, its location and technical capacity (where relevant) is provided in the Scoping Report at Chapters 1 and 2. Section 2.1 of the Scoping Report describes the offshore elements of the Proposed Development; Section 2.2 describes the onshore.

2.2.2 The Proposed Development comprises the construction and operation of an electricity interconnector between Normandy in France and Hampshire in the UK. The Proposed Development, as the subject of this Opinion, relates to the UK element only, which is that part of the project located in England and the UK controlled marine area. The marine aspect of the Proposed Development is defined as the marine cable corridor from the Mean High Water Springs (MHWS) mark within the UK to the UK/France European Economic Zone (EEZ) boundary in the English Channel.

2.2.3 The Proposed Development comprises two pairs of High Voltage Direct Current (HVDC) subsea and underground cables, two pairs of High Voltage Alternating Current (HVAC) underground cables, one HVDC convertor station and permanent access road, and two fibre optic data transmission cables. The Proposed Development is being designed as two independent pairs of subsea/underground cables, each with the net capacity of 1000MW and a total import capacity of up to 2000MW.

2.2.4 The marine element of the Proposed Development comprises two pairs (ie four) HVDC cables and two fibre optic cables to be located between MHWS at the UK landfall site in Eastney, Hampshire and the UK/France EEZ boundary, covering a distance of approximately 109km. The proposed marine cable route is presented on Figure 1.2 'Marine Cable Corridor – UK Marine Area' (Drawing No: GB201394_M_041_A) of the Scoping Report. The Scoping Report also refers to the 'inshore marine cable corridor', which is that section of the cable corridor from the landfall site to 12 nautical miles (nm); and the 'offshore marine cable corridor', which is that from 12nm to the UK/France EEZ boundary. The marine cables are proposed to be installed as two bundled pairs for the majority of the cable route.

2.2.5 The onshore element of the Proposed Development comprises two pairs of cables between the existing National Grid substation at Lovedean,

Hampshire and upward of Mean Low Water Springs (MHLS) at Eastney, Hampshire as presented on Figure 1.3 'Onshore Scoping Red Line Boundary' (Drawing No: EN020022-SR-1.3) of the Scoping Report. The proposed onshore cable route from the convertor stations to upwards of MLWS will cover a distance of approximately 20km. The Scoping Report presents two options for the proposed location of the HVDC convertor station, which will be located within 2km of the existing substation at Lovedean. These options are also presented on Figure 1.3 to the Scoping Report.

2.2.6 Details of existing land use are described in Chapter 20 'Land Use' of the Scoping Report. Existing land use in the area of the proposed converter substation includes agricultural land and farm buildings. The proposed cable route mainly follows existing highways and is described in the Scoping Report as utilising residential roads and green space. The proposed landfall area is within a car park to the north of Eastney beach.

2.3 The Planning Inspectorate's Comments

Description of the Proposed Development

2.3.1 The ES should include a description of the Proposed Development comprising at least the information on the site, design, size and other relevant features of the development. The ES should also include a description of the development and description of the physical characteristics of the whole development, including the land-use requirements during construction and operation phases.

2.3.2 Paragraph 2.1.7 of the Scoping Report addresses issues associated with the construction programme and timing of individual works. It identifies the potential for the installation of the offshore marine cable to be delayed by various factors such as weather conditions and types of vessels used amongst others, such that it may be necessary to undertake a second phase of cable installation in the following year. The potential for a delay of this sort has not been reflected in Table 2.1: Indicative marine construction programme. The ES must take into consideration the potential for a delay of this sort and the impacts that may ensue where relevant.

2.3.3 The Inspectorate notes that uncertainty currently remains with regards to construction/installation methods (onshore and offshore), details relevant to the final route of the cable and the location and parameters of infrastructure. There is also uncertainty regarding elements of construction such as the Horizontal Directional Drilling (HDD) entry/exit locations (amongst others). The Inspectorate considers that the Applicant should make effort to refine options and reduce uncertainty, however, where they are unable to do so the Applicant should ensure that the ES appropriately assesses the likely significant effects associated.

2.3.4 The Scoping Report indicates that the total footprint of the offshore cable route is not yet known. There is also uncertainty regarding the amount of

non-burial protection material (eg rock) that may be required in areas where the cables cannot be buried/ trenched efficiently and the amount potentially needed at cable crossings. The ES should clearly detail the methodology of the cable installation in the offshore area to inform the assessment of significant impacts, as well as proposed mitigation measures. Where certainty cannot be provided the assessment should be based on a worst-case scenario.

2.3.5 It is unclear in the Scoping Report whether material to be disposed of within the cable corridor would be at designated points or redistributed within the Proposed Development site. The ES should ensure that impacts arising from the proposed approach to dredge disposal are assessed in the ES. The ES should provide information on the location of the proposed disposal, including specific areas of the route corridor and/or any offsite disposal sites, as required. The Applicant should made effort to agree the approach to assessing impacts from dredging activities (including disposal) with relevant consultation bodies.

2.3.6 Paragraphs 2.1.51 to 2.1.52 of the Scoping Report describes the likely vessel groups to be utilised during the installation of the cables and a number of matters in the aspect chapters are proposed to be scoped out on the basis of the number of vessels and/or the proposed vessel activity. However, there is no reference to the likely number of vessels in each vessel group and also how many of these are likely to be present at the same time. The ES should clearly describe the likely type and number of vessels to be utilised during construction, including whether they will be present at the same time or sequentially, and ensure that where likely significant effects could occur, that the impact assessment is based on these parameters.

2.3.7 The Scoping Report acknowledges the importance of considering decommissioning at the DCO stage at paragraph 2.1.60 and confirms that decommissioning activities would be determined by the relevant legislation and guidance available at the time of decommissioning. In addition, a decommissioning plan will be developed and agreed with The Crown Estate. Whilst the Scoping Report states that decommissioning will be assessed, no consistent approach to the consideration of decommissioning has been provided and reference to decommissioning is limited to Chapters 8, 10, 11, 12, 16 and 18 of the Scoping Report. The Inspectorate considers that the ES should describe the anticipated approach to decommissioning. Impacts associated with decommissioning should be assessed where significant effects are likely to occur.

Alternatives

2.3.8 The EIA Regulations require that the Applicant provide 'A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects'.

2.3.9 The Inspectorate acknowledges the Applicant's intention to consider alternatives within the ES. The Inspectorate would expect to see a discrete section in the ES that provides details of the reasonable alternatives studied and the reasoning for the selection of the chosen option(s), including a comparison of the environmental effects.

2.3.10 The ES should describe the selection process used and decisions made which result in the determination of the preferred locations for the landfall, the cable route, and the proposed convertor station.

Flexibility

2.3.11 Paragraph 2.1.2 of the Scoping Report identifies that the information provided in the Scoping Report is indicative to inform the scoping process and that it will be further refined in the ES to provide the final proposals. It is not entirely clear from Chapters 1 and 2 whether a Rochdale Envelope approach is to be adopted by the Applicant in the compiling of the ES.

2.3.12 It is noted that reference is made to a number of elements being determined at the 'final design stage' for the Proposed Development. Paragraph 2.1.3 states for example that "*The final design details of the marine cables will be determined as part of the final design stage, which will be undertaken by the cable manufacturer following the appointment of the Engineering, Procurement and Construction (EPC) contractors*". It is not immediately apparent whether this stage will be prior to any DCO application. However, it is noted that Paragraph 4.6.1 states that the "*the ES will be based on final design of the Proposed Development and will include embedded mitigation where possible*". The ES should make clear when final decisions are to be made with regards to design elements, where they are yet to be determined. The ES should consider the worst-case scenario based upon the options/parameters presented in the ES.

2.3.13 The Inspectorate notes reference at Paragraph 6.3.11 to the intention to apply a Rochdale Envelope approach to the impact assessment with regards to the volumes of material to be dredged as a result of uncertainty.

2.3.14 The Applicant's attention is drawn to the Inspectorate's Advice Note Nine 'Using the 'Rochdale Envelope'[1], which provides details on the recommended approach to follow when incorporating flexibility into a draft DCO (dDCO).

2.3.15 The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the Proposed Development have yet to be finalised and provide the reasons. At the

[1] Advice Note nine: Using the Rochdale Envelope. 2012. Available at: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/

time of application, any Proposed Development parameters should not be so wide-ranging as to represent effectively different developments. The development parameters will need to be clearly defined in the dDCO and in the accompanying ES. It is a matter for the Applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the Proposed Development in the ES must not be so wide that it is insufficiently certain to comply with the requirements of Regulation 14 of the EIA Regulations.

2.3.16 It should be noted that if the Proposed Development materially changes prior to submission of the DCO application, the Applicant may wish to consider requesting a new scoping opinion.

3. ES APPROACH

3.1 Introduction

3.1.1 This section contains the Inspectorate's specific comments on the scope and level of detail of information to be provided in the Applicant's ES. General advice on the presentation of an ES is provided in the Inspectorate's Advice Note Seven 'Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements'[2] and associated appendices.

3.1.2 Aspects/ matters (as defined in Advice Note Seven) are not scoped out unless specifically addressed and justified by the Applicant, and confirmed as being scoped out by the Inspectorate. The ES should be based on the Scoping Opinion in so far as the Proposed Development remains materially the same as the Proposed Development described in the Applicant's Scoping Report.

3.1.3 The Inspectorate has set out in this Opinion where it has/ has not agreed to scope out certain aspects/ matters on the basis of the information available at this time. The Inspectorate is content that the receipt of a Scoping Opinion should not prevent the Applicant from subsequently agreeing with the relevant consultees to scope such aspects/ matters out of the ES, where further evidence has been provided to justify this approach. However, in order to demonstrate that the aspects/ matters have been appropriately addressed, the ES should explain the reasoning for scoping them out and justify the approach taken.

3.1.4 Where relevant, the ES should provide reference to how the delivery of measures proposed to prevent/ minimise adverse effects is secured through DCO requirements (or other suitably robust methods) and whether relevant consultees agree on the adequacy of the measures proposed.

3.2 Relevant National Policy Statements (NPSs)

3.2.1 Sector-specific NPSs are produced by the relevant Government Departments and set out national policy for NSIPs. They provide the framework within which the Examining Authority (ExA) will make their recommendation to the SoS and include the Government's objectives for the development of NSIPs. The NPSs may include environmental requirements for NSIPs, which Applicants should address within their ES.

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[2] Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements and annex. Available from: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/

3.2.2 The SoS's direction, as included at Appendix A to the Scoping Report, confirms that the SoS has exercised the discretion in Section 35ZA(5) of the Planning Act to direct that the Overarching NPS for Energy (NPS EN-1) has effect in relation to an application for development consent under the Direction in a manner equivalent to its application to development consent for the construction and extension of a generating station within section 14(a) of the Planning Act of a similar capacity as the Proposed Development so far as the impacts described in EN-1 are relevant to the Proposed Development.

3.3 Scope of Assessment

General

3.3.1 The Inspectorate recommends that in order to assist the decision-making process, the Applicant uses tables:

- to demonstrate how the assessment has taken account of this Opinion;
- to identify and collate the residual effects after mitigation for each of the aspect chapters, including the relevant interrelationships and cumulative effects;
- to set out the proposed mitigation and/ or monitoring measures including cross-reference to the means of securing such measures (eg a dDCO requirement);
- to describe any remedial measures that are identified as being necessary following monitoring; and
- to identify where details are contained in the Habitats Regulations Assessment (HRA report) (where relevant), such as descriptions of European sites and their locations, together with any mitigation or compensation measures, are to be found in the ES.

3.3.2 The level of information provided in the Scoping Report for the chosen assessment study areas varies and is very limited in some chapters. The ES must clearly identify and justify the extent of the study area for each aspect assessment.

3.3.3 The Scoping Report presents limited information with regards to the assessment methodology for the assessment of cumulative impacts. The ES should clearly set out the proposed methodology for the assessment of cumulative impacts including any limitations.

3.3.4 The Inspectorate notes that whilst the drawings and figures provided with the Scoping Opinion are identified by name and number in the contents page and main body text (eg Figure 1.1, 1.2 etc), the figures provided at the end of the main report have not been clearly labelled as such. All references to drawings in this Opinion are therefore to the drawing/figure numbers as identified in the contents page of the Scoping Report, as the assumed intention of the Applicant. Also, a number of figures provided in the Scoping Report are not provided at a size or scale to be clearly

legible. The Applicant should ensure the ES is accompanied by clear and appropriately labelled/referenced drawings and figures, provided at an appropriate size and scale.

Baseline Scenario

3.3.5 The ES should include a description of the baseline scenario with and without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.

3.3.6 It is noted from paragraphs 4.5.2 and 4.5.3 of the Scoping Report that the methodologies for the baseline surveys to inform the impact assessment, both those undertaken to date and those proposed, have been or will be agreed with statutory bodies and individual/independent stakeholders. Limited information regarding survey methodologies is provided in the Scoping Report. The ES should clearly describe the survey methodologies that have been used to inform the impact assessment, together with any agreements reached with regards to the scope of the surveys. This information could be presented in appendices to the ES.

3.3.7 In light of the number of ongoing developments within the vicinity of the Proposed Development, the Applicant should clearly state which developments will be assumed to be under construction or operational as part of the future baseline.

Forecasting Methods or Evidence

3.3.8 The ES should contain the timescales upon which the surveys which underpin the technical assessments have been based. For clarity, this information should be provided either in the introductory chapters of the ES (with confirmation that these timescales apply to all chapters), or in each aspect chapter.

3.3.9 The Inspectorate expects the ES to include a chapter setting out the overarching methodology for the assessment, which clearly distinguishes effects that are 'significant' from 'non-significant' effects. Any departure from that methodology should be described in individual aspect assessment chapters.

3.3.10 The Inspectorate notes that Table 4.2 presents the proposed definition of the magnitude of impact to be applied to the impact assessment, but notes that paragraph 4.6.8 states that this is a guide only and may be more specific for some receptors. Where aspect-specific definitions of magnitude are applied, these should be clearly described in the aspect chapters.

3.3.11 The ES should include details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.

Residues and Emissions

3.3.12 The EIA Regulations require an estimate, by type and quantity, of expected residues and emissions. Specific reference should be made to water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases, where relevant. This information should be provided in a clear and consistent fashion and may be integrated into the relevant aspect assessments.

3.3.13 The Inspectorate notes that the Waste and Material Resources aspect chapter of the Scoping Report appears to discuss the onshore element of the Proposed Development only, although it is noted that there are references in the design and mitigation section to the marine cables. It is not clear where an assessment of waste and material resources for the offshore element will be presented in the ES. The ES should include an assessment of effects arising from material consumption and waste generation for the offshore elements, including information and assessment of the likely dredged arisings and potential rock placement associated with the marine cable installation. For purposes of clarity, it may be appropriate for this matter to be considered in the relevant offshore marine aspect chapters.

Mitigation

3.3.14 Any mitigation relied upon for the purposes of the assessment should be explained in detail within the ES. The likely efficacy of the mitigation proposed should be explained with reference to residual effects. The ES should also address how any mitigation proposed is secured, with reference to specific DCO requirements or other legally binding agreements.

3.3.15 The Inspectorate notes that a Construction Environmental Management Plan (CEMP), Site Waste Management Plan (SWMP), and Materials Management Plan (MMP) are to be produced. Where the ES relies upon mitigation measures which would be secured through management plans, it should be demonstrated (with clear cross referencing) where each measure is set out in the management plan. The Applicant should provide draft copies of these documents appended to the ES and/or demonstrate how they will be secured.

Risks of Major Accidents and/or Disasters

3.3.16 The Scoping Report contains no reference to whether an assessment of risk of major accidents and/or disasters associated with the Proposed Development will be provided in the ES.

3.3.17 The ES should include a description and assessment (where relevant) of the likely significant effects resulting from accidents and disasters applicable to the Proposed Development. The Applicant should make use of appropriate guidance (e.g. that referenced in the Health and Safety Executives (HSE) Annex to Advice Note 11) to better understand the

likelihood of an occurrence and the Proposed Development's susceptibility to potential major accidents and hazards. The description and assessment should consider the vulnerability of the Proposed Development to a potential accident or disaster and also the Proposed Development's potential to cause an accident or disaster. The assessment should specifically assess significant effects resulting from the risks to human health, cultural heritage or the environment. Any measures that will be employed to prevent and control significant effects should be presented in the ES.

3.3.18 Relevant information available and obtained through risk assessments pursuant to European Union legislation such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.

Climate and Climate Change

3.3.19 The Inspectorate notes the intention to include a discreet aspect chapter in the ES to present an assessment of climate effects. The ES should include a description and assessment (where relevant) of the likely significant effects the Proposed Development has on climate (for example having regard to the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change. Where relevant, the ES should describe and assess the adaptive capacity that has been incorporated into the design of the Proposed Development. This may include, for example, alternative measures such as changes in the use of materials or construction and design techniques that will be more resilient to risks from climate change. The Inspectorate's comments on the Applicant's proposed assessment of climate change are presented in Table 4.25 to the Opinion.

Transboundary Effects

3.3.20 Schedule 4 Part 5 of the EIA Regulations requires a description of the likely significant transboundary effects to be provided in an ES.

3.3.21 The Scoping Report states that the potential for transboundary effects will be considered more fully on a topic by topic basis in the ES, but currently concludes that the Proposed Development is not likely to have significant effects on another European Economic Area (EEA) State. The Scoping Report confirms that it intends to confirm this conclusion through the EIA process.

3.3.22 The Inspectorate acknowledges that this is a Trans-European Networks for Energy (TEN-E) project and has inherent transboundary interest due to part of the project being located within another EEA State, in this case France. Regulation 32 of the EIA Regulations inter alia requires the

Inspectorate to publicise a DCO application on behalf of the SoS if it is of the view that the proposal is likely to have significant effects on the environment of another EEA state, and where relevant, to consult with the EEA state affected.

3.3.23 The Inspectorate considers that where Regulation 32 applies, this is likely to have implications for the examination of a DCO application. The Inspectorate recommends that the ES should identify whether the Proposed Development has the potential for significant transboundary impacts and if so, what these are and which EEA States would be affected.

A Reference List

3.3.24 A reference list detailing the sources used for the descriptions and assessments must be included in the ES.

3.4 Confidential Information

3.4.1 In some circumstances it will be appropriate for information to be kept confidential. In particular, this may relate to information about the presence and locations of rare or sensitive species such as badgers, rare birds and plants where disturbance, damage, persecution or commercial exploitation may result from publication of the information. Where documents are intended to remain confidential the Applicant should provide these as separate paper and electronic documents with their confidential nature clearly indicated in the title, and watermarked as such on each page. The information should not be incorporated within other documents that are intended for publication or which the Inspectorate would be required to disclose under the Environmental Information Regulations 2014.

4. ASPECT BASED SCOPING TABLES

4.1 Marine UK: Physical Processes

(Scoping Report Part 2, Chapter 6)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.1.1	Paragraph 6.2.18 and Table C1	Air Quality	The Scoping Report contains very limited information with regards to air quality in the marine area and the likely numbers and types of vessels to be used. No information has been provided with regards to receptors that are likely to be sensitive to air quality effects, including distance from the Proposed Development. The Inspectorate anticipates that exhaust emissions from vessels used in the construction of the Proposed Development within the marine environment would be the main source of potential impacts on air quality and that the pollutants emitted are likely to be nitrogen oxides (NOx), sulphur dioxide (SO_2), and particulate matter. Due to the nature of the Proposed Development and receiving environment, and on the basis that the main source of atmospheric emissions would be exhaust emissions from vessels and is unlikely to result in significant increase in emissions across all phases of the Proposed Development, the Inspectorate considers that the agrees that this matter can be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.1.2	Paragraphs 6.2.1 to 6.2.2 and 6.4.1 to 6.4.3	Baseline data – study area	The Scoping Report does not refer to or define the study area for this aspect. The ES should clearly define the study area and explain why it has been selected.
4.1.3	Section 6.2	Baseline – receptors	Sandbanks and seabed features, particularly where they are in the vicinity of protected areas, should be considered as receptors in the ES.
4.1.4	Paragraphs 6.2.1 and 2.1.8	Baseline - surveys	Reference is made to marine surveys used to inform the baseline for this aspect; however, very limited information has been provided as to what these surveys comprised/will comprise, including their extent. The ES should include a description of the surveys that have underpinned the impact assessment.
4.1.5	Paragraphs 6.2.3 to 6.2.6	Modelling	The importance of currents for sediment transport is acknowledged in the Scoping Report. Modelling of current should also be validated against measured data. The desk study should identify the most suitable data.
4.1.6	Table 6.1	Mitigation	The ES should clearly describe the mitigation measures identified and proposed as a result of the EIA process. The ES should also clearly identify any embedded mitigation measures within the design that have been chosen as a result of potential impacts to physical processes.
4.1.7	Paragraph 6.4.3	Assessment methodology and cross-referencing	This aspect chapter of the Scoping Report does not describe in any detail the specific approach to assessing the significance of the identified potential impacts with regards to the physical environment. It is unclear if the physical processes chapter will present an assessment of receptors separate to those presented in related aspect

ID	Ref	Other points	Inspectorate's comments
			chapters, such as Marine Water and Sediment Quality, and Intertidal and Benthic Ecology. This aspect chapter also does not indicate that the physical processes assessment will be cross-referenced with other aspect chapters. The ES should clearly set out the approach to the impact assessment for the physical processes aspect chapter, particularly where this differs from the overarching approach described in Chapter 4 to the Scoping Report. Where the intention is to present the impact assessment on receptors arising from changes to physical processes in other aspect chapters, this should be clearly explained in the ES. The Inspectorate considers that cross-referencing enables a thorough assessment and should be followed where appropriate.

4.2 Marine UK: Marine Water and Sediment Quality

(Scoping Report Part 2, Chapter 7)

ID	Ref	Applicant's proposed matter to scope out	Inspectorate's comments
4.2.1	Paragraph 7.3.3 and Table C1	Effects on marine water and sediment quality during operation and maintenance	The Inspectorate notes paragraph 2.1.56 which states that routine maintenance will not be required, but that some unplanned repair operations may take place. Paragraph 7.3.3 acknowledges that some operation and maintenance activities (eg repair and reburial) may lead to similar impacts as construction, but that these are likely to be much smaller in scale than the construction works. The Inspectorate considers that the justification provided in the Scoping Report does not demonstrate the information necessary to support the decision to scope this out. The ES should include an assessment of operational and maintenance activities on marine water and sediment quality, where significant effects are likely to occur. The Inspectorate recognises the potential similarity between potential effects that could arise from repair and reburial works to those during construction, and therefore the Applicant should consider whether it would be appropriate to apply the same/similar mitigation measures.

ID	Ref	Other points	Inspectorate's comments
4.2.2	Paragraph 7.2.1	Study Area	A study area of 2km has been chosen to establish the marine water and sediment baseline for the ES; however, no justification for this distance has been provided. The ES must clearly identify and justify the extent of the study area.
4.2.3	Paragraph	Baseline – contaminated sediment	The Inspectorate notes that contaminated sediment sampling has

ID	Ref	Other points	Inspectorate's comments
	7.2.3	sampling and analysis	been completed along the inshore marine cable corridor as part of the benthic sampling campaign and this is to be analysed. The Inspectorate recommends the Applicant makes effort to agree the sampling and analysis with relevant consultation bodies and present any agreements within the ES. It is noted that details of quality standards to be applied have not been provided at this stage. It should be noted that methods of chemical analysis should be compatible with the benchmarks they are compared against (for example the metal extraction method). The Inspectorate considers that the chemical analysis used to inform the assessment of likely significant effects is sufficiently robust and where necessary for this purpose conforms to Marine Management Organisation (MMO) dredge disposal laboratory guidelines.
4.2.4	Paragraph 7.4.4	Water Framework Directive (WFD) assessments	The Applicant should seek to agree the scope of the proposed WFD assessments with relevant consultation bodies, including the Marine Management Organisation and Environment Agency. It is recommended that transitional waters and coastal waters be addressed together in a 'marine' WFD assessment. The Applicant should also be aware that the Bathing Water Directive, as referred to in Appendix B to the Scoping Report, has been subsumed into the WFD Directive.
4.2.5	N/A	Receptors and cross-referencing between aspects	This chapter of the Scoping Report makes no reference to the potential impacts from changes to water and sediment quality on designated sites. It is acknowledged that ecological designations are proposed to be assessed in relevant other aspect chapters of the ES. However, the Inspectorate considers that these assessments should be informed by the marine water and sediment quality assessment, and appropriate cross-references should be made in the ES.

4.3 Marine UK: Intertidal and Benthic Ecology

(Scoping Report Part 2, Chapter 8)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.3.1	Paragraph 8.3.4 and Table C	Introduction of Non-Native Species (INNS)	The Inspectorate agrees that this matter can be scoped out of the ES on the basis that the Applicant intends to apply available best industry practice, including the production and implementation of a biosecurity plan. The Scoping Report also indicates that imported material for the Proposed Development will not be of large volume. The ES application should provide reference to how the delivery of best practice measures for the control of INNS, including a biosecurity plan, are secured through DCO requirements (or other suitably robust methods). Effort should be made to agree such measures with relevant consultation bodies.
4.3.2	Paragraphs 8.3.5 to 8.3.7 and Table C	Electro-Magnetic Field (EMF) and emissions from HVDC Cable	The Inspectorate agrees on the basis of the evidence provided and the nature of the Proposed Development that effects of EMF on benthic receptors can be scoped out of the ES.
4.3.3	Paragraphs 8.3.8 and 8.3.9 and Table C	Heat emissions from HVDC Cable	A number of features of the Solent Maritime Special Area of Conservation (SAC) are sensitive to temperature increases from power cable operation and therefore, the Inspectorate cannot agree to scope this matter out as significant effects may occur. The ES should include an assessment of heat emissions from the HVDC cable during operation on sensitive receptors where significant effect could occur.

ID	Ref	Other points	Inspectorate's comments

ID	Ref	Other points	Inspectorate's comments
4.3.4	Paragraphs 8.2.1, 8.2.3, Tables 8.1 and 8.2	Study area	No study area is explicitly defined in this aspect chapter, although the Inspectorate notes the identification of protected areas within 50km of the Proposed Development in Table 8.1 and the benthic habitats identified at a variety of distances in paragraph 8.2.3. The ES should clearly identify and justify the study area applied to the assessment of effects on intertidal and benthic ecology.
4.3.5	Paragraphs 8.4.2 to 8.4.4	Baseline – surveys, baseline information, and analysis	The Inspectorate notes from the Scoping Report that a suit of benthic surveys, together with intertidal surveys have been undertaken. The Scoping Report does not include the detailed methodology for the surveys or specify what standard protocols and quality standards are being utilised. The Applicant should ensure that the baseline information used to inform the assessment of likely significant effects is robust and suitable for that purpose. The Applicant should make effort to agree the approach to data collection and quality assurance with relevant consultation bodies. The ES and/or accompanying technical appendices should therefore provide detailed information regarding the survey methodology and analysis used to inform the impact assessment, together with appropriate figures to present the sampling locations.
4.3.6	Paragraphs 8.4.2 to 8.4.4	Baseline – surveys and analysis	The Scoping Report does not address relevant quality standards applicable to the survey and analysis of impacts to benthic ecology. The ES should provide a description of these matters and how they are applied in the assessment.
4.3.7	Section 8.2 and Paragraph 8.4.2	Baseline – receptors	The baseline section of the Scoping Report does not discuss protected habitats or species of conservation concern outside of designated sites. The Inspectorate acknowledges that the surveys undertaken will seek to identify any protected habitats and species potentially affected by the Proposed Development, as confirmed in paragraph 8.4.2. The Proposed Development could, for example, increase suspended

ID	Ref	Other points	Inspectorate's comments
			sediment concentrations which have the potential to smother native oyster (*Ostrea edulis*) within the Solent. The ES should ensure that impacts on protected habitats and species (including, but not limited to, those protected under the Habitats Directive, Wildlife and Countryside Act 1981, NERC Act s41 habitats and species of principal importance), together with local Biodiversity Action Plan (LBAP) habitats and species and other habitats/species of conservation concern are assessed where significant effects are likely.
4.3.8	Table 8.3 and Appendix C Table C1	Potential impacts – habitat loss during construction and decommissioning	Habitat loss during construction is not specially identified in the Scoping Report as a potential impact, although it is noted that loss of habitat and species is included in the 'reason' column for the potential impact of seabed disturbance during construction. For the avoidance of doubt, the ES should include an assessment of habitat loss during construction and decommissioning.
4.3.9	N/A	Cross-referencing between aspects	Appropriate cross-referencing between this aspect chapter and other relevant aspects, such as physical processes and marine water and sediment quality, should be included in the ES.

4.4 Marine UK: Fish and Shellfish

(Scoping Report Part 2, Chapter 9)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.4.1	N/A	N/A	No matters have been proposed to be scoped out of the ES

ID	Ref	Other points	Inspectorate's comments
4.4.2	Chapter 9	Study area	The Inspectorate notes that no study area is defined in the Scoping Report. The study area should be clearly defined and justified in the ES. Supporting figures should be provided, such as the location of spawning and nursery grounds.
4.4.3	Section 9.2	Baseline – Receptors	It is noted that baseline section of the Scoping Report does not clearly identify the conservation status of the fish and shellfish species discussed. The ES should identify, value, and assess impacts on protected species and species of conservation concern, where significant effects are likely.
4.4.4	N/A	Cross-referencing between aspects	Appropriate cross-referencing between this aspect chapter and other relevant aspects, such as physical processes and marine water and sediment quality, should be included in the ES.

4.5 Marine UK: Marine Mammals and Basking Sharks

(Scoping Report Part 2, Chapter 10)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.5.1	Table 10.2 and Table C1	Collision with vessels	The Scoping Report contains very little information on the likely numbers and types of vessels to be used for the Proposed Development and the baseline with which to compare. In the absence of sufficient justification, the Inspectorate cannot agree to scope out this matter. The ES should clearly describe the likely type and number of vessels to be utilised during construction and the risk to marine mammals. An assessment of collision impacts on marine mammals and basking sharks should be included, where significant effects are likely to occur.
4.5.2	Table 10.2 and Table C1	Increased vessel noise	As noted at point 4.5.1 above, the Scoping Report contains very limited information regarding the likely numbers and type of vessels, together with the likely noise generated from such vessels. The Inspectorate considers that insufficient justification has been provided as to why this matter can be scoped out. The ES should therefore include an assessment of effects on marine mammals and basking sharks arising from increased vessel noise, where significant effects are likely to occur.
4.5.3	Table 10.2 and Table C1	Increased Anthropogenic noise from geotechnical investigations, Horizontal Directional Drilling (HDD), seabed preparation, route clearance, cable lay and burial	The Scoping Report contains limited information with regards to the equipment involved and noise levels for these activities, together with baseline noise levels, to support the scoping out of this matter. Reference is made to the relatively low densities of species known to occur in the Channel; however, information on population densities for species has similarly not been provided in the Scoping Report to support this statement.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			Therefore, the Inspectorate does not agree to scope out these matters. The ES should include an assessment of effects on marine mammals and basking sharks arising from these activities, where significant effects are likely.
4.5.4	Table 10.2 and Table C1	Presence of EMF	The Scoping Report contains no information regarding marine mammal and basking shark populations within the likely Zone of Influence (ZoI) for the Proposed Development, or evidence to support the statements made, in respect of basking sharks in particular. The Inspectorate considers that limited justification has been provided and therefore does not agree to scope out this matter. The ES should include an assessment of EMF effects on marine mammals and basking sharks, where significant effects are likely.

ID	Ref	Other points	Inspectorate's comments
4.5.5	Section 10.2	Study area	The Scoping Report does not define the study area and/or Zone of Influence (ZoI) for the assessment of effects on marine mammals and basking sharks. This should be clearly stated and justified in the ES.
4.5.6	10.2.4	Baseline – basking sharks	This aspect refers to basking sharks within the title and in Table 10.2 scoping out of matters; however, no other reference is made to basking sharks. It is also unclear which data sources will be used to inform the baseline and assessment of impacts on basking sharks. The ES should clearly identify the data sources used to inform the assessment.
4.5.7	Appendix E,	Potential impacts – Unexploded	The Scoping Report does not clearly state whether an assessment will

ID	Ref	Other points	Inspectorate's comments
	Table E1	Ordnance (UXO) removal/ detonation	be included in the ES of potential significant impacts to sensitive receptors as a result of the detonation/removal of UXO from the marine environment. The Applicant should ensure that significant effects to marine mammals and basking sharks associated with UXO removal or detonations are assessed. The Applicant should make effort to agree the approach to the assessment with relevant consultation bodies.

4.6 Marine UK: Intertidal and Marine Ornithology

(Scoping Report Part 2, Chapter 11)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.6.1	Paragraph 11.3.9	MCZ assessment for ornithology	On the basis that there are no Marine Conservation Zones (MCZs), recommended, proposed, or designated for ornithological features within the Zone of Influence from the Proposed Development, the Inspectorate agrees that this matter can be scoped out.
4.6.2	Table 11.3 and Appendix C Table C1	Exposure to surface hydrocarbons or chemicals due to accidental spills	The Scoping Report identifies that chemical and fuel spills would be unplanned by nature and that pollution prevention measures would be in place to mitigate this. It is currently unclear what these measures would comprise and how they would be secured.. In absence of the detail relating to these measures the Inspectorate considers that impacts resulting from exposure to surface hydrocarbons or chemicals from accidental spills should be assessed where significant effects are likely. In addition, the Scoping Report has not provided information with regards to risks of major accidents in general the Applicant should have regard to the information contained at paragraphs 3.3.16 to 3.3.18 above
4.6.3	Table 11.3 and Appendix C Table C1	Barrier effects	The Inspectorate agrees that given the nature of the Proposed Development and the largely temporary nature of the impacts during construction, barrier effects on intertidal and marine ornithology can be scoped out of the ES.
4.6.4	Table 11.3 and Appendix C Table C1	Collision risk	The Inspectorate agrees that given the nature of the Proposed Development collision risk to intertidal and marine ornithology can be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.6.5	11.3.3	Study area	The Inspectorate notes the use of a 100km initial search area for the seabird baseline and the potential for this to be widened where clear ecological links exist. The maximum foraging ranges of seabird species have also been noted in Table 11.1, some of which travel distances greater than 100km. The ES should clearly present and justify the study area(s) applied to the intertidal and marine ornithology assessment for all receptor types. The ES should also include clear figures showing the location of designated sites considered in the impact assessment in relation to the Proposed Development.
4.6.6	Paragraph 11.3.6, 11.5.6 and Section 17.2	Receptors - European sites	Chapter 11 of the Scoping Report implies that the Alderney West Coast and Burhou Islands Ramsar will be considered in the Habitats Regulations Assessment (HRA) report, alongside the ecological impact assessment. However, Chapter 17 states that effects on this site are unlikely to be significant. The ES should provide a sufficient justification based on objective evidence to support the conclusions made in respect of European sites, both within the UK and in other EEA States/Crown dependencies, where significant effects are likely.
4.6.7	Paragraphs 11.3.10 to 11.3.14	Baseline – surveys	The Inspectorate notes that intertidal ornithological surveys have been undertaken; however, the Scoping Report contains limited information regarding the survey methodology, including the location of the vantage points. This information should be clearly presented in the ES. It is recommended the Applicant seek to agree the scope and adequacy of these surveys with relevant consultation bodies.
4.6.8	Paragraph 11.3.13	Baseline – survey date	The Inspectorate notes the summary numbers of protected bird species and species of conservation concern recorded identified on or over the landfall site during the wintering bird surveys. The ES should provide the survey results and clearly identify the species considered in the impact assessment.

ID	Ref	Other points	Inspectorate's comments
4.6.9	Paragraph 11.3.16	European site qualifying features	The Inspectorate notes that the list of qualifying features for Chichester and Langstone Harbour Special Protection Area (SPA) is incomplete. The ES and/or information to inform HRA report should correctly identify and consider likely significant effects on all qualifying features of a European site where this is being considered.
4.6.10	Paragraph 11.4.12	Cross-referencing between aspect chapters	Reference is made to further detail on intertidal ornithology to be included in Chapter 19 (Ecology (with arboriculture)). The ES should avoid duplication but include clear cross-referencing between relevant aspect chapters.

4.7 Marine UK: Commercial Fisheries

(Scoping Report Part 2, Chapter 12)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.7.1	N/A	N/A	No matters have been proposed to be scoped out of the ES

ID	Ref	Other points	Inspectorate's comments
4.7.2	N/A	Study area	The Inspectorate notes that no study area has been defined in this Chapter of the Scoping Report. The study area should be clearly defined and justified in the ES and aided by clear figures.
4.7.3	N/A	Sensitive receptors	The Scoping Report identifies a variety of fishing vessels and techniques but does not indicate how sensitive receptors will be determined. Justification as to how sensitive receptors are determined should be clearly explained in the ES.
4.7.4	Paragraph 12.3.2	Relationship with the Fish and Shellfish aspect chapter	The Inspectorate acknowledges the Applicant's intention to consider effects on commercially harvested fish and shellfish in the Fish and Shellfish aspect chapter of the ES and discuss any significant effects in the Commercial Fish aspect chapter. The ES should clearly identify the relationship between the assessments and include appropriate cross-referencing.

ID	Ref	Other points	Inspectorate's comments
4.7.5	Table 12.1	Impacts – temporary loss or restricted access to fishing grounds	It is acknowledged that cable protection could be used along stretches of the cable as a mitigation measure, but the current volume/tonnage, type and locations are unknown at present. Table 12.1 states that "*the most appropriate cable protection will be used to minimise impacts to fisheries*". The ES should clearly identify whether any loss will be permanent or temporary and also quantify the loss, where significant effects are likely to occur. This comment is also applicable to the Fish Shellfish aspect chapter. The ES should apply consistency between the assessment of impacts considered in the Commercial Fisheries aspect chapter and those presented within the Fish and Shellfish aspect chapter.
4.7.6	Paragraph 12.4.2 to 12.4.3	Sources of baseline data and consultation	The Applicant should make effort to engage with the recreational fishing community to obtain relevant baseline information to inform the impact assessment.
4.7.7	Paragraph 12.4.3	References	The ES should ensure that the baseline data sources, including references to published papers are included in full.

4.8 Marine UK: Shipping and Navigation

(Scoping Report Part 2, Chapter 13)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.8.1	N/A	N/A	No matters have been proposed to be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.8.2	Paragraph 13.2.9	Study area	The ES should clearly justify the selected study area of 2 nautical miles (nm) around the Proposed Development.
4.8.3	Paragraphs 13.3.5 to 13.3.8	Impacts – risk of interaction with vessels anchors and displacement of anchoring	Reference is included to a wider anchoring assessment in the Navigational Risk Assessment (NRA) to determine the risk of emergency anchoring over the cable. Mitigation measures are stated to include suitable protection of the cable, such as burial or rock placement. The Applicant should ensure that the ES identifies and assesses impacts resulting from rock placement, where this would result in a likely significant effect. Any assumptions applied to this assessment including locations and quantity of material used should be explained in the ES. Where uncertainty exists the ES should explain how this has been taken into account in the assessment.
4.8.4	Paragraph 13.4.5 to 13.4.6	Impact methodology	The Inspectorate acknowledges that the NRA will present a baseline assessment which will be used to identify the potential impacts of the Proposed Development relevant to shipping and navigation. It would appear that the impact assessment methodology for shipping and navigation is likely to follow a different approach to that presented in the overarching impact assessment methodology. The ES should clearly state the assessment methodology applied to this aspect chapter and how it will be applied to determine and report significant

ID	Ref	Other points	Inspectorate's comments
			effects.

4.9 Marine UK: Marine Archaeology

(Scoping Report Part 2, Chapter 14)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.9.1	N/A	N/A	No matters have been proposed to be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.9.2	Section 14.4 and Chapter 2	Assessment methodology	The Inspectorate notes reference to a variety of surveys, including geophysical surveys, which could be used to inform the baseline and assessment of impacts to archaeological assets. Reference is also made to surveys that could inform post-consent data archaeological analysis. It is not clear if such surveys have been or will be undertaken with archaeological interpretation in mind, and this should be specified. The ES should clearly set out the methodology and processes followed with regard to the data analysis and interpretation undertaken to determine the significant of impacts. Sufficient information should be provided within the ES to determine the potential impacts of the Proposed Development.
4.9.3	Paragraph 14.3.5	Archaeological Written Scheme of Investigation (WSI)	The ES should clearly identify the proposed mitigation measures to be included in respect of marine archaeology. A WSI should steer the final design of the interconnector cable and appropriate mechanisms should be clearly laid out to deal with any finds during implementation. Mitigation measures including any Archaeological Exclusions Zones (AEZs) should be clearly identified. The ES should also explain how the WSI, including any AEZs, are to be appropriately secured.

ID	Ref	Other points	Inspectorate's comments
4.9.4	Paragraphs 2.1.10 and 2.1.50	Post-consent data analysis and interpretation	The Inspectorate notes reference in the Scoping Report to various pre-construction/post-consent ground condition surveys, geo-physical surveys or remotely operated vehicles (ROVs). Whilst this information would be gathered to inform any bathymetric changes, presence of UXOs, and monitor the works, such processes should also allow for archaeological analysis to inform final route selection prior to route clearance and installation and to identify any anomalies of known or possible archaeological interest are avoided in accordance with a defined mitigation strategy.
4.9.5	N/A	Study area	The ES should clearly define the study area and Zone of Influence applied to the marine archaeology aspect chapter.
4.9.6	N/A	Cross-referencing between aspects	Appropriate cross-referencing between this aspect chapter and other relevant aspects, such as physical processes, should be included in the ES.

4.10 Marine UK: Landscape and Seascape

(Scoping Report Part 2, Chapter 15)

ID	Ref	Applicant's proposed aspect to scope out	Inspectorate's comments
4.10.1	Chapter 15	Landscape and seascape visual effects	The Inspectorate agrees that given the nature of the Proposed Development, landscape and seascape visual effects can be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.10.2	N/A	N/A	N/A

4.11 Marine UK: Other Marine Users

(Scoping Report Part 2, Chapter 16)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.11.1	N/A	N/A	No matters have been proposed to be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.11.2	N/A	Study area	The Scoping Report does not define the study area or likely ZoI for effects on other marine users. The study area and ZoI should be clearly stated in the ES.
4.11.3	Paragraphs 16.2.1 and 16.2.5	Rampion wind farm	The Scoping Report identifies Rampion Wind Farm as being located within 5nm but it is not clear whether effects on this wind farm are to be considered in the ES and what these are likely to comprise.
4.11.4	N/A	Recreational vessels receptor assessment and relationship with the Shipping and Navigation aspect chapter	The Inspectorate notes that the baseline information and potential impacts/mitigation within Chapter 13 of the Scoping Report includes recreational vessel data and potential impacts and mitigation measures are similar to that contained within Chapter 16 for recreational vessels. The ES should avoid duplication but include appropriate cross-referencing between aspects.

4.12 Marine UK: Marine Cumulative and Transboundary Impacts

(Scoping Report Part 2, Chapter 17)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.12.1	N/A	N/A	No matters have been proposed to be scoped out of the assessment

ID	Ref	Other points	Inspectorate's comments
4.12.2	Table 17.1	Marine transboundary impacts	The Inspectorate notes that assumptions have been made regarding potential impacts and mitigation measures to conclude that there is unlikely to be significant transboundary effects; however, such effects are stated as yet to be explored in the corresponding aspect chapter (eg through sediment modelling). Limited information has been also provided with regard to the location of potential sensitive receptors in other EEA States. The Inspectorate notes reference in Appendix E to and the intention to consider transboundary effects in the EIA process. In accordance with the EIA Regulations, the ES should include a description of the likely significant effects as a result of the Proposed Development, including transboundary effects.
4.12.3	Appendix F	Cumulative plans and projects	The ES should consider the potential for cumulative impacts with proposals to redevelop the Fraser Range site at Eastney and the North Portsea Coastal Defence schemes. The Applicant should seek to consult with the Eastern Solent Coastal Partnership (ESCP) with regards to the latter and potential cumulative effects. The Applicant's attention is drawn to the comments of Natural England and the Environment Agency contained in Appendix 2 to the Scoping Opinion in this regard.

4.13 Onshore UK: Landscape and Visual

(Scoping Report Part 3, Chapter 18)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.13.1	Table 18.1 and Table C1	Convertor Station - Effects on visual receptors beyond 3km of the convertor station boundary	The Scoping Report proposes to scope out this matter on the basis that changes will be limited due to the presence of built form and intervening vegetation. However, the Scoping Report does not contain sufficient evidence to support this conclusion and as such the Inspectorate cannot agree to scope this matter out. The Inspectorate notes that an initial Zone of Theoretical Visibility (ZTV) has been prepared and discussed with local authorities, and also that viewpoints beyond 3km have been included. No visual information has been provided with the Scoping Report and therefore supporting evidence with regards to visibility and screening is not apparent. The Inspectorate considers that effects on visual receptors beyond 3km of the site boundary of the convertor station should therefore be included in the ES, where likely significant effects could occur.
4.13.2	Table 18.1	Cable Route and Landfall - Effects on landscape and seascape character and features associated with the landfall during construction, operation and decommissioning	The Scoping Report proposed to scope out this matter on the basis that effects would be temporary/short term and the scale of works minimal, resulting in an underground structure to house the transition bay, and that the land would be reinstated. The Scoping Report does not contain sufficient detail regarding the spatial and temporal nature of the proposed works associated with the landfall site, or the likely scale and significance of the acknowledged temporary effects, for the Inspectorate to agree that this matter can be scoped out of the ES. The Inspectorate notes the character area information including heritage assets within close proximity to the landfall site, as described in the Scoping Report. The ES should include an assessment of landscape and seascape character effects, including heritage assets, arising from the proposed landfall works, where likely significant

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			effects could occur.
4.13.3	Table 18.1	Cable Route - Effects on visual receptors within 100m buffer on either side of the cable route up to 2km of the proposed converter station	The Scoping Report does not provide a clear justification as to why this matter should be scoped out of the ES and the Inspectorate cannot agree to scope this issue out.

ID	Ref	Other points	Inspectorate's comments
4.13.4	Drawing number EN020022-SR-4.1 and Chapter 18	Figures and receptors	The information included within the Scoping Report lacks detailed figures applicable to inform the scope of the assessment e.g. location of visual receptors. The ES must include clear figures of an appropriate scale and size to present the landscape and visual effect receptors considered in the impact assessment.
4.13.5	Paragraph 18.2.18	Study area	The Scoping Report does not clearly identify and justify the proposed study areas referenced in this aspect chapter. The ES should clearly define the study area for the matters considered in this aspect chapter. The Inspectorate advises that the study area should be based on the extent of potential impacts, and that the ZTV will be essential in selecting viewpoints. The Applicant should make effort to agree the viewpoints should be agreed with relevant consultation bodies e.g. local authorities. The ES should explain how consultation with the relevant local authorities has informed the decisions taken with regards to the assessment. The ES should also document agreements reached with the local authorities with regards to the assessment methodology and justify the approach taken, should the chosen approach differ.

ID	Ref	Other points	Inspectorate's comments
4.13.6	N/A	Relationship with Heritage and Archaeology and ecology	The Inspectorate notes and welcomes the intention to assess effects on the settings of built assets including conservation areas and listed buildings, together with loss of features such as ancient woodland, hedgerows and trees. The ES should not duplicate assessments in aspect chapters; however, the ES should ensure appropriate cross-referencing is provided between these aspect chapters.

4.14 Onshore UK: Ecology (with Arboriculture)

(Scoping Report Part 3, Chapter 19)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.14.1	N/A	N/A	No matters have been proposed to be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.14.2	Paragraph 19.2.1	Study area/Zone of Influence	The ES should clearly describe the ZoI for the Proposed Development. Beyond the designated sites and the Environmental Constraints Plan (Figure 4.1), the Scoping Report does not include specific figures to present ecological information. Clear figures must be provided with the ES, including figures detailing crossings of waterbodies (see also comments at points 4.14.6 and 4.14.7 below).
4.14.3	Section 19.2 and 19.3	Baseline – surveys	The Scoping Report contains very limited information on the temporal and spatial extent of the ecological surveys undertaken to date and those proposed. The ES/appendices should detail the methodology, including spatial and temporal extent of all ecological surveys used to inform the impact assessment and describe any limitations to undertaking those surveys. Additionally, there are some potentially contradictory statements made concerning whether surveys are proposed or not, such as those for badgers along the cable route. The Scoping Report also refers to desk study records and potential habitats for a number of species, but proposes to scope out further surveys with no justification. The Inspectorate recommends the Applicant seek to agree the scope of habitat species with relevant consultation bodies, including Natural

ID	Ref	Other points	Inspectorate's comments
			England and local authority ecologists, as appropriate.
4.14.4	Table 19.1	Designated sites – National Nature Reserves (NNR)	It is unclear whether any NNRs are to be considered in the ES, as Chapter 19 contains no reference to these sites. NNRs are noted to be included on the Environmental Constraints May (Figure 4.1). The ES should identify any NNRs within the ZoI for the Proposed Development and assess impacts to these sites, where likely significant effects could occur.
4.14.5	Paragraph 19.2.20	Baseline - Other mammals	The Scoping Report refers to habitat potentially suitable for other notable mammal species but does not expand on what these species might comprise. The ES should clearly identify and value the receptors considered in the impact assessment. The ES should assess significant effects on protected and species of conservation concern, including habitats and species
4.14.6	N/A	Aquatic receptors	The Scoping Report contains no reference to potential aquatic receptors, such as freshwater fish species, which could be affected by the Proposed Development. The ES should include an assessment of noise and vibration impacts arising from HDD activities on eel and other sensitive ecological receptors (North Purbeck Stream), where significant effects could occur. The Applicant should make effort to agree the approach to the assessment with relevant consultation bodies. The ES should include an assessment of effects on aquatic receptors within the ZoI for the Proposed Development, including noise and vibration impacts on sensitive receptors arising from any HDD works proposed, where significant effects could occur. The ecology aspect chapter should also cross-refer to the findings and assessments made in other relevant aspect chapters in this regard, including Water Resources and Flood Risk. Where mitigation is relied upon to avoid or reduce effects on aquatic receptors, such as through the use of

ID	Ref	Other points	Inspectorate's comments
			trenchless crossings, this should be clearly described and secured as appropriate through the DCO.
4.14.7	Paragraph 2.2.66	Potential impacts - Horizontal Direction Drilling (HDD)	The Inspectorate notes the current proposal to use HDD construction techniques at five locations, including "*King's Pond Site of Special Scientific Interest (SSSI)*". The Inspectorate notes that there is no other reference to a King's Pond SSSI in the Scoping Report. Chapter 19 identifies a King's Pond Meadow Site of Importance to Nature Conservation (SINC). No reference to HDD construction techniques is included in the Ecology (with Arboriculture) aspect chapter of the Scoping Report. The ES should clarify the locations where HDD is to take place. Where impact pathways from the Proposed Development to sensitive ecological receptors exist and where a likely significant effect may occur, this should be assessed in the ES.
4.14.8	Paragraph 19.2.1	Ancient woodland	It is unclear whether the Applicant will rely solely on Natural England's Ancient Woodland Inventory to identify ancient woodland affected by the Proposed Development. Ancient woodlands smaller than 2 hectares (ha) are unlikely to appear on these inventories. The ES should assess likely significant effects on all relevant ancient woodland receptors. The assessment should be supported by survey information. As an irreplaceable resource, the design for the Proposed Development should seek to avoid direct impacts on ancient woodland and veteran trees and ensure that there is no increase in fragmentation of these habitats. The ES should also explain the extent to which enhancement measures, where practicable, to enhance ecological networks and connectivity have been considered.
4.14.9	Paragraph 19.4.3	Recreational greenspace and Solent Waders and Brent Goose Strategy	The ES (and HRA report) should consider potential impacts upon recreational use of green spaces and whether this would have any

ID	Ref	Other points	Inspectorate's comments
		(SWBGS) sites	likely significant effect upon designated sites through temporary displacement of recreation (including onto SWBGS sites).
4.14.10	Paragraph 19.4.13	SWBGS – avoidance and mitigation	The Inspectorate notes that proposal to programme proposed works within SWBGS sites during the summer months. Any mitigation and/ or design measures relied upon to exclude likely significant effects on designated sites should be explained in the ES and appropriately secured. The Applicant's attention is also directed to the comments of Natural England at Appendix 2 to this Opinion with regards to guidance on mitigation and offsetting requirements in respect to effects on SWBGS sites.
4.14.11	N/A	Eastney Beach Habitat Restoration Management Plan	The Applicant should have regard to the Eastney Beach Habitat Restoration Management Plan Supplementary Planning Document in compiling the ES and when considering any biodiversity enhancement measures.
4.14.12	Paragraphs 19.4.4, 194.6 to 19.4.7 and 19.4.28	Invertebrates – Milton Common Local Nature Reserve (LNR)	It is noted that there are three route options through this LNR. Natural England (see Appendix 2 to this Opinion) have identified that this is the only site in Hampshire where there are records of large thorn moth. The ES should consider impacts on invertebrates and potential further survey work/data collection, as appropriate. The Applicant should seek to agree the scope of the data collection with relevant consultation bodies.
4.14.13	N/A	Cross-referencing and inter-relationships	The ecological impact assessment presented in the ES should be informed by the findings of other aspect assessments (and vice versa), including Air Quality, Noise and Vibration and Water Quality. Full and appropriate cross-referencing between aspect chapters should be included in the ES.

4.15 Onshore UK: Soils and Land Use

(Scoping Report Part 3, Chapter 20)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.15.1	N/A	N/A	No matters have been proposed to be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.15.2	Paragraph 20.4.11	Soil resources plan	The Scoping Report refers to the intention to implement a Soils Resources Plan. This Plan should be appropriately secured. It is also recommended that an Outline Plan be provided with the DCO application.
4.15.3	N/A	Cross-reference with Ground Conditions aspect chapter	The Inspectorate notes potential overlap with the proposed Ground Conditions aspect chapter. The ES should include appropriate cross-references between aspect chapters and avoid duplication.
4.15.4	N/A	Field drains	It is unclear how the construction and operation of the Proposed Development may affect field drainage regimes and the potential impact this could have on soils. The ES should address the potential for impacts to field drainage regimes and consequently soils with appropriate cross reference to relevant aspect chapters including Ground Conditions and Water Resources and Flood Risk. If significant effects are likely to occur these should be presented within the ES.

4.16 Onshore UK: Ground Conditions

(Scoping Report Part 3, Chapter 21)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.16.1	N.A	N/A	No matters have been proposed to be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.16.2	N/A	Storage of hazardous substance or non-hazardous pollutants	Limited information is provided in the Scoping Report with regards to the proposed works at the convertor station. For example, no information is provided on the potential storage or use of hazardous substances or non-hazardous pollutants within or in the vicinity of the convertor station. The ES should include within its description information on such matters and provide an assessment of likely significant effects associated with the use and storage of such substances to groundwater. The ES should explain how risks to groundwater will be mitigated and also how such measures are to be secured.
4.16.3	N/A	Preferential pathways	The ES should include consideration of any preferential pathways that may be created as a result of the Proposed Development.
4.16.4	Paragraph 21.3.13 to 21.3.15	Assessment methodology	The Inspectorate notes the reference to the desk-based assessment, including development of a conceptual site model and preliminary risk assessment for the assessment of effects on groundwater. The impact assessment should also include detailed and site-specific assessments to demonstrate that the risks to groundwater are acceptable, particularly in those areas identified as of greatest risk. The Applicant should seek to agree the approach to the assessment, including the Conceptual Site Model (CSM), Preliminary Risk Assessment (PRA) and

ID	Ref	Other points	Inspectorate's comments
			site-specific surveys, with the Environment Agency, Hampshire County Council and other relevant consultation bodies, as appropriate.
4.16.5	Paragraphs 21.3.15 and 22.3.2	Assessment of effects - Groundwater quality	This aspect of the Scoping Report focuses on land contamination and states that wider issues of groundwater resources are contained in the Water Resources aspect chapter. The Water Resources and Flood Risk aspect chapter states that "*potential impacts to groundwater associated with impacts to groundwater quantity, groundwater flows and the release of contaminants contained in the ground will be assessed in the Ground Conditions chapter*". It is not apparent from the Scoping Report where an assessment of groundwater quality from pollutants associated with the Proposed Development would be considered and presented. The ES must include an assessment of significant effects on groundwater quality arising from the Proposed Development, particularly given the sensitivity of the existing groundwater receptors. See also comments at point 4.16.7 below. Any proposed mitigation and monitoring with regards to groundwater quality effects must be clearly described in the ES, including likely efficacy. Mitigation and monitoring measures should be appropriately secured.
4.16.6	Paragraphs 21.3.11	Scope of the assessment - Other potential issues	The Scoping Report contains limited detail regarding the proposed works and duration; however, it is noted that this paragraph refers to the proposed excavation (area 4-6ha) which is expected to be open for construction works for up to two years. Given the sensitivity of the area and the potential for impacts on groundwater quality, the ES must include an assessment of significant effects to groundwater quality associated with the convertor station, including details of any mitigation and monitoring proposed. Mitigation and monitoring relied upon in the assessment should be appropriately secured.
4.16.7	N/A	Receptors – Solution (Karstic) Features within the SPZ1	Related to the above points, the ES must address the presence of karstic features which could be impacted by the Proposed

ID	Ref	Other points	Inspectorate's comments
			Development and include a detailed assessment of significant effects on groundwater quality that could arise from the construction of the convertor station within Source Protection Zone 1 (SPZ1).
4.16.8		Baseline data sources	The Applicant's attention is directed to the comments of the Environment Agency at Appendix 2 to the Opinion, which provides a link to British Geological Society (BGS) information on the Karst hydrogeology of the Bedhampton and Havant springs. The ES should address this information in light of the Proposed Development.

4.17 Onshore UK: Water Resources and Flood Risk

(Scoping Report Part 3, Chapter 22)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.17.1	N/A	N/A	No matters are proposed to be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.17.2	Paragraphs 22.2.1 and 22.3.3	Study area	The Scoping Report identifies that surface water features up to a minimum of 0.5km from the Proposed Development and features of hydraulic connectivity within 1km of the Proposed Development will be considered. The impact assessment should consider all sensitive receptors within the ZoI for the Proposed Development, particularly where hydrological links occur.
4.17.3	Paragraph 22.3.2 and Chapter 21	Groundwater	The Inspectorate notes that this paragraph defers the assessment of groundwater quantity, groundwater flows and release of contaminants to the Groundwater Chapter of the ES. As noted in Table 4.16 of the Opinion, there is no reference to the assessment of groundwater quality. This must be included in the ES. Where the Water Resources and Flood Risk aspect chapter informs the groundwater aspect chapter (and vice versa), appropriate cross-references should be included.
4.17.4	Paragraph 22.4.1	Impacts to flood defences	This paragraph appears to be the first mention of 'impact to flood defences, most likely from within the tidal area (landfall)'. The baseline does not contain any information with regards to flood defences present that could be affected by the Proposed Development. The ES should clearly include in the baseline, a description of existing (and where relevant, proposed) flood defences that could be impacted by the Proposed Development.

ID	Ref	Other points	Inspectorate's comments
4.17.5	Paragraph 22.4.4	Climate change	As set out in the NPS EN-1 (Paragraph 4.8.6), the Applicant should take into account the potential impacts of climate change using the latest UK Climate Projections (UKCP). The UKCP18 projections have recently been published. Effort should be made to agree the climate change model and future flood risk allowance baseline with relevant consultation bodies.
4.17.6	N/A	Main river crossings	The Scoping Report does not clarify the locations where the cable may cross below or run in close proximity to a main river. This should be detailed in the ES. Site-specific assessments for each location should also be undertaken to inform the cable crossing techniques at each main river and where significant effects may occur. Any mitigation and/or design measures relied upon for the purposes of the assessment e.g. either trenchless or open cut methods should be explained in the ES and appropriately secured. Effort should be sought to agree proposed mitigation and reinstatement measures with the relevant consultation bodies e.g. Environment Agency.
4.17.7	Paragraph 22.4.3	Flood Risk Assessment (FRA) – temporary works	The ES and FRA should assess likely significant impacts associated with temporary works, such as dewatering and working compounds in the flood plain.
4.17.8	N/A	Figures	The Scoping Report does not include figures to show the location of potential receptors or the flood maps for the area. The ES must include clear and appropriate figures to support the impact assessment, including those in support of any Flood Risk Assessment and Water Framework Directive (WFD) Assessment.
4.17.9	Appendix B, Paragraph 1.1.23	Environmental Permitting (England and Wales) Regulations 2016	The Scoping Report refers to outdated legislation: the Environmental Permitting (England and Wales) Regulations 2010 which has been superseded by the Environmental Permitting (England and Wales) Regulations 2016, which should be used when interpreting the

ID	Ref	Other points	Inspectorate's comments
			Environmental Permitting requirements for the Proposed Development in the ES.

4.18 Onshore UK: Heritage and Archaeology

(Scoping Report Part 3, Chapter 23)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.18.1	Paragraph 23.2.8 and Appendix C Table C1	Cable Route and Landfall - Impact on the setting of above ground designated heritage assets at the landfall and throughout the cable route during construction	The Inspectorate agrees that given the nature of the Proposed Development that impacts on the settings of above ground designated heritage assets along the cable route can be scoped out of the ES. Due to the proximity of the landfall and to the scheduled ancient monument of Fort Cumberland and listed buildings, together with the limited information provided within the Scoping Report with regards to the nature of the works at the landfall site, the Inspectorate does not agree to scope out impacts on the setting of above ground heritage assets at the landfall. The ES should include an assessment of any significant effects on heritage receptors that are likely to occur.
4.18.2	Appendix C Table C1	Operational impacts to buried archaeological remains	The Inspectorate agrees that given the nature of the Proposed Development impacts to buried archaeological remains during operation can be scoped out of the ES.
4.18.3	Appendix C Table C1	Operational impacts on the setting of above ground designated heritage assets at the landfall and throughout cable route	The Inspectorate agrees that given the nature of the Proposed Development, impacts during operation on the settings of above ground designated heritage assets at the landfall and throughout the cable route can be scoped out of the ES.
4.18.4	'Insignificant Effects' after Paragraph 23.3.4	Cumulative effects in relation to the cable route and landfall	The Scoping Report does not make clear whether the Applicant intends to scope out an assessment of any cumulative impact to heritage and archaeological assets along the cable route and landfall and this matter is not included in Table C1 of Appendix C. The Inspectorate considers that cumulative effects on heritage and archaeological receptors that could be significantly affected by the

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			Proposed Development should be included in the ES.

ID	Ref	Other points	Inspectorate's comments
4.18.5	Paragraphs 23.2.67 and 23.2.2	Baseline - study area	It is noted that a ZTV is proposed for the assessment of impacts on above ground settings arising from the convertor station and that this has not yet been established for the Proposed Development. The impact assessment should ensure that the determination of baseline receptors is appropriately informed by the ZTV, and the study area/ZoI clearly justified. The study area for the assessment of the entire Proposed Development should also be based on the likely ZoI rather than an arbitrary distance.
4.18.6	Paragraph 23.4.7	Baseline – site inspection/surveys	The Inspectorate notes the intention to undertake a site walkover inspection at selected locations to inform the ES. The Inspectorate considers that the proposed baseline assessment at the landfall should be informed by a geophysical and geotechnical survey undertaken in accordance with recognised methods. The Applicant should seek to agree the scope and extent of such surveys with the relevant consultation body, including Hampshire County Archaeology/ Conservation Officers.
4.18.7	Paragraph 23.4.2	Baseline – data sources	It is noted that reference is made to obtaining desk based information from the principal source of Berkshire Historic Environmental Record (HER); however, the Inspectorate assumes this is a typographical error and that the Hampshire HER will be consulted to inform the ES, as subsequently referred to in Table 23.1.
4.18.8	N/A	Potential impacts – surface and	The Inspectorate considers that the ES should address impacts to

ID	Ref	Other points	Inspectorate's comments
		groundwater alterations	drainage and groundwater movement where these may result in significant impacts to heritage assets and below ground archaeological remains. Cross reference should be made to the relevant assessments (eg Ground Conditions and Water Resources and Flood Risk chapters).

4.19 Onshore UK: Traffic and Transport

(Scoping Report Part 3, Chapter 24)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.19.1	Table C1	Employees during the operational stage of the Proposed Development	The Inspectorate agrees that due to the likely low number of staff to be employed at the operational proposed converter station (as described at paragraph 2.2.86 of the Scoping Report), this matter can be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.19.2	Paragraph 24.4.8	Scope of the assessment	The Inspectorate notes that further discussions with the relevant highways authorities are proposed to confirm the scope of the traffic and transport assessment. The ES/accompanying appendices should clearly document in a table any consultations undertaken with regards to the scope of the proposed assessment, including particular matters agreed/not agreed. Where the scope differs from that requested by the relevant highways authority, the ES should provide justification for the alternative approach.
4.19.3	N/A	Strategic Road Network	The ES should assess impacts to the Strategic Road Network (SRN), including the M27, A3(M) and A3, where significant effects could occur. The ES should also clearly identify where the Proposed Development could interact with existing SRN assets, such as going over or under the SRN.
4.19.4	N/A	Figures	The ES should include supporting figures of appropriate size and scale to present the affected road network and the receptors considered within the impact assessment.

4.20 Onshore UK: Air Quality

(Scoping Report Part 3, Chapter 25)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.20.1	Paragraph 25.3.1 and Table C1 of Appendix C	Operational traffic emissions	On the basis of the information in the Scoping Report, the Inspectorate agrees that operational traffic emissions from the Proposed Development can be scoped out of the ES.
4.20.2	Paragraph 25.3.2	Quantitative assessment of construction traffic exhaust gas emissions	The Inspectorate notes that the Applicant intends to undertake qualitative assessments of effects during construction but that a quantitative assessment of potential impacts to local air quality from construction exhaust gas emissions is not proposed on the basis that the additional traffic generated in not expected to be above the indicative threshold presented in Environmental Protection UK and Institute for Air Quality (EPUK/IAQM) guidance documents either inside or outside the Air Quality Management Area (AQMA). On the basis of the numbers of additional traffic generated not exceeding the indicative threshold presented in EPUK/IAQM guidance documents either inside or outside the Air Quality Management Area (AQMA) the Inspectorate agrees that this assessment can be scoped out. However, if during the EIA process that construction numbers are determined likely to give rise to a significant effect then a quantitative assessment should be undertaken.

ID	Ref	Other points	Inspectorate's comments
4.20.3	N/A	N/A	N/A

4.21 Onshore UK: Noise and Vibration

(Scoping Report Part 3, Chapter 26)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.21.1	Paragraph 26.3.2 and Table C1 of Appendix C	Operational noise of the cable route	The Inspectorate agrees that this is likely to be negligible and can therefore be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.21.2	Section 26.2. and 26.3	Baseline and potential impacts – ecological receptors	Beyond reference at paragraphs 26.2.1 and 26.2.3 to 'residential receptors', the Scoping Report does not identify the receptors to be considered in the noise impact assessment. There is no reference to other receptor types that may be sensitive to noise and vibration, such as ecological receptors. The ES must include an assessment of noise and vibration impacts on ecological receptors, where significant effects are likely to occur. The noise assessment should cross-refer to the findings of other relevant aspect chapters, such as Ecology (with Arboriculture) and Intertidal and Marine Ornithology. The ES should clearly explain any assumptions made with regard to the assessment of likely significant effects arising from noise and vibration on sensitive ecological receptors.
4.21.3	N/A	Study Area	No specific study area has been stated in the Scoping Report. The Inspectorate does however, note that the Scoping Report confirms that the exact scope of the noise and vibration assessment will be discussed and ideally agreed with the Environmental Health Officers at

ID	Ref	Other points	Inspectorate's comments
			East Hampshire District Council (EHDC) and Hampshire County Council (HCC). The Applicant should ensure that the selected study area is sufficient to encompass all sensitive receptors which may experience significant effects from the Proposed Development, including sensitive ecological receptors (as discussed at point 4.21.2 of the Opinion above).
4.21.4	Paragraph 26.4.1	Noise data	The results of the completed surveys regarding the existing noise climate should be fully reported in the ES and/or in an associated Technical Appendix. Effort should be made to agree the noise monitoring locations with relevant consultation bodies e.g. EHDC and HCC.
4.21.5	Paragraph 26.4.1	Assessment methodology	The Inspectorate notes the intention to follow the assessment methodology set out in Chapter 4 to assess the significant of effects. The ES should clearly present the assessment methodologies applied and how significant effects as a result of changes in noise/vibration levels have been determined.
4.21.6	Paragraph 26.4.5	Mitigation measures	Any proposed mitigation measures for noise and vibration impacts should be detailed in the ES, including their method of delivery, such as through a Construction Environmental Management Plan (CEMP). The CEMP and mitigation measures, as appropriate, must be secured in the dDCO.

4.22 Onshore UK: Socio-Economics

(Scoping Report Part 3, Chapter 27)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.22.1	Paragraph 27.3.1	Private or community assets (excluding agricultural land)	Paragraph 27.3.1 of the Scoping Report states that there are no private assets beyond agricultural land (to be considered in the Soils and Land Use aspect chapter) and therefore, effects related to private or community assets will not be considered further. However, it is noted that paragraph 27.3.5 identifies "*changes in community severance and accessibility to private and community resources*" as a likely significant effect to be considered in the impact assessment. In the absence of clarity the Inspectorate cannot agree to scope this matter out at this stage. The ES should clearly identify impacts to private or community assets, where likely significant effects could occur.
4.22.2	Paragraph 27.3.2	Site security during construction/ crime	The Inspectorate agrees that effects in relation to crime arising during construction can be scoped out of the ES as significant effects are not likely to occur.
4.22.3	Paragraphs 27.3.3 and 27.3.5	Community severance	The Scoping Report contains very limited information with regards to the timings of likely disruption and the likely community receptors that could be affected by community severance during the construction of the Proposed Development. The Scoping Report also appears to identify the same matter as a 'likely significant effect' at paragraph 27.3.5. In the absence of sufficient evidence to support the statements made, the Inspectorate cannot agree to scope this matter out. The ES should include an assessment of community severance on sensitive receptors, where likely significant effects could occur.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.22.4	Paragraph 27.3.4 and Appendix C Table C1	Generation of direct, indirect and induced employment opportunities during the operational stage	Given the nature of the Proposed Development and the information provided within the Scoping Report, the Inspectorate agrees that this matter can be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.22.5	N/A	Baseline - study area	The ES should clearly define and justify the study area applied to the assessment. It is noted that the Applicant intends to apply Design Manual for Roads and Bridges (DMRB) Vol 11, Section 3, Part 8 guidance to the assessment of disruption and changes in amenity value for users of recreational/open space. The Inspectorate notes that DMRB Vol 11, Section 3, Part 8, Paragraph 2.2 states that community facilities 'and their catchment areas' should be addressed by such an assessment. The ES should clearly explain the selected study area.
4.22.6	Section 27.3 and 27.4	Baseline – Community receptors	It is noted in this aspect chapter that reference is made to community assets, community resources, and community facilities. It is unclear whether these are referring to one and the same. The ES should make this clear and use consistent terminology. The Scoping Report does not describe the community (including amenity) receptors in any detail and no figures have been provided to show their location. The ES should clearly identify and justify the applicable receptors, together with the study area. The presentation of receptors and study areas on figures accompanying the ES should also be provided.
4.22.7	Paragraph	Impacts - Construction worker	The Scoping Report refers to potentially significant increase in workers

ID	Ref	Other points	Inspectorate's comments
	27.4.4	numbers	relocating to the area. The ES should provide information on the likely number of workers and the assumptions made in the impact assessment.
4.22.8	Paragraph 27.4.8	Impacts – disruption and changes in amenity value	The Scoping Report acknowledges that change to amenity value is concerned with changes in the degree and duration of a receptors exposure to traffic (fear/intimidation), noise, dirt and air quality. It goes on to state that air quality and noise and vibration will be considered elsewhere in the ES and will not be assessed within the Socio-economic chapter of the ES. Whilst the Inspectorate acknowledges that this will be the case, the Socio-economic chapter should in its assessment of impacts on amenity include appropriate cross-references the assessments presented elsewhere in the ES and consider the combination of these intra-related effects arising from the Proposed Development.
4.22.9	N/A	Assessment criteria	It is unclear whether the different matters to be assessed within the Socio-economic aspect chapter will follow the same impact assessment methodology approach. The ES should clearly state the assessment criteria which the effects are to be assessed against and the value of receptors identified.

4.23 Onshore UK: Human Health

(Scoping Report Part 3, Chapter 28)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.23.1	Table 28.7	Health determinants to be scoped out (for all of Proposed Development unless otherwise stated): • Noise (cable route/landfall) • Collisions • Social isolation • Climate change • Surface access (convertor station) • Illicit drug use • Smoking habit • Water quality • Land use (cable route/landfall) • Hazards • Public transport (convertor station) • Wealth distribution • Community participation	The Inspectorate notes that these health determinants are proposed to be scoped out of the health assessment. The Inspectorate agrees that these matters can be scoped out of the ES given the nature of the Proposed Development and the information provided within the Scoping Report. Those matters identified within Table 28.7 that the Inspectorate does not agree to scope out are described separately below.

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		• Crime/antisocial behaviour • Income • Childhood development • Level of income	
4.23.2	Table 28.7	Air quality	Whilst the Inspectorate acknowledges that an assessment of impacts associated with construction (including dust and vehicle emissions) on sensitive receptors are to be included in the Air Quality aspect chapter, the ES should ensure that it relates the assessment of air quality to the assessment on human health. It is not necessary to duplicate assessments but appropriate cross-referencing between aspect chapters should be included.
4.23.3	Table 28.7	Water quality	Effects of water quality are to be included elsewhere in the ES; however, effects on human health associated with changes to water quality should be referenced in the Human Health aspect chapter, where significant effects could occur.
4.23.4	Table 28.7	Exercise and physical activity and access to nature	The Proposed Development may impact on Public Rights of Way (PRoW), cycle paths and open space and therefore, the Inspectorate cannot agree to scope this matter out, as there is the potential to reduce access to routes promoting active travel and physical activity. This matter should be included in the ES, where significant effects are likely to occur. Appropriate cross-references to other aspect chapters should also be included in the Human Health aspect chapter (eg Traffic and Transport, Socio-economics, and Landscape and Visual).
4.23.5	Table 28.7	Access to healthcare	Chapter 27: Socio-economics refers to a significant number of construction workers for the Proposed Development and the potential demand on local services including healthcare. The ES should include an assessment of effects on healthcare, where likely significant effects

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			could occur. Cross-references between the Socio-economics chapter and this aspect chapter should be included.
4.23.6	Table 28.7	Housing	As per comments above regarding 'access to healthcare', given the statement that significant numbers of construction workers could arise as a result of the Proposed Development, the ES should assess the impact on local rented accommodation demand and affordability, where likely significant effects could arise.

ID	Ref	Other points	Inspectorate's comments
4.23.7	Paragraphs 28.4.4 and 28.4.5	Study area	Although the Scoping Report defines the study area this should be provided with justification in the ES.
4.23.8	Paragraph 28.4.6	Receptors – vulnerable groups	It is noted that health impacts will be assessed on the vulnerable groups listed at paragraph 28.4.6 only. The ES should provide justification in support of this approach.
4.23.9	Paragraph 28.4.7	Evidence	The baseline population health data should have reference to the Public Health Outcomes Framework.
4.23.10	Table 28.9	Assessment methodology – significance	The Inspectorate notes the definitions of significance to be applied to the impact assessment. The ES should make clear whether the intention is to conclude that a certain level of significance and above is deemed to be significant for the purposes of satisfying the EIA Regulations (eg major/moderate and major (and potentially moderate), as per Scoping Report Chapter 4). Should this aspect chapter assessment methodology for significance differ from that to be included in Chapter 4, this should be clarified in the aspect chapter.

ID	Ref	Other points	Inspectorate's comments
4.23.11	N/A	Cross referencing to other aspect chapters	The Scoping Report does not cross-refer to any other relevant aspect chapters where impacts could result on human health (eg noise, air quality, water quality, land use, landscape). The ES should include appropriate cross-references to relevant assessments presented elsewhere in the ES.

4.24 Onshore UK: Waste and Material Resources

(Scoping Report Part 3, Chapter 29)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.24.1	Paragraph 29.3.2 and Appendix C Table C1	Lifecycle assessment of materials and arisings and waste	The Inspectorate agrees that having had regard to the characteristics and nature of the Proposed Development a lifecycle assessment of materials and arisings and waste can be scoped out of the ES.
4.24.2	Paragraph 29.3.3 and Appendix C Table C1	Materials consumption, site arisings and waste production beyond the first full year of operation	The Scoping Report provides no information on the likely type and volume of materials and waste to be produced by the Proposed Development beyond the first year of operation; however, the Inspectorate accepts that material consumption and waste generation during operation beyond the first year is unlikely to generate significant effects and is content that this matter can be scoped out of the assessment.

ID	Ref	Other points	Inspectorate's comments
4.24.3	Table 29.6	Assessment methodology – assessment of significance	The Inspectorate notes the intention to define significance using that presented in Table 29.6. The levels of significance are different to that presented in Chapter 4 to the Scoping Report. In that chapter major and major/moderate impacts will be deemed significant. The Waste and Material Resources aspect chapter of the ES should define what level of impact is deemed to be significant, where this differs from the overarching assessment methodology.
4.24.4	Paragraph 29.4.20	Mitigation – management plans	The Inspectorate notes reference to the implementation of a CEMP, Materials Management Plan (MMP) and Site Waste Management Plan (SWMP). Where the ES relies upon mitigation measures which would

ID	Ref	Other points	Inspectorate's comments
			be secured through management plans, it should be demonstrated (with clear cross-referencing) where each measure is set out in the management plan. The Applicant should provide draft copies of management plan documents appended to the ES and/or demonstrate how they will be secured.
4.24.5	N/A	Waste types – inert, hazardous, and non-hazardous	It is noted that the types and volumes of waste is not yet known. The ES should specify this information in the assessment. Appropriate cross-referencing to the Ground Conditions aspect chapter should be included, noting the potential for contaminated land within the vicinity of the Proposed Development.

4.25 Onshore UK: Carbon and Climate Change

(Scoping Report Part 3, Chapter 30)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.25.1	Table 30.5 and Appendix C Table C1	Construction - land use, land use change and forestry	The Inspectorate does not agree to scope this matter out on the basis that the Scoping Report does not confirm the area of land use likely to be required, particularly for the convertor station and connection to the existing sub-station at Lovedean and also whether this would include forestry/woodland habitat. The ES should consider emissions associated with the change in land use and loss of forestry, where significant effects could occur.
4.25.2	Paragraph 30.3.12, Table 30.5 and Appendix C Table C1	Decommissioning - deconstruction	The effects of climate change during the decommissioning of the Proposed Development have been excluded due to uncertainty of requirements and processes at the Proposed Development's end of life. The Inspectorate agrees that decommissioning can be scoped out of the assessment on the basis that decommissioning activities are unknown at this stage. The Applicant's attention is, however, directed to the comments in Section 2.3 (paragraph 2.3.7) of this Opinion and the need to provide more information with regards to the design life of the Proposed Development and likely decommissioning activities, including timescales. Should further detail become available regarding decommissioning to enable an assessment of climate change at this life cycle stage, an assessment should be presented in the ES where significant effects are considered to be likely.

ID	Ref	Other points	Inspectorate's comments
4.25.3	Paragraph 30.2.7	Assessment – Climate projections	The Inspectorate notes the application of the UKCP09 climate projections within the Scoping Report. The ES should take into account the potential impacts of climate change using the latest UKCP, which are the UKCP18 projections as recently published.
4.25.4	Table 30.10	Assessment methodology – assessment of significance	The Inspectorate notes the climate risk assessment matrix presented in Table 30.10. The Carbon and Climate Change aspect chapter of the ES should define what level of impact is deemed to be significant, where this differs from the overarching assessment methodology.

4.26 Onshore UK: Electric and Magnetic Fields

(Scoping Report Part 3, Chapter 31)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.26.1	N/A	N/A	No matters are proposed to be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.26.2	N/A	N/A	No comments.

4.27 Onshore UK: Onshore Cumulative Effects

(Scoping Report Part 3, Chapter 32)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
4.27.1	N/A	N/A	No matters are proposed to be scoped out of the ES.

ID	Ref	Other points	Inspectorate's comments
4.27.2	Paragraph 32.1.5	Study area	A study area of 1km surrounding the Proposed Development is proposed; however, no justification has been provided. The Inspectorate considers that projects and plans beyond this distance could give rise to cumulative effects on the same receptors. The ES must clearly state and justify the study area applied. Effort should be made to agree the scope of the cumulative assessment with relevant consultation bodies.
4.27.3	N/A	Methodology and limitations	The Scoping Report contains limited detail regarding the methodology to be applied to the cumulative effects assessment and no reference to likely limitations. The ES should describe the assessment methodology applied and any limitations to the selection and assessment process.

5. INFORMATION SOURCES

5.0.1 The Inspectorate's National Infrastructure Planning website includes links to a range of advice regarding the making of applications and environmental procedures, these include:

- Pre-application prospectus[3]
- Planning Inspectorate advice notes[4]:
  - Advice Note Three: EIA Notification and Consultation;
  - Advice Note Four: Section 52: Obtaining information about interests in land (Planning Act 2008);
  - Advice Note Five: Section 53: Rights of Entry (Planning Act 2008);
  - Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements;
  - Advice Note Nine: Using the 'Rochdale Envelope';
  - Advice Note Ten: Habitat Regulations Assessment relevant to nationally significant infrastructure projects (includes discussion of Evidence Plan process);
  - Advice Note Twelve: Transboundary Impacts;
  - Advice Note Seventeen: Cumulative Effects Assessment; and
  - Advice Note Eighteen: The Water Framework Directive.

5.0.2 Applicants are also advised to review the list of information required to be submitted within an application for Development as set out in The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009.

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[3] The Planning Inspectorate's pre-application services for applicants. Available from: https://infrastructure.planninginspectorate.gov.uk/application-process/pre-application-service-for-applicants/

[4] The Planning Inspectorate's series of advice notes in relation to the Planning Act 2008 process. Available from: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/

APPENDIX 1: CONSULTATION BODIES FORMALLY CONSULTED

TABLE A1: PRESCRIBED CONSULTATION BODIES[5]

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Health and Safety Executive	Health and Safety Executive
The National Health Service Commissioning Board	NHS England
The relevant Clinical Commissioning Group	NHS South Eastern Hampshire CCG
	NHS West Hampshire CCG
	NHS Portsmouth CCG
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	Historic England - London and the South East offices
The Historic Buildings and Monuments Commission for England (OFFSHORE ONLY)	Historic England
The relevant fire and rescue authority	Hampshire Fire and Rescue Service
The relevant police and crime commissioner	Hampshire Police and Crime Commissioners
The relevant parish council(s) or, where the application relates to land [in] Wales or Scotland, the relevant community council	Horndean Parish Council
	Southwick and Widley Parish Council
	Denmead Parish Council
The Environment Agency	The Environment Agency - Solent and South Downs
The Joint Nature Conservation Committee	Joint Nature Conservation Committee
The Maritime and Coastguard Agency	Maritime & Coastguard Agency

[5] Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the 'APFP Regulations')

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Maritime and Coastguard Agency - Regional Office	The Maritime and Coastguard Agency - National Maritime Operation Centre
The Marine Management Organisation	Marine Management Organisation (MMO)
The Relevant Highways Authority	Hampshire County Council Highways Authority
The relevant strategic highways company	Highways England - South East
Trinity House	Trinity House
Public Health England, an executive agency of the Department of Health	Public Health England
The Crown Estate Commissioners	The Crown Estate
The Forestry Commission	Forestry Commission - South East and London
The Secretary of State for Defence	Ministry of Defence

TABLE A2: RELEVANT STATUTORY UNDERTAKERS[6]

STATUTORY UNDERTAKER	ORGANISATION
The relevant Clinical Commissioning Group	NHS South Eastern Hampshire CCG
	NHS West Hampshire CCG
	NHS Portsmouth CCG
The National Health Service Commissioning Board	NHS England
The relevant NHS Trust	St James Hospital
The relevant NHS Foundation Trust	South Central Ambulance Service NHS

[6] 'Statutory Undertaker' is defined in the APFP Regulations as having the same meaning as in Section 127 of the Planning Act 2008 (PA2008)

STATUTORY UNDERTAKER	**ORGANISATION**
	Foundation Trust
Railways	Network Rail Infrastructure Ltd
	Highways England Historical Railways Estate
Dock and Harbour Authority	Portsmouth International Port
	Langstone Harbour Board
	ABP Southampton
Universal Service Provider	Royal Mail Group
Homes and Communities Agency	Homes England
The relevant Environment Agency	Environment Agency - Solent and South Downs
The relevant water and sewage undertaker	Portsmouth Water
	Southern Water
The relevant public gas transporter	Cadent Gas Limited
	Energetics Gas Limited
	Energy Assets Pipelines Limited
	ES Pipelines Ltd
	ESP Connections Ltd
	ESP Networks Ltd
	ESP Pipelines Ltd
	Fulcrum Pipelines Limited
	GTC Pipelines Limited
	Harlaxton Gas Networks Limited
	Independent Pipelines Limited
	Indigo Pipelines Limited

STATUTORY UNDERTAKER	ORGANISATION
	Murphy Gas Networks limited
	Quadrant Pipelines Limited
	National Grid Gas Plc
	Scotland Gas Networks Plc
	Southern Gas Networks Plc
The relevant electricity distributor with CPO Powers	Eclipse Power Network
	Energetics Electricity Limited
	Energy Assets Networks Limited
	Energy Assets Power Networks Limited
	ESP Electricity Limited
	Fulcrum Electricity Assets Limited
	G2 Energy IDNO Limited
	Harlaxton Energy Networks Limited
	Independent Power Networks Limited
	Leep Electricity Networks Limited
	Murphy Power Distribution Limited
	The Electricity Network Company Limited
	UK Power Distribution Limited
	Utility Assets Limited
	Vattenfall Networks Limited
	Utility Distribution Networks Limited
	Southern Electric Power Distribution Plc
The relevant electricity transmitter with CPO Powers	National Grid Electricity Transmission Plc

STATUTORY UNDERTAKER	ORGANISATION
The relevant electricity interconnector with CPO Powers	Aquind Limited
	National Grid IFA 2 Limited

TABLE A3: SECTION 43 CONSULTEES (FOR THE PURPOSES OF SECTION 42(1)(B))[7]

LOCAL AUTHORITY[8]
Hampshire County Council
South Downs National Park Authority
Fareham Borough Council
Gosport Borough Council
Hart District Council
Test Valley District Council
Eastleigh Borough Council
Basingstoke and Deane District Council
Chichester District Council
Waverley District Council
Portsmouth City Council
Havant Borough Council
Winchester District Council
East Hampshire District Council

[7] Sections 43 and 42(B) of the PA2008

[8] As defined in Section 43(3) of the PA2008

LOCAL AUTHORITY[8]
Dorset County Council
West Sussex County Council
Surrey County Council
Southampton City Council
Bracknell Forest Borough Council
Wokingham Borough Council
Wiltshire County Council
West Berkshire Council

TABLE A4: NON-PRESCRIBED CONSULTATION BODIES

ORGANISATION
States of Guernsey
Royal National Lifeboat Institution

APPENDIX 2: RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES

Consultation bodies who replied by the statutory deadline:

ABP Southampton
Bracknell Forest Council
East Hampshire District Council
Environment Agency
ES Pipelines Ltd
Fareham Borough Council
Forestry Commission
Gosport Borough Council
Hampshire County Council
Harlaxton Energy Networks Ltd
Harlaxton Gas Networks Ltd
Hart District Council
Havant Borough Council
Health and Safety Executive
Highways England
Historic England
Joint Nature Conservation Committee
Langstone Harbour Board
Marine Management Organisation
Maritime and Coastguard Agency
Ministry of Defence
National Grid Electricity and Gas Transmission

Natural England
Public Health England
Royal Mail
Southampton City Council
Southern Water
Trinity House
Winchester City Council

From:	Sue Simmonite
To:	Aquind Interconnector
Cc:	Mike Toogood
Subject:	Application by Aquind Limited (the Applicant) for an Order granting Development Consent for the Aquind Interconnector
Date:	14 November 2018 12:36:38

Your Ref: EN020022-000030

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11
Application by Aquind Limited (the Applicant) for an Order granting Development Consent for the Aquind Interconnector (the Proposed Development)
Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

Dear Marie,

Thank you for your letter dated 7 November regarding the above proposed development.

Associated British Ports is the Statutory Harbour Authority, Competent Harbour Authority, Vessel Traffic Services Authority and Local Lighthouse Authority for the Port of Southampton. The Port is one the UK's main gateway ports with the value of goods exported through the port exceeding £70 billion per annum. Safeguarding of the main navigational route to the port is, therefore, in the national interest.

We are grateful for the notification from The Planning Inspectorate concerning the status of this application. We agree that we should be considered as a consultation body under the Regulations and consequently, we have reviewed the Applicant's scoping report. I can confirm that we have no comments or suggestions on the proposed scope of environmental assessment work identified in this document.

In our view, the Applicant should continue to engage with us on the progress and conclusions of the Navigational Risk Assessment – this can be undertaken through the Nab VTS Users Group of which the Applicant is aware.

Finally, our contact for this project should be identified as Mike Toogood, the Port's Harbour Control (VTS) Manager michael.toogood@abports.co.uk. Please also note that our correct postcode should be SO14 3QN rather than SO1 1XQ for any future written correspondence.

Yours sincerely

Sue Simmonite

Sue Simmonite | Development & Environment Manager
Associated British Ports | Port of Southampton | Ocean Gate | Atlantic Way | Southampton | SO14 3QN
Mob: 07713 350 171 | www.abports.co.uk

Bracknell Forest Council

The Planning Inspectorate
FAO Marie Shoesmith
The Planning Inspectorate
Major Casework Directorate
Temple Quay House
2 The Square
Bristol
BS1 6PN

9th November 2018

Consultation Response

Dear Sir/Madam

Town and Country Planning Act 1990

REFERENCE:	18/01086/OBS/OBSZ
DESCRIPTION:	Request for observations on a scoping opinion under Regulations 10 and 11 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
LOCATION:	Aquind Ltd Aquind Interconnector
CASE OFFICER:	Trevor Yerworth, direct line 01344 351182

I refer to your consultation on the above application received on 31st October 2018. My comments are;

01. Thank you for consulting Bracknell Forest Council (BFC) on a Scoping Report prepared for AQUIND Ltd. In respect of a proposal to construct an electricity interconnector between France and UK including a new subsea and underground High Voltage Direct Current power cable transmission link between Normandie in France and the south coast of England, a converter station at Lovedean, Hampshire and a HVAC cable route from the existing National Grid substation at Lovedean to the AQUIND converter station.

BFC does not wish to comment on this Scoping Report.

Should you wish to discuss this matter further, please do not hesitate to contact me.

Yours faithfully

Trevor Yerworth

Principal Planning Officer
Planning Transport and Countryside
email trevor.yerworth@bracknell-forest.gov.uk
Direct Line 01344 351182

PLACE PLANNING AND REGENERATION

Bracknell Forest Borough Council, Time Square, Market Street, Bracknell, Berkshire RG12 1JD
T: 01344 352000 Minicom: 01344 352045 www.bracknell-forest.gov.uk

From:	Holmes, Jon
To:	Aquind Interconnector
Subject:	Scoping Request Consultation - EN020022-000030
Date:	09 November 2018 10:28:02
Attachments:	Lovedean Scoping Opinion.docx

Dear Marie Shoesmith,

Scoping consultation – Aquind Ltd Interconnector – Ref: EN020022-000030

Thank you for the consultation in respect of this Scoping Opinion.

East Hampshire District Council formed a Scoping Opinion in March this year (attached) and that now forms our response to the Planning Inspectorate as to the information we consider should be provided in the ES. There are not considered to be any changes.

Yours sincerely

Jon Holmes
Principal Planning Officer
East Hampshire District Council
Penns Place Petersfield GU31 4EX
T. 01730 234243
W. www.easthants.gov.uk

PROPOSAL	**Request for Scoping Opinion - Installation of HVDC converter station**
LOCATION:	Land south and West of Lovedean Electricity Sub Station, Broadway Lane, Lovedean, Waterlooville
REFERENCE NO:	57524/002
APPLICANT:	WSP
CONSULTATION EXPIRY DATE:	23 March 2018
APPLICATION EXPIRY DATE:	29 March 2018

SUMMARY RECOMMENDATION: ENVIRONMENTAL IMPACT ASSESSMENT REQUIRED

Site and Development

The development proposed for which a Scoping Opinion from this Authority is sought is part of a project proposing an Interconnector providing a High Voltage Direct Current (HVDC) power cable transmission link between France and England. The project has a nominal rating of 2,000MW intended to significantly increase cross-border capacity between the UK and France. The project would comprise HVDC subsea and underground cables, linking to converter stations in the UK and France; the converter stations would connect to existing sub-stations by underground High Voltage Alternating Current (HVAC) cables.

Within the East Hampshire District Council (EHDC) area, the project would comprise the underground HVDC and HVAC cables and the converter station. At this stage, the proposal includes reference to two converter stations as they are presented as options (referred to as Option A and Option B) and it is understood the applicants are currently undertaking work to finalise which of the options would be taken forward. Option A is within the EHDC area and option B is within the adjoining Winchester City Council area. This Scoping Opinion considers the likely impacts of the cable route and the converter station within the EHDC area.

The development does not constitute either Schedule 1 or Schedule 2 Development as set out in the Environmental Impact Assessment (EIA) but due to the environmental and human sensitivities in the area, the applicant is voluntarily proposing to submit an Environmental Statement with a subsequent planning application.

Option A is agricultural land in a generally open, rural landscape situated approximately 400m to the south of Lovedean electrical substation and approximately 300m west of Boundary Lane. The site is approximately 1.2km north west of Lovedean/Horndean and 1.6km north east of Denmead. The boundary of the South Downs National Park is approximately 500m to the north. Public footpaths run east-west along the southern and northern edges of the site. The boundary of East Hampshire and Winchester City Councils is to the immediate west of Option A. The area is within a Groundwater Source Protection Zone.

Option B is situated on agricultural land approximately 200m west of Lovedean electricity substation. The substation is contained by trees in the landscape, including Crabdens Copse, which is a small woodland and a designated Site of Importance for Nature Conservation.

A new vehicular access would be necessary from either Broadway Lane or Old Mill Lane dependent upon which option is pursued. Once operational traffic would be limited to maintenance traffic only. Some ground levelling 'cut and fill' would be necessitated due to the topography of the site. Mitigation landscape planting would be provided to screen the building in the landscape.

Scoping of the Environment Statement

The proposed scope for the Environmental Statement, as set out in 3.8 of the Scoping Report, is considered to be acceptable by the Local Planning Authority.

General comments

Planning policy

The Scoping Report identifies the relevant national and local planning policy and guidance framework against which a subsequent planning application will be considered. There should be analysis of the proposal against the relevant planning policies demonstrating how the proposal is policy compliant. The South Downs National Park Authority is progressing its Local Plan and will submit the 'Submission' version of the Local Plan by the end of April 2018.

Cumulative effects

The Assessment of Cumulative Effects (3.11) are noted. One scheme that should be included as part of a cumulative assessment in the ES is the energy storage system (our planning ref: 57524/001 and included at the top of table 3.4) now has planning permission. This will have implications for construction traffic and particularly on landscape impact, including landscape capacity. It will also likely have cumulative implications for amenity of nearby residents through noise, outlook, electric and magnetic fields, ecological impacts and ground water. Cumulative effects should also include the solar farm at Day Lane, Lovedean.

Design

It is understood that a hybrid application is proposed with details of the design of the converter building 'reserved' for detailed consideration at a later stage, but that details of scale will be included in the initial application. The absence of details of design make a full assessment of the impact on the landscape more difficult even where indications of scale are provided. It also makes an assessment of how the building/infrastructure would sit within the site and how any material arising from the development would be used to create new screening landform's (as mentioned at 8.3.15). Absence of landscaping details also has the potential to undermine the Landscape and Visual Impact Assessment.

Consideration of alternatives

In accordance with Schedule 4 of the EIA Regulations, it is rightly stated that the ES will contain reference to alternatives. Reference is made at (3.10.2) to a summary being provided in the ES of reasons for the selection of the final development design and a description of design alternatives. This is welcome but it rather underplays the need for fully evidenced reasoning for site selection and reasonable alternative sites. It is understood that the Lovedean substation offers a technically available connection option in terms of a strategic location in the south of England, but the option sites as presented comprise generally open countryside on elevated ground in close proximity to the South Downs National Park and within a Groundwater Source Protection Zone. Evidence should be submitted demonstrating what alternative sites for the converter have been considered that may have a less sensitive impact on the environment, particularly landscape and visual impacts. This issue is particularly important in relation to the setting of the South Downs National Park.

It is understood a position close to the substation is required so as to reduce the length of AC cables between the converter and the substation (due to efficiency and trench requirements of DC cables), however, similar systems at Daedalus (Fareham) and the FAB Link at east Devon comprise much greater lengths of AC cables (approximately 5km in the case of the FAB Link) and that raises the question of whether alternatives further south of Lovedean may be more suitable.

Traffic and Transport

As outlined in section 5 of the Scoping Report a Transport Assessment/Statement will be required to support an application with the main environmental impacts arising during the construction phase. Key routes to the proposed Lovedean site have been identified, although further details regarding the routes will need to be provided together with full details of construction traffic. The cable routing is shown and outlined in paragraph 5.1.6 this will need to be discussed with the Highway Authority in more detail. Information regarding cable laying proposals, carriageway widths required and appropriateness of routes should be provided to support any application. Consideration must also be given to committed development in the area and measures taken to ensure service information and highway layout is up-to-date.

The Scoping Report appropriately sets out the areas in which the ES should consider impacts and it is noted that discussions are on-going with the County Highways Office in respect of potential mitigation and these should be developed and incorporated in the ES.

Air Quality

No further comments to add.

Noise and Vibration

The Scoping Report is considered to adequately address matters relating to noise and vibration impacts, which should be incorporated in the ES. Please note that noise and vibration implications should also be assessed in terms of ecologically sensitive receptors (see below).

Landscape and visual impacts

The Scoping Report correctly identifies the national, county level and local landscape character assessments and the main receptors are agreed. A detailed baseline needs to be carried out as part of the LVIA. This should be robust enough to enable it to guide constraints and opportunities for the site and steer the design and appropriate mitigation/enhancement approaches. The SDNPA recommend that the baseline study responds to the site's location close to the National Park boundary and clearly explores, using evidence, how the site contributes to the setting of the National Park, both in visual and landscape character terms. The inclusion of the South Downs Integrated Landscape Character Assessment (2011) is supported as part of the baseline evidence. Additionally, the following evidence should also be considered in order to inform the baseline assessment:

- Historic Evidence - maps, historic landscape characterisation (Hampshire Historic Landscape Characterisation 2013)
- South Downs National Park Viewshed Characterisation and Analysis (2015)
- South Downs National Park Tranquillity Study (2017)
- South Downs Green Infrastructure Framework

Table 8.1 sets out the issues to be scoped in / out of the LVIA. It proposes to scope out visual receptors beyond 3km of the site boundary, and this should be scoped in. It is noted work is still ongoing to determine the Zone of Theoretical Visibility (ZTV) and this should be used to inform receptor points that are beyond 3km but which may be sensitive to change. It is noted (8.3.5) that it is intended to include three sites beyond the 3km zone (Old Winchester Hill Downs, Windmill Hill and Port Down Hill), however, there may be other locations that should be incorporated in the LVIA rather than being scoped out by a more arbitrary 3km zone. Winchester Hill is a Scheduled Ancient Monument with the South Downs Way National Trail crossing it, so should be assessed in that context.

The LVIA should not be limited to assessment of the building in isolation, but should, as identified (Para 8.2.3), include all associated elements (eg lighting columns, perimeter fencing, access roads, signage). As mentioned above, there is a conflict here with the suitability of an outline application to suitably assess detailed elements such as fencing, roads, parking areas associated infrastructure and landscaping proposals against any generalised reference to it in the LVIA.

The method used to assess the likely significance of effects needs to be set out within the LVIA.

Lighting

As acknowledged in the Scoping Report, the South Downs National Park is a designated International Dark Skies Reserve. Reference is made to consideration of visual lighting impacts

within the Landscape and Visual chapter of the scoping report. However, it is recommended that a lighting assessment is also scoped in to consider potential environmental pollution impacts. Lighting impacts should be assessed in accordance with best practise guidelines from the Institute of Lighting Professionals and should consider the operational phase of development. Consideration should also be given to temporary effects during construction for example, light pollution from flood lighting of the construction site. The lighting assessment should detail the baseline conditions, and consider the cumulative impact from any existing/approved developments.

Landscape Mitigation

Landscape mitigation proposals must be informed by an Ecologist to ensure the landscaping has mutual benefits to enhance biodiversity and improves wildlife connectivity and networks and foraging corridors. Mitigation must also be informed by the LVIA.

Heritage and Archaeology

The Council's Conservation Officer supports the approach taken to address above ground heritage. In line with the advice in the NPPF, the Environmental Statement should contain a thorough assessment of the likely effects which the proposed development might have upon those elements which contribute to the significance of heritage assets, including non-designated heritage assets.

The assessment should clearly demonstrate that the extent of the proposed study area is of the appropriate size to ensure that all heritage assets likely to be affected by this development have been included and can be properly assessed. An arbitrary radial search is unlikely to accurately reflect the impact of the development on heritage assets in the wider area and a more tailored approach would be required, in particular with regards to assessing impacts to setting.

With regard to designated heritage assets, there needs to be an understanding of what makes these assets ‘special, Significance can be harmed or lost through alteration or destruction of the heritage asset, or through development within its setting, so it needs to be demonstrated how these proposals would impact on significance.

The assessment should also take account of the potential impact which associated development activities (such as construction, servicing, and maintenance) might have upon perceptions, understanding, and appreciation of any heritage assets in the area. The assessment should also consider the likelihood of alterations to drainage and ground water patterns that might lead to in-situ decomposition or destruction of below ground archaeological remains and deposits, and can also lead to subsidence of buildings and monuments.

Archaeology

The County Archaeologist comments that the site is in an area of good archaeological interest with evidence of a Bronze Age cemetery and a round barrow in the immediate area together with isolated Iron Age and medieval finds recorded in the vicinity. It is confirmed that the

archaeological Desk Based Assessment (DBA) should address the below ground archaeological potential of the site and the route of the cables. The DBA must set out (as proposed by the submitted Scoping Report) the nature of the archaeological potential and the impact of the proposals on that potential as well as a mitigation strategy.

Ecology

The cable route option through Denmead Meadows has been identified for its nature conservation value and is currently being considered by Natural England for designation as a SSSI and detailed consideration of this will be required.

Species information should include a data search from the Hampshire Biodiversity Information Centre. Potential impacts of species to consider should include direct habitat loss, habitat fragmentation, population isolation, disturbance (light, noise, visual), and hydrological impacts. The scope of the ecological assessments currently underway are considered appropriate. Where the ecologist considers that the very rare Bechstein's bat may occur (the woodlands around the upper sections of the route are within the potential 'Bechstein's zone' in both East Hampshire and Winchester districts), bat surveys should be suitable for that species i.e. the species is not likely to be detected without trapping surveys. Whilst it is a woodland specialist, surveys in the area over many years have shown that important roosts are often situated well-away from woodland blocks and that key commuting routes and foraging habitat take bats across seemingly unsuitable habitat.

Hazel dormouse is highly likely to occur within hedgerows in the agricultural land within the area, and there is a recent record from woodland immediately adjacent to the Lovedean substation. Dormice may be persisting at low densities and therefore a negative result from a tube survey should be treated with appropriate caution.

Noise and vibration impacts on ecologically sensitive receptors are to be included in the ES.

Natural England advise that the ES be supported by a Biodiversity Mitigation and Enhancement Plan (BMEP) to include measures for mitigating impacts on protected species and habitats and include biodiversity compensation measures for residual biodiversity losses that cannot be mitigated on-site. This may include provision of off-site replacement habitats or a financial contribution for biodiversity improvements elsewhere. In the recent 25 Year Environment Plan, there is a drive to ensure net gains in biodiversity from development so the ES should demonstrate how the development will meet the duty set out in Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006.

Catherington Down SSSI (calcareous grassland) is within 2Km of the site and also adjacent to one of the potential traffic routes. Although the scoping report includes this within Table 10.3 (Nationally Designated Sites), it does not appear to be included within the Scope of Assessment (Section 10.2).

Arboriculture

An Arboricultural Implications Assessment would identify the impact of the development on existing trees and Crabdens Copse and identify suitable protection/mitigation. The ES should assess the implications for the cable routes between the converter station and Lovedean Substation in view of the trees that surround the Substation. Direct drilling should be used as opposed to works that may result in loss of any hedgerow/trees.

Socio-economics

No additional comments.

Water Resources and Flood Risk

The proposed technical approach is considered acceptable subject to the following comments being incorporated in the ES and catchment-specific characteristics are considered including concerns over increased turbidity, solution features, contamination pathways and impacts on groundwater. Specific comments from Portsmouth Water are detailed in light of the Groundwater Source Protection Zone. Comments are referenced using the Scoping Report's nomenclature for ease of reference.

Chapter 7 Noise and Vibration
The noise and vibration assessment must include any anticipated vibration impacts on groundwater i.e. increased turbidity, on Portsmouth Water's supply. Vibrations caused during development works must form part of this assessment to understand potential risks associated with turbidity.
Mitigation of vibration causing increased turbidity is challenging therefore it is best dealt with during the design phase.

Chapter 12 Water Resources and Flood Risk
12.1.1 The study area should encompass ground and surface water features within at least 1000m when reviewing baseline conditions. There are potential impacts on groundwater abstractions due to solution features and rapid transit times between the proposed site and drinking water sources.
The proposed cable route has solution features present. These features contribute to a karstic environment with rapid transit times therefore pollution prevention is key. Consideration of the solution features must form part of the scope of work particularly in key areas i.e. close to the Lambeth Group and Chalk boundaries and Clay with Flints and Chalk boundaries.
12.1.37 The route of the cable lies on Superficial Geology overlying Bedrock and, in places, directly on Bedrock that is classified as Principal Aquifer. This must be reflected in the study along with karstic hydrogeology and solution features.
12.2.1 Surface-borne and subsurface pollutants should be considered in the study to account for legacy contamination derived from historic land use.

General Comments
2.2.6 The Source Protection Zones (SPZ) must be identified in any future reporting to ensure the appropriate level of risk is assigned to the risk assessments and design/operations.

2.5.5 Confirmation should be provided as to the proposed cooling options at the converter station, eg. do they involve the use of oils?
2.5.7 Details of temporary laydown areas will be required, the applicant should ensure these are low permeability and that pollution prevention measures are in place prior to use such as spill kits and incident management systems.
2.5.14 Details of Horizontal Directional Drilling (HDD) locations and methodology will be required for approval prior to commencement to understand the pollution prevention methodologies employed to mitigate potential impacts on groundwater. The potential land contamination risks must be addressed prior to commencement.
2.5.19 Construction details of the proposed joint bays should be provided for approval.
2.6.2 The specification and location of all oil filled cables, existing and proposed, should be provided to understand the potential risks posed to groundwater in the catchment.
2.7.2 Environment Surveys and Inspections must include consideration of soils, potential contamination, geology, superficial cover, bedrock, hydrogeology, solution features, source protection zones and nearby abstractions.
2.7.9 Details/method statement for trenchless techniques for the installation of cable ducts should be provided.
2.7.35 All imported soils material must be clean and inert and not pose a contaminant threat to the underlying aquifer.
2.9.1 The risk assessment must consider the risks posed to groundwater associated with leaving the cable in-situ at the end of the cable's 40 year design life.
Table 3.1 Hydrological Receptors – Effects of and on solution features, aquifer, water quality including turbidity must be included.
3.11.2 The assessment must be designed to understand the potential for pathway creation through impacted soils and/or long-term spill and incident management if preferential pathways are created.
3.13.3 Portsmouth Water would like to guarantee consultation via the LPA.
5.3.17 Traffic routes should be directed away from Source Protection Zones where feasible to reduce risk of collision and/or spills during construction and operation.
18.3.20 The preparation of a Construction Environmental Management Plan (CEMP) is supported.

<u>Ground conditions / Contamination</u>

Comments in respect of ground conditions should be read in conjunction with the above section on water resources.

13.1.1 The study must incorporate information on solution features and cavities due to potentially rapid transit times in the catchment posing a risk to Portsmouth Water's public drinking water supply.
13.1.2 The Ground Conditions chapter is proposed to include water quality therefore due the nature of the catchment being karstic in places the 250m study area is considered too narrow and should be extended to at least 500m.
13.1.14 The proposed route passes within SPZs for the Havant & Bedhampton Springs, the study must reflect this.
13.2.1 Sites of geological interest should include solution features.

13.2.6 The Conceptual Site Model (CSM) should also look at the development phase as well as legacy contamination and how mitigation measures can be deployed to prevent pollution occurring during the pre-development, during and operational phases. Table 13.1 – Where Secondary A Aquifers overlie Principal Aquifers this should have a receptor assessment of High due to the potential connectivity of the aquifer and the presence of solution features. Secondary A and B Aquifers should lie in Moderate Risk and it is recommended that Unproductive Strata is present in Low Risk.
13.3.15 Operational sources of contamination should consider new preferential pathways and, if relevant, Oil filled cables.

Appropriate attention is given to addressing potential contamination issues.

No further comments are made in respect of the remaining issues covered in the Scoping Report:

- Carbon and Climate Change
- Human Health
- Soils and Land Use
- Electric and Magnetic Fields
- Waste and Material Resources

Conclusion

The Council has reviewed the topic areas and conclude that generally they adequately address the subject areas under which the development proposals may have significant environmental effects, subject to the above comments being addressed and incorporated into the EIA.

creating a better place
for people and wildlife

Environment Agency

SENT BY EMAIL ONLY -
aquind@pins.gsi.gov.uk
Planning Inspectorate
Temple Quay House (2 The Square)
Temple Quay
Bristol
Avon
BS1 6PN

Our ref: HA/2018/120826/01-L01
Your ref: EN020022-000030

Date: 27 November 2018

Dear Sir or Madam,

SCOPING OPINION FOR AQUIND INTERCONNECTOR

AQUIND INTERCONNECTOR - LAND SOUTH AND WEST OF LOVEDEAN ELECTRICITY SUB STATION, BROADWAY LANE, LOVEDEAN, WATERLOOVILLE.

Thank you for consulting us on the above Scoping Opinion which we received on 31 October 2018.

We have reviewed the EIA Scoping Report, dated October 2018, document ref 0.1, PINS ref EN020022.

Overall we are generally pleased with the scope of the EIA Scoping Report and the range of topics that have been proposed to be included within the Environmental Statement (ES), but have some further comments on additional matters that require consideration.

Please see our detailed comments set out below, and a summary table of particular items we recommend for the ES is included at the end of this letter for ease of reference.

Source Protection Zone 1

We are pleased to see in Table C1 (Appendix C – page 57) that Water Resources (as discussed in Section 22) and Ground Conditions (as discussed in Section 21) have been 'scoped in' to the ES. This is because the two potential sites for the converter station, together with a section of cable, are located within the groundwater Source Protection Zone 1 (SPZ1) for **Portsmouth Water's Bedhampton and Havant springs and Lovedean public water supplies**. These supply drinking water to over 250,000 homes. As such, careful consideration must be given to the acceptability of any activity

which has the potential to impact groundwater quality in this area.

We expect development and investigation proposals in the areas of greatest risk to be supported by detailed and site specific assessments to demonstrate that the risks to groundwater are acceptable. We expect such assessments to be included in the ES.

The EIA Scoping Report contains very limited information on the design of the convertor station, and includes no information on the potential storage or use of hazardous substances or non-hazardous pollutants in the scheme (for example fuels and chemicals used in cables or in the convertor station or transformers). The ES should include this information, provide an assessment of risks associated with the use and storage of these substances to groundwater and discuss how the risks to groundwater can be mitigated.

Given the sensitively of groundwater in this area the ES needs to include sufficient information to demonstrate that the risks are understood and that they can be mitigated. This information is needed to assess the appropriateness of any proposal or planning application.

Section 22.3.2 (page 260) says '*Potential impacts to groundwater associated with impacts to groundwater quantity, groundwater flows and the release of contaminants contained in the ground will be assessed in the Ground Conditions chapter'.* Given that the site is in SPZ1, we would expect risks to groundwater quality from pollutants associated with the proposed development to also be considered. We are concerned that the potential risks to groundwater quality have been omitted.

Within Section 21.3.11 (page 247) it says '*The proposed excavation invert depth for housing the converter station may be founded within putty chalk which would likely be of a low permeability. The proposed excavation (approximately 4-6ha) is expected to remain open for construction works for up to two years.*' The site is within SPZ1 in an area where solution (karstic) features are prolific. An open excavation of this scale for such a period where development and construction works are to take place has the potential to have an adverse impact groundwater quality. The ES needs to consider the risks and explain how they can be monitored and mitigated.

In addition, the proposed excavation could be open for up to 2 years, which could also give rise to large amounts of contaminated (chalk / suspended solid) surface water being produced. The ES and/or Construction Environment Management Plan (CEMP) needs to consider how this contaminated surface water will be managed to stop it flowing to watercourses and drains.

Any de-watering activities (from land or from excavations) must comply with the Environment Agency's Position Statement on Dewatering Temporary Excavations: https://www.gov.uk/government/publications/temporary-dewatering-from-excavations-to-surface-water. This should be recognised in the ES and/or CEMP.

Sections 21 and 22 mention that as part of the establishing baseline conditions, BGS mapping has been reviewed (pages 253 - 258 & 269). In establishing the baseline conditions and developing the conceptual site model, we recommend that the developer reviews information published by the BGS on the Karst hydrogeology of the Bedhampton and Havant springs, which can be found here:

http://www.bgs.ac.uk/research/groundwater/about/karstAquifers/bedhamptonHavantSprings.html.

Cont/d..

Currently, the EIA Scoping Report fails to recognise that these features may be present at the site(s) and the potential risks associated with them. This should be recognised and scoped into the ES.

The EIA Scoping Report confirms that *"a detailed review of potential sources of contamination will be completed in the preliminary risk assessment"* (Section 21.2.19 – page 245). We agree that this will be needed.

We would like to take this opportunity to remind the developer that due to the sensitivity of groundwater underlying the two areas identified as options for the convertor station, we will be applying the precautionary principle in making our response to these development proposals. Our position statement A2 on the 'Precautionary Principle', is outlined in 'The Environment Agency's Approach to Groundwater Protection' (which can be located on the gov.uk website - https://www.gov.uk/government/publications/groundwater-protection-position-statements).

In particular, it says:

'Development must be appropriate to the sensitivity of the site. Where the potential consequences of a development or activity are serious or irreversible the Environment Agency will adopt the precautionary principle to manage and protect groundwater. The Environment Agency will also apply this principle in the absence of adequate information with which to conduct an assessment.'

A conceptual site model should be developed and included in the ES. Further information is available on the gov.uk website.

As the site is in the SPZ1 for Portsmouth Water's Bedhampton and Havant Springs and Lovedean public water supplies, we would expect the developer to consult Portsmouth Water and seek confirmation that they are satisfied with the proposals.

Solution (Karstic) Features

In addition to the sites being located in SPZ1, they are also in an area where solution (karstic) features are prolific. Not only must the developer consider the geotechnical issues associated with these, they must also consider the increased risk to groundwater quality that they present.

Evidence available to us shows that pollutants entering these features can reach the springs rapidly with little opportunity for monitoring, attenuation or to be intercepted. We are also aware of concerns by Portsmouth Water regarding disturbance to the chalk (from, for example the installation of boreholes or piles) and the potential to cause turbidity and impact drinking water supplies.

We have previously raised concerns about this with the developer, and have explained that investigations and site specific detailed risk assessments will be necessary in order to show that it will be acceptable for the convertor station to be located at either of the proposed options (options A and B). It is therefore disappointing that despite the potential for solution (karstic) features being acknowledged in Table E3 (Appendix E – pages 150 - 154), there is no mention of them in either Sections 21 or 22. Due to the potential risks to public water supplies, we expect this to be considered in detail in the ES.

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Two sites (options A and B) have been identified for the convertor stations. We would like to understand if these need to be located next to the existing National Grid Substation, or if there are alternative and suitable locations which would move them outside of the SPZ1 and away from the area where solution (karstic) features have been identified. We would like to see this explained in the ES.

Main River Crossings

We require clarification of the locations where the cable will cross below the bed of a main river, or where the cable route runs in close proximity to main river. This should be detailed in the ES.

A site specific assessment for each main river crossing point is recommended to fully understand the constraints involved in crossing each main river. We understand that consultation with us in the form of a data request has already been received by our Partnership and Strategic Overview team and is currently being processed.

The site specific assessment should be use to inform the cable crossing technique for each main river crossing point. We require confirmation of the pipeline crossing technique to be used at each main river to be crossed. The use of a trenchless installation technique would be our preferred installation method for all main river crossings, as this is the least disruptive method for providing new service crossings under a watercourse. If an open cut technique were to be chosen as the preferred option, the ES and/or CEMP would need to provide sufficient evidence and mitigation to convince us of negligible impact on the watercourse.

The ES and/or CEMP should include a mitigation commitment to reinstate the bed and banks of the watercourse to the condition they were in before the activities commenced, within a suitable timeframe agreed with us.

The detailed design for each river crossing will also need to be refined. This should satisfy our general guidance on service crossings below the bed of a main river as set out below:

- As a guide, a minimum cover of 1.0 m shall be provided above the highest part of the pipe/cable or concrete surround to the firm bed level, and the pipe shall remain at this level for at least 3.0 m on each side of the channel, with the following provisos:

    a) This clearance is required to permit possible future deepening and widening of the watercourse and routine maintenance, and the owner of the pipe or cable must cater for additional clearance required to protect apparatus; and

    b) Where heavy maintenance plant will track along the river bank, consideration shall be given to increasing the horizontal length of the pipe under that bank. The amount depends on the profile of the bank and pipe, on the cover required for the pipe strength, and the loading.

    c) The cover requirements and justification should be provided at each main river crossing once the route is refined. It is important that the level above Ordnance Datum of the highest part of the pipe or concrete surround is shown on accompanying design drawings.

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Climate Change Projections

We are pleased to see that the Flood Risk Assessment will consider the potential impact of climate change in accordance with current policy (Section 22.4.4).

Please note that an updated set of climate change projections, **UKCP18**, is due to be published by the end of November 2018. Planning decisions should take account of UKCP18 as soon as it is published in order to ensure planning decisions are in line with policies in the National Planning Policy Framework (NPPF).

North Portsea Coastal Defence Scheme

In accordance with our previous advice (scoping opinion consultation response to Portsmouth City Council, dated 21 March 2018), we are pleased to see that the requirement to identify future phases of the North Portsea coastal defence scheme has been acknowledged (Appendix E - Table E3: LPA scoping opinion responses (page 127)). The proposed cable route through Portsmouth passes along sections of the North Portsea coastal defence scheme. The North Portsea coastal defence scheme is being delivered by the Eastern Solent Coastal Partnership (ESCP), a team of specialist coastal officers and engineers, who should be consulted during preparation of the ES to determine whether there will be a likely significant effect of the proposed cable route on the scheme.

Flood Risk Activity Permits

We are pleased to see that water resources and flood risk national policy has been reviewed, and that the environmental permitting requirements under the Environmental Permitting Regulations have been identified.

We would like to take this opportunity to point out that the EIA Scoping Report refers to outdated legislation (the Environmental Permitting (England and Wales) Regulations 2010). This has been superseded by the **Environmental Permitting (England and Wales) Regulations 2016** which should be used when interpreting the Environmental Permitting requirements of this work. The Environmental Permitting (England and Wales) Regulations 2016 can be viewed here:

https://www.legislation.gov.uk/uksi/2016/1154/contents/made.

A Flood Risk Activity Permit from us will be required for the construction phase of the work. Further guidance on such permits can be found on the gov.uk website:

https://www.gov.uk/guidance/flood-risk-activities-environmental-permits

For any further advice we recommend that you consult our local PSO team - psohiow@environment-agency.go.uk.

We advise that you consult us early to avoid delays to construction. We generally take 2 months to determine each application, but for a large scale NSIP such as this with multiple main river crossings and associated works it may take longer to determine the applications.

For clarity, we would like to add that all temporary work associated with permanent

installation such as temporary bridge crossings, dewatering and working compounds in the flood plain are likely to require a Flood Risk Activity Permit. Temporary work should therefore be considered in the ES and/or a standalone Flood Risk Assessment (FRA) to determine whether there will be a likely significant effect. We will require further information regarding any temporary flood risk activities as part of the permit application. Detailed drawings which meet our design requirements should be provided. Bridge soffit levels, for example, must normally be 600mm or more above the design flood level in order to allow floating debris to pass freely through the structure. If a lower soffit is required on technical grounds, we may require a wider span to compensate. The application should also specify a lifetime for any proposed bridge crossings as an additional allowance for climate change may need to be made. Therefore, we recommend that you engage with us regarding temporary works design early in the process to ensure that a permit can be granted for the temporary works.

Water Framework Directive (WFD)

We are pleased to see that the WFD has been scoped into the ES, and in particular impacts on marine water quality. We agree that the impacts on water quality from any temporary increases in suspended sediment concentrations will need to be considered, in particular those related to re-suspension of contaminated sediments.

The developer proposes to only assess potential effects during construction and decommission, and to scope out any works required for maintenance. However, it is our opinion that maintenance works should be included in the ES as they still bear the same risks as any other construction work if carried out in proximity to sensitive areas such as Shellfish Waters and Bathing Waters.

WFD Assessment

With regard to the WFD assessment, we suggest that transitional waters and coastal waters should be addressed together in a 'marine' WFD assessment.

We would also like to point out that the Bathing Water Directive, which is referred to Appendix B (page 22-23 of the appendices), has been subsumed into WFD, and is now considered a protected area therein. The same applies to the Shellfish Waters Directive.

Lastly, we would like to reiterate our advice on the scope and structure of the WFD assessment, which is the same as given previously:

- A WFD assessment will be required for all elements of the works that fall within, or have the potential to affect, a WFD water body and any of the protected areas therein (including Bathing Waters and Shellfish Waters). An assessment of water quality impacts should also be included.

- There are Bathing Waters and Shellfish Waters around the area of landfall. Any sediment disturbances that lead to increases in suspended solids in the water column could potentially affect compliance with the WFD. Suitable evidence of no likely impact will be required for any marine works. Hence, marine water quality and a WFD assessment should be included in the ES.

- The WFD assessment should follow the 'Clearing the Waters for All' guidance, which has been published on the gov.uk website:

  https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-

coastal-waters.

- A WFD Assessment should comprise either:
  - an explanation of why the activity has been screened out; or
  - an explanation of why all elements have been scoped out, ideally using the scoping template; or
  - an impact assessment.

- The size and scale of the WFD Assessment should be proportional to the risk posed by the potential works, but the applicant must demonstrate that they have assessed the risks and provided mitigation where necessary.

Marine Conservation Zones and Solent Maritime SAC

We agree with Section 6.2.14 that although the marine cable route does not directly overlap with any Marine Conservation Zones, the potential impact on these will need to be assessed.

In regard to Section 6.2.15, we agree that the potential impacts on the **Solent Maritime SAC** will also need to be assessed due to the close proximity to the proposed landfall location at Eastney.

Intertidal and Benthic Ecology

In Section 8.3.1, we would expect habitat loss to be listed under potential impacts during construction and decommissioning.

We agree with Table 8.3.

We agree with the proposed methodology set out in Section 8.4.

Fish and Shellfish

We are pleased to see the inclusion of migratory fish species in Section 9, in particular salmon, sea trout and European eel.

We agree with Table 9.2, and with the proposed methodology in Section 9.4.

Ecology

As mentioned in previous responses, the impact on freshwater fish species has not been considered. We would expect freshwater fish to be included within Section 19.

The cable route proposes to cross an unnamed watercourse north of the B2150. We believe this watercourse to be the **North Purbrook Stream,** which is classified as a statutory watercourse. This watercourse is a known migratory route for European Eel, and is also likely to have a resident fish population. The noise and vibration from HDD drilling activities in close proximity to a watercourse has the potential for adverse impact on these fish species, as well as other aquatic ecology such as water voles and otters. Therefore, this needs to be included in the ES.

There are other watercourses close to the cable route including **Soake Farm**, the **Wallington** and **Hermitage** (which are classified as statutory main rivers). It is unclear from the maps provided whether these watercourses and their ecology could be

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impacted by the proposed cable route. Clarification needs to be given on how close the proposed route is to these watercourses, and whether the cable route will impact ecology of these rivers also.

We agree with the inclusion of bats, water vole, otter and great crested newt within Section 19.2.43.

Summary Table

Source Protection Zone 1	We expect development and investigation proposals in the areas of greatest risk to the SPZ1 to be supported by detailed and site specific assessments to demonstrate that the risks to groundwater are acceptable. We expect such assessments to be included in the ES.
	The ES should include information about the design of the converter station, and provide an assessment of risks associated with the use and storage of substances to groundwater, and discuss how the risks to groundwater can be mitigated.
	The ES needs to include sufficient information to demonstrate that the risks to the SPZ1 are understood and that they can be mitigated.
	The ES needs to consider risks to groundwater quality from pollutants associated with the proposed development.
	An open excavation of this scale for such a period where development and construction works are to take place has the potential to have an adverse impact groundwater quality. The ES needs to consider the risks and explain how they can be monitored and mitigated.
	The proposed excavation could give rise to large amounts of contaminated surface water being produced. The ES needs to consider how this contaminated surface water will be managed to stop it flowing to watercourses and drains.
	Any de-watering activities (from land or from excavations) must comply with the Environment Agency's Position Statement on Dewatering Temporary Excavations.
	Information published by the BGS on the Karst hydrogeology of the Bedhampton and Havant springs. These features should be recognised and scoped into the ES.
	A conceptual site model should be developed and included in the ES.

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	The developer needs to consult Portsmouth Water and seek confirmation that they are satisfied with the proposals.
Solution (Karstic) Features	Not only must the developer consider the geotechnical issues associated with these features, they must also consider the increased risk to groundwater quality that they present.
	We have previously raised concerns about this with the developer, and have explained that investigations and site specific and detailed risk assessments will be necessary in order to show that it will be acceptable for the convertor station to be located at either of the options. It is therefore disappointing that despite the potential for solution (karstic) features being acknowledged in Table E3 (Appendix E – pages 150 - 154), there is no mention of them in either Sections 21 or 22. Due to the potential risks to public water supplies, we expect this to be considered in detail in the ES.
	The ES should cover information about the converter stations and whether these need to be located next to the existing National Grid Substation, or if there are alternative and suitable locations.
Main River Crossings	The ES should clarify the locations where the cable will cross below the bed of a main river, or where the cable route runs in close proximity to main river.
	The ES should include a site-specific assessment for each main river crossing point to fully understand the constraints involved in each crossing.
	The ES should confirm the pipeline crossing technique to be used at each main river to be crossed.
	The ES and/or CEMP should include a mitigation commitment to reinstate the bed and banks of the watercourse to the condition they were in before the activities commenced, within a suitable timeframe agreed with us.
	The detailed design for each river crossing will also need to be refined. This should satisfy our general guidance on service crossings.
Climate Change Projections	The updated set of climate change projections, (**UKCP18** – to be published November 2018) should be taken into account.
North Portsea Coastal Defence Scheme	The Eastern Solent Coastal Partnership (ESCP) should be consulted during preparation of the ES to determine whether there will be a likely significant effect of the proposed cable route on the scheme.

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Flood Risk Activity Permits	The ES should reflect the latest permitting legislation (Environmental Permitting (England and Wales) Regulations 2016).
	Early engagement is required with us in regard to the need for Flood Risk Activity Permits, including temporary works.
WFD	Maintenance works should be included in the ES as they still bear the same risks as any other construction work if carried out in proximity to sensitive areas such as Shellfish Waters and Bathing Waters.
	Transitional waters and coastal waters should be addressed together in a 'marine' WFD assessment, and this should be reference in the ES.
	The Bathing Water Directive and Shellfish Waters Directive has been subsumed into WFD. This should be reflected in the ES
	A WFD assessment will be required for all elements of the works that fall within, or have the potential to affect, a WFD water body and any of the protected areas therein (including Bathing Waters and Shellfish Waters). An assessment of water quality impacts should also be included. This should be reflected in the ES.
	Any sediment disturbances that lead to increases in suspended solids in the water column could potentially affect compliance with the WFD. Suitable evidence of no likely impact will be required for any marine works. Marine water quality and a WFD assessment should be included in the ES.
Intertidal and Benthic Ecology	Habitat loss is to be listed in the ES under potential impacts during construction and decommissioning.
Ecology	The impact on freshwater fish should be included in the ES.
	The noise and vibration from HDD drilling activities in close proximity to a watercourse (**North Purbrook Stream)** has the potential for adverse impact on these fish species, as well as other aquatic ecology such as water voles and otters. Therefore, this needs to be included in the ES.
	There are other watercourses close to the cable route including **Soake Farm**, the **Wallington** and **Hermitage** (which are classified as statutory main rivers). It is unclear from the maps provided whether these watercourses and their ecology could be impacted by the proposed cable route. Clarification needs to be given on how close the proposed route is to these watercourses,

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	and whether the cable route will impact the ecology of these rivers also.

Please do not hesitate to contact me using the contact details shown below should you have any queries regarding the above information.

Yours faithfully,

Miss Anna Rabone
Sustainable Places Advisor

Direct dial: 02077 150425
Email: planningSSD@environment-agency.gov.uk

End

From:	ESP Utilities Group Ltd
To:	Aquind Interconnector
Cc:	Richard White
Subject:	Your Reference: EN020022-000030 Our Reference: PE137310. Plant Not Affected Notice from ES Pipelines
Date:	31 October 2018 15:55:43

Marie Shoesmith
The Planning Inspectorate

On Behalf of AQUIND Limited
c/o Martyn Jarvis
Herbert Smith Freehills LLP
Exchange House
Primrose Street
London
EC2A 2EG

31 October 2018

Reference: EN020022-000030

Dear Sir/Madam,

Thank you for your recent plant enquiry at: (Reference: EN020022-000030).

I can confirm that ESP Gas Group Ltd has no gas or electricity apparatus in the vicinity of this site address and will not be affected by your proposed works.

ESP are continually laying new gas and electricity networks and this notification is valid for 90 days from the date of this letter. If your proposed works start after this period of time, please re-submit your enquiry.

Important Notice
Please be advised that any enquiries for ESP Connections Ltd, formerly known as British Gas Connections Ltd, should be sent directly to us at the address shown above or alternatively you can email us at: PlantResponses@espipelines.com

Yours faithfully,

Roz Chomacki
Plant Officer

Bluebird House
Mole Business Park
Leatherhead
KT22 7BA
☎ 01372 587500 01372 377996

http://www.espug.com

From: Hebden, Rachael
To: Aquind Interconnector
Subject: AQUIND Interconnector
Date: 19 November 2018 11:45:42

Dear Ms Shoesmith,

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIS Regulations 10 and 11)

Application by AQUIND Limited (the Applicant) for an Order granting Development Consent for the AQUIND Interconnector (the Proposed Development)

FBC reference: Q/0273/18

Response to scoping consultation

Thank you for consulting Fareham Borough Council regarding the above Scoping Opinion. I can confirm that Fareham Borough Council have no comments to make.

Yours sincerely,

Rachael Hebden
Senior Planner Strategic Sites (Development Management)
Fareham Borough Council
01329 824424
07880 243359

South East & London Area Office
Bucks Horn Oak
Farnham
GU10 4LS

Tel: 0300 067 4167
richard.pearce@forestrycommission.gov.uk

Area Director
Alison Field

Date: 26th November 2018

Our ref: 23 NSIP AQUIND

Your ref: EN020022-000030

Marie Shoesmith
Senior EIA and Land Rights Adviser
The Planning Inspectorate
3D Eagle Wing
Temple Quay House
2 The Square
Bristol, BS1 6PN
BY EMAIL ONLY

Dear Marie,

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11

Application by AQUIND Limited (the Applicant) for an Order granting Development Consent for the AQUIND Interconnector (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

Thank you for consulting the Forestry Commission on the scope of the Environmental Statement (ES) in your letter dated 31st October 2018.

The Forestry Commission is the Government experts on forestry & woodland and a statutory consultee (as defined by Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009)[1] for major

[1] http://www.legislation.gov.uk/uksi/2009/2264/contents/made

infrastructure (Nationally Significant Infrastructure Projects (NSIPS)) that are likely to affect the protection or expansion of forests and woodlands (Planning Act 2008).

The Forestry Commission's responsibility is to discharge its consultee roles as efficiently, effectively and professionally as possible, based on the forestry principles set out in The UK Forestry Standard (4th edition published 2017). Page 23 "Areas of woodland are material considerations in the planning process and may be protected in local authority Area Plans. These plans pay particular attention to woods listed on the Ancient Woodland Inventory and areas identified as Sites of Local Nature Conservation Importance (SLNCIs).

As highlighted in the National Planning Policy Framework revised July 2018[2]: Irreplaceable habitats include ancient woodland, ancient trees and veteran trees:

Paragraph 175c – "*development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists*"

The Forestry Commission has also prepared joint standing advice with Natural England on ancient woodland, ancient trees and veteran trees[3] which we refer you to as it notes that ancient woodland, ancient trees and veteran trees are an irreplaceable habitat, and that, in planning decisions, Plantations on Ancient Woodland Sites (PAWS) should be treated equally in terms of the protection afforded to ancient woodland. It highlights the Ancient Woodland Inventory as a way to find out if woodland is ancient. Woodland under 2 hectares may not appear on the Ancient Woodland Inventory but may still have ancient woodland characteristics, so we would suggest that a detailed investigation is undertaken to ascertain whether any additional ancient woodlands exist that may be impacted by the proposed scheme.

The standing advice provides details on the hierarchy of: avoid impacts, mitigate impacts and compensate as a last resort. This hierarchy could apply to any deterioration to woodland, ancient trees and veteran trees during the cable works, converter substation works and the connection to the current substation. We would draw your attention to the standing advice in relation to ancient woodland, ancient trees and veteran trees being irreplaceable habitats. Ancient trees and Veteran trees can be individual trees or groups of trees including within hedgerows.

There are 3 ancient woodlands present around the existing substation Stoneacre Copse, Crabdens Copse and Crabdens Row. Given the presence of substantial hedgerows we would also anticipate that the scheme may impact on ancient and veteran trees.

[2] https://www.gov.uk/government/collections/revised-national-planning-policy-framework
[3] https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences

We have reviewed the Environmental Impact Assessment Scoping Report in particular sections relating to woodland and trees. We do note that in the scoping report it states: "None of the proposed locations for the proposed converter station contain significant woodland vegetation. The cable route will largely be within the footprint of roads and it is assumed that any agricultural land will be reinstated". The ES should consider direct loss or indirect loss, to any woodland, particularly if there are connections between the converter station and the existing substation.

Also throughout the scoping report there appears to be no mention of Ancient Woodland, Ancient Trees or Veteran Trees being "Irreplaceable Habitats" as per the National Planning Policy Framework. If there isn't any ancient woodland, ancient trees or veteran trees impacted we would expect this to be referenced in the ES.

Within the AQUIND Interconnector Constraints Maps – they show Ancient Woodland but no other woodland, we would like to see all woodland assessed for value and impact, and to be considered within the scheme design and any mitigation/compensation provisions with a minimum 'no net loss' and ideally 'net gain' for ecological habitats including woodlands. .

The scoping report confirms that during the desk inspection no veteran trees have been identified. Ancient trees and veteran trees can be individual trees, or groups of trees including within hedgerows[4]. Site investigations for the ES should identify ancient and veteran trees.

The scoping report (Table C1) states that the landscape effects are 'insignificant apart from the last 2km where the route will cross fields. Any potential impact on landscape regarding Ancient Woodland, Ancient trees and Veteran trees and other woodland should be included in the Environment Statement. We also suggest that a UKFS-compliant Woodland Creation Design Plan is considered for any potential woodland creation habitat proposed in the development or for any woodland management proposals put forward as part of the mitigation package.

If you wish to consult us further in relation to the Environmental Statement with the Forestry Commission please contact the South East and London Office at the above address.

Yours sincerely

[redacted]

Richard Pearce
Local Partnership Adviser

[4] https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences

GOSPORT
Borough Council

Development Management

Planning Services
Gosport Borough Council
Town Hall
High Street
Gosport
Hampshire
PO12 1EB

Phone: 023 9254 5645
Email: planning@gosport.gov.uk

14th November 2018

Marie Shoesmith
Major Casework Directorate
The Planning Inspectorate
Temple Quay House
2 The Square
Bristol
BS1 6PN

Dear Sir/Madam,

Your Reference: EN020022-000030
Our Reference: EIA/001/18
EIA SCREENING REQUEST - DEVELOPMENT OF AQUIND INTERCONNECTOR
The Solent Off Portsmouth (Eastney)

Thank you for your recent consultation to Gosport Borough Council as a neighbouring Planning Authority to the above submission. The Council has **NO COMMENT** in this instance.

Yours sincerely

Simon Barnett

Simon Barnett
Development Management Manager

From:	Phillips, Wendy
To:	Aquind Interconnector
Cc:	Murray (Planning), Chris
Subject:	EN020022-000030 Aquid Interconnector
Date:	28 November 2018 12:36:00
Attachments:	281118 HCC EIA Response.pdf

Dear Marie Shoesmith,

Thank you for providing us with the opportunity to comment on the Aquid Interconnector Scoping.

Please find attached HCCs response.

If you have any queries, please do not hesitate to contact me.

Kind regards

Wendy Phillips
Senior EIA Project Officer

Environmental Impact Assessment Team
Environment, Transport and Economy
Hampshire County Council
Elizabeth II Court West
Winchester, SO23 8UD

Tel: 01962 832252
Email: wendy.phillips@hants.gov.uk

Please note that my working days are Monday - Thursday

Hampshire County Council EIA, Ecology, Landscape, Archaeology, Soils and Ground Conditions Response

1. Project Details

Project name:	**Aquind Interconnector**
Task name:	HCC Response: Scoping Report
PINS Reference	EN020022-000030
Date:	28/11/2018
HCC Dept:	EIA
EIA team project manager:	Holly Wood

2. Objectives

This memo provides Hampshire County Councils (HCC) response on the AQUIND Interconnector Scoping consultation.

HCC notes that AQUIND Limited is proposing to construct and operate an electricity interconnector between France and the UK. This will include a new subsea and underground High Voltage Direct Current power cable transmission link between Normandie in France and the south coast of England, which will also include fibre optic data transmission cables. Converter stations will be needed in both England and France.

This response covers the general scoping report and the technical review of the following environmental topics:

- Biodiversity;
- Landscape and visual impact;
- Archaeology; and
- Soils and geology.

3. Comments

HCC Review Comments	
Landscape and Visual Impact Comments	The scoping report sets out the landscape issues related to the landscape and visual effects of both the sea crossing route and the landfall route between Eastney in Portsmouth and the existing power station to the west of Lovedean. A new converter station will be required within 2km of the existing Lovedean sub-station; two options are to be investigated. The site will need to be 4-6ha and will include two converter Hall buildings which will be approximately 50m wide x 90m long x 22m high. The impact of this requirement will be substantial. The scoping report has scoped out landscape impacts for the seascape element of the route and this is acceptable.

	The proposed scope of works for the onshore section of the project is generally acceptable. It will be carried out in accordance with industry standards and I accept all the elements scoped out except the following:- • 'Effects on visual receptors within 100m buffer on either side of the cable route up to 2km of the proposed converter station.' When the route is selected there may be long term effects on visual receptors within 100m of either side of the cable route and these effects need to be assessed. This impact needs to be scoped in.
Archaeology	The marine section of the cable route may impact upon heritage assets, but as this area lies beyond the jurisdiction of Hampshire County Council I would assume that Historic England will be consulted for their opinion. The land cable route takes it close to several Scheduled Monuments (including fort Cumberland at the point where the cable come ashore) and follows the eastern coast of Portsea Island and land to the south of Lovedean, both areas with some potential for later prehistoric and Roman archaeological remains. Based on the current evidence I would advise that an Environmental Impact Assessment would not be required for the proposed development on the basis of archaeology. That being said, there is potential for as yet unrecorded archaeological features to exist along the route. As a result, I would recommend that any future planning application should be accompanied by a Heritage Statement which should address below ground archaeological issues. It should set out the nature of the archaeological potential of the area and the impact of the proposals on that potential as well as a mitigation strategy to satisfy the planning authority that all archaeological issues will be sustainably dealt with during development under the terms of NPPF. On this basis I am pleased to note that the Scoping Report commits any future Environmental Statement to include an Archaeological Desk-Based Assessment (DBA) that will address all cultural heritage issues associated with this proposal. The Scoping Report also makes clear that any further assessment of archaeological potential can be achieved via archaeological evaluation, again a strategy that I would welcome in principle.
Ecology	The scoping report appears to be comprehensive. Furthermore, previous input from district ecologists, EA and NE (which picked up several of the potential issues I did) has already been incorporated within the scoping approach (a previous scoping was consulted upon when applications relating to the proposals were expected to be determined by the local planning authorities and MMO). Please note the following: - The desktop screening and records search should have included all designated sites including NNRs (if they haven't been included already). - Links need to be clearly made between water quality and ecology including consideration of impacts to habitats and species associated with watercourses. - Similarly, links need to be made between ecology and air quality/noise and vibration.

	- Consideration should be given to impacts upon recreational use of green spaces and whether this has any effect upon designated sites through temporary displacement of recreation (including onto Solent Waders and Brent Geese sites). The proposal to provide a stand alone HRA report is welcomed.
Land contamination	We note that consideration will be given to existing contamination and potential exposure during construction. In addition, we would like to see considered of preferential pathways that may be created. We would expect the PRA to include site inspections and bespoke conceptual models for the different aspects of the development. We would expect some intrusive investigations to be undertaken to confirm the findings given the limitations of any desk based assessment.
Assessment of alternatives	We note that the ES will contain a description of the reasons for the selection of the final design. We would like to see full details of all alternatives and the scheme evolution within this section.
Cumulative effects	We welcome the clear definition of cumulative effects (inter and intra). We would like to see further details regarding the methodologies proposed for the combined and cumulative effects assessments within the ES i.e. preparation of long list and then criteria developed to compile the short list. Further, no discussion has been provided regarding the limitations of the cumulative effect's assessment for example with respect to whether adequate information / evidence would be available for many of the short listed developments to allow for a meaningful cumulative assessment to be undertaken (i.e. adequate evidence is taken to include an Environmental Impact Assessment (EIA) Scoping Report / or similar as a minimum). It would be useful to provide further details in this regard within the ES.
Mitigation	We note and are pleased that most mitigation measures are considered likely to be embedded within the design rather than as 'add-on' measures to ameliorate significant environmental effects. We welcome and hope to see that all other measures proposed as mitigation for the project will be reported within the relevant section of the ES along with the mechanism by which these measures will be carried through and implemented.

From:	Karen Thorpe
To:	Aquind Interconnector
Subject:	AQUIND Interconnector - EN020022-000030
Date:	21 November 2018 13:04:09
Attachments:	image001.png image003.png image008.png image010.png image011.png image012.png

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Good afternoon,

Thank you for sending the relevant information and material regarding the AQUIND Interconnector - EN020022-000030.

Harlaxton Energy Networks Ltd. at this time has no assets in the area, and will not be implementing any in the near future, therefore Harlaxton has no comment to make on this project.

Kind Regards

Karen Thorpe
Distribution Administrator
0844 800 1813

Visit our website harlaxtonenergynetworks.co.uk and explore at your leisure

Harlaxton
Energy Networks Limited
Toll Bar Road, Marston, Grantham, Lincolnshire, NG32 2HT
Registered Company Number : 7330883

From:	Karen Thorpe
To:	Aquind Interconnector
Subject:	AQUIND Interconnector - EN020022-000030
Date:	21 November 2018 13:05:06
Attachments:	image002.png

Good afternoon,

Thank you for sending the relevant information and material regarding the AQUIND Interconnector - EN020022-000030.

Harlaxton Gas Networks Ltd. at this time has no assets in the area, and will not be implementing any in the near future, therefore Harlaxton has no comment to make on this project.

Kind Regards

Karen Thorpe
Distribution Administration Assistant

Harlaxton
Gas Networks Limited
Toll Bar Road, Marston, Grantham, Lincs, NG32 2HT

Our Ref: 18/02525/EIA
Case Officer: Emily Fitzpatrick
Tel. No.: 01252 774099
planningadmin@hart.gov.uk
www.hart.gov.uk

19th November 2018

c/o Marie Shoesmith
The Planning Inspectorate
Major Casework Directorate
Temple Quay House
2 The Square
Bristol
BS1 6PN

PROPOSAL: **Request for EIA scoping opinion for development of AQUIND Interconnector with a nominal net capacity of 2000MW between Great Britain and France, located off the coast of Portsmouth offshore and between Portsmouth and Lovedean substation onshore.**

AT
SITE LOCATION: **Infrastructure Consult, Miscellaneous Street, Internal, Hampshire,**

Dear Sir/Madam

Thank you for your invitation for Hart District Council to comment on the above proposal.

It is considered that the proposed development would not give rise to any issues which Hart District Council would be required to comment upon and therefore we have no comments to make on the proposal.

Yours faithfully

Emily Fitzpatrick
Regulatory Services

From:	Oliver, Lewis
To:	Aquind Interconnector
Subject:	RE: EN020022 – AQUIND Interconnector – EIA Scoping Notification and Consultation - LPA reference GEN/18/01106
Date:	01 November 2018 16:13:21
Attachments:	DocGenRespInf.pdf 1109984-Consultee Comment-MR NEIL ADAM.PDF 1110037-Consultee Comment-MR STEPHEN MOUNTAIN.PDF RE Scoping Opinion GEN1800101 A3 Hambledon Road Milton Road within Havant Borough Council.msg 1110994-Consultee Comment-HAMPSHIRE COUNTY COUNCIL.PDF 1111418-Consultee Comment-PORTSMOUTH WATER.PDF RE Scoping Opinion GEN1800101 A3 Hambledon Road Milton Road within Havant Borough Council.msg 1111911-Consultee Comment-CONSULTEE ENVIRONMENTAL HEALTH (ENVIRONMENT TEAM).pdf 1112374-Consultee Comment-CONSULTEE RESPONSE - SOUTHERN WATER.PDF 1112376-Consultee Comment-CONSULTEE RESPONSE - SOUTHERN WATER PLAN.PDF 1112377-Consultee Comment-CONSULTEE RESPONSE SOUTHERN WATER PLAN 2 OF 2.pdf GEN1800101 A3 Hambledon Road Milton Road within Havant Borough Council 18.0400.msg 1113045-Consultee Comment-CONSULTEE RESPONSE - HAMPSHIRE HIGHWAYS.TIF 1113189-Consultee Comment-CONSULTEE RESPONSE - HISTORIC ENGLAND.PDF PlanningProposal.pdf

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Dear Sir/Madam,

Thank you for consulting Havant Borough Council (HBC) on the further Scoping Opinion for this project.

HBC would like to advise you, as is also highlighted in the Scoping Report, that we provided a Scoping Opinion response on 25/4/18. We have considered this further scoping request and note that the responses of the four Local Planning Authorities are outlined at Appendix E, Table E3 pages 124-158 inclusive. Having looked at the content of this Scoping Report we have no further comments to make. We have however, for the purposes of completeness, attached our Scoping Report (LPA ref: GEN/18/00101), along with all of the consultation responses from both our internal and external consultees.

I trust this is of assistance.

Regards

Lewis

Lewis Oliver MRTPI
Principal Planning Officer
Planning Services
Havant Borough Council
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Direct Dial Telephone Number: (023) 9244 6263
Fax number: (023) 9244 6588
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www.facebook.com/havantboroughcouncil
www.twitter.com/havantborough

Havant BOROUGH COUNCIL

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Lungile Mngadi
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6 Devonshire Square
London
EC2M 4YE

Our Ref: GEN/18/00101
Direct Line: (023) 92 446263
Ask For: Mr L Oliver
Email: planning.development@havant.gov.uk

25 April 2018

Site Location: A3, Hambledon Road, Milton Road within Havant Borough Council
Re: Scoping Opinion for Aquind Interconnector Project for power transmission cable between England and France.

Site and development

The development proposed for which a Scoping Opinion from this Authority is sought is part of a project proposing an Interconnector providing a High Voltage Direct Current (HVDC) power cable transmission link between France and England. The project has a nominal rating of 2,000MW intended to significantly increase cross-border capacity between the UK and France. The project would comprise HVDC subsea and underground cables, linking to converter stations in the UK and France; the converter stations would connect to existing sub-stations by underground High Voltage Alternating Current (HVAC) cables.

Within the Havant Borough Council (HBC) administrative area, the proposal would comprise the cable route. The cable route for HVDC and fibre optic cables (hereafter referred to as the 'cable route') will run from the proposed converter station west of Lovedean, south to the landfall at Eastney, passing Waterlooville, Purbrook, Cosham, and east of the City of Portsmouth. It is outlined in the submission that where possible, the cable route will be located within the highway.

There will be four DC cables, laid as two separate pairs of cables (in most cases), with each cable pair located within a separate trench. Each trench will also include a separate duct to facilitate installation of fibre optic cables along the underground cable route. The submission outlines that these are essential for converter station control systems and communication. This proposal forms part of the wider project comprising the following components; HVDC subsea cables, Land/sea transition joint, HVDC underground cables, HVAC underground cables, located largely in Portsmouth City Council administrative area and supporting infrastructure in the form of HVDC converter stations in the UK, which are to be located in either Winchester City Council and/or East Hampshire District Council administrative areas (location to be determined at a later date).This Scoping Opinion considers the likely impacts of the cable route within the HBC area.

Scoping of the Environment Statement

The proposed scope for the Environmental Statement, as set out in 3.8 of the Scoping Report, is considered to be acceptable by the Local Planning Authority. Though further requests for information in the Environmental Statement are outlined in the relevant chapters below.

Cumulative effects

The Assessment of Cumulative Effects (3.11) are noted. The Grainger development has commenced with a number of phases under construction, and therefore this needs to be

updated with the relevant subsequent reserved matters application. This information can be found by contacting Katie Stickland - HBC/WCC -West of Waterlooville Implementation Officer - email: kstickland@winchester.gov.uk.

Traffic and Transport

Chapter 5 of the EIA scoping covers transport matters. Key routes to the proposed Lovedean site have been identified, although further details regarding the routes will need to be provided together with details of construction traffic.

The cable routing is shown and outlined in paragraph 5.1.6 this will need to be discussed with the Highway Authority in more detail. Information regards cable laying proposals, carriageway widths required, and appropriateness of routes should be provided to support any application. Consideration must also be given to committed development in the area and measures taken to ensure service information and highway layout is up to date.

As outlined in section 5 of the EIA a Transport Assessment/Statement will be required to support the application. The EIA sets out appropriately the areas in which the Transport Assessment should consider and engagement with the Highway Authority to inform this assessment is welcomed.

Air Quality

No further comments to add.

Noise and Vibration

The Scoping Report is considered to adequately address matters relating to noise and vibration impacts, which should be incorporated in the ES. Please note that noise and vibration implications should also be assessed in terms of ecologically sensitive receptors (see below).

Landscape and visual impacts

It is acknowledged that the cabling would have limited visual impact on Havant Borough Council. However consideration must be given to visual impact on viewpoints of the proposed convertor station sites, from within the boundaries of Havant Borough Council. The Scoping Report correctly identifies the national, county level and local landscape character assessments and the main receptors are agreed. A detailed baseline needs to be carried out as part of the LVIA. This should be robust enough to enable it to guide constraints and opportunities for the site and steer the design and appropriate mitigation/enhancement approaches.

It is noted on Table 8.1 sets out the issues to be scoped in / out of the LVIA. It proposes to scope out visual receptors beyond 3km of the site boundary, this would cover the relevant sensitive viewpoints from within the boundaries of Havant Borough Council, for which the closet point to the boundary of the site is approximately 1.07km from the Borough boundary.

Heritage and Archaeology

The Council's Conservation Officer supports the approach taken to address above ground heritage. In line with the advice in the NPPF, the Environmental Statement should contain a thorough assessment of the likely effects which the proposed development might have upon those elements which contribute to the significance of heritage assets, including non-designated heritage assets.

The assessment should clearly demonstrate that the extent of the proposed study area is of the appropriate size to ensure that all heritage assets likely to be affected by this development have been included and can be properly assessed. An arbitrary radial search is unlikely to accurately reflect the impact of the development on heritage assets in the wider area and a more tailored approach would be required, in particular with regards to assessing impacts to setting.

With regard to designated heritage assets, there needs to be an understanding of what makes these assets 'special, Significance can be harmed or lost through alteration or destruction of the heritage asset, or through development within its setting, so it needs to be demonstrated how these proposals would impact on significance.

The assessment should also take account of the potential impact which associated development activities (such as construction, servicing, and maintenance) might have upon perceptions, understanding, and appreciation of any heritage assets in the area. The assessment should also consider the likelihood of alterations to drainage and ground water patterns that might lead to in-situ decomposition or destruction of below ground archaeological remains and deposits, and can also lead to subsidence of buildings and monuments.

Archaeology
The County Archaeologist comments that the site is in an area of good archaeological interest with evidence of a Bronze Age cemetery and a round barrow in the immediate area together with isolated Iron Age and medieval finds recorded in the vicinity. It is confirmed that the archaeological Desk Based Assessment (DBA) should address the below ground archaeological potential of the site and the route of the cables. The DBA must set out (as proposed by the submitted Scoping Report) the nature of the archaeological potential and the impact of the proposals on that potential as well as a mitigation strategy.

Ecology
The scope of works as set out in Chapter 10 of the submitted Scoping Report (Aquind, February 2018) are considered acceptable. The proposed cable route runs predominantly through urban/suburban areas and therefore ecological constraints are likely to be limited. There may be specific constraints resulting from impacts to e.g. trees, hedgerows or other habitat with potential to support protected species or which is otherwise of ecological value.

Noise and vibration impacts on ecologically sensitive receptors are to be included in the ES.

Natural England advise that the ES be supported by a Biodiversity Mitigation and Enhancement Plan (BMEP) to include measures for mitigating impacts on protected species and habitats and include biodiversity compensation measures for residual biodiversity losses that cannot be mitigated on-site. This may include provision of off-site replacement habitats or a financial contribution for biodiversity improvements elsewhere. In the recent 25 Year Environment Plan, there is a drive to ensure net gains in biodiversity from development, so the ES should demonstrate how the development will meet the duty set out in Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006.

Socio-economics

No additional comments.

Water Resources and Flood Risk

The proposed technical approach is considered acceptable subject to the following comments being incorporated in the ES and catchment-specific characteristics are considered including concerns over increased turbidity, solution features, contamination pathways and impacts on groundwater. Specific comments from Portsmouth Water are detailed in light of the Groundwater Source Protection Zone. Comments are referenced using the Scoping Report's structure for ease of reference.

Chapter 7 Noise and Vibration
The noise and vibration assessment must include any anticipated vibration impacts on groundwater i.e. increased turbidity, on Portsmouth Water's supply. Vibrations caused during development works must form part of this assessment to understand potential risks associated with turbidity.

Mitigation of vibration causing increased turbidity is challenging therefore it is best dealt with during the design phase.

Chapter 12 Water Resources and Flood Risk
12.1.1 The study area should encompass ground and surface water features within at least 1000m when reviewing baseline conditions. There are potential impacts on groundwater abstractions due to solution features and rapid transit times between the proposed site and drinking water sources.
The proposed cable route has solution features present. These features contribute to a karstic environment with rapid transit times therefore pollution prevention is key.
Consideration of the solution features must form part of the scope of work particularly in key areas i.e. close to the Lambeth Group and Chalk boundaries and Clay with Flints and Chalk boundaries.
12.1.37 The route of the cable lies on Superficial Geology overlying Bedrock and, in places, directly on Bedrock that is classified as Principal Aquifer. This must be reflected in the study along with karstic hydrogeology and solution features.
12.2.1 Surface-borne and subsurface pollutants should be considered in the study to account for legacy contamination derived from historic land use.

Fisheries and Biodiversity
The Environment Agency have noted from the report that the cable route may cross an 'unnamed watercourse' north of the B2150. It is believed this water course to be the North Purbrook Stream, classified as a statutory watercourse. This watercourse is a known eel migratory route and is likely to have a resident fish population.

Currently the Scoping Report does not include potential effects on fish (including eels). The noise and vibration from HDD drilling activities near a watercourse, which has the potential for adverse impact on these fish species as well as other aquatic ecology such as water voles and otters. Therefore, this needs to be included in the EIA scoping report.

There are other watercourses close to the cable route including Soake Farm, the Wallington and Hermitage statutory main rivers. It is unclear from the maps provided whether these watercourses and their ecology could be impacted by the proposed cable route. Clarification needs to be given on how close the proposed route is to these watercourses whether the cable route will impact ecology of these rivers also.

General Comments
2.2.6 The Source Protection Zones (SPZ) must be identified in any future reporting to ensure the appropriate level of risk is assigned to the risk assessments and design/operations.
2.5.14 Details of Horizontal Directional Drilling (HDD) locations and methodology will be required for approval prior to commencement to understand the pollution prevention methodologies employed to mitigate potential impacts on groundwater. The potential land contamination risks must be addressed prior to commencement.
2.5.19 Construction details of the proposed joint bays should be provided for approval.
2.6.2 The specification and location of all oil filled cables, existing and proposed, should be provided to understand the potential risks posed to groundwater in the catchment.
2.7.2 Environment Surveys and Inspections must include consideration of soils, potential contamination, geology, superficial cover, bedrock, hydrogeology, solution features, source protection zones and nearby abstractions.
2.7.9 Details/method statement for trenchless techniques for the installation of cable ducts should be provided.
2.7.35 All imported soils material must be clean and inert and not pose a contaminant threat to the underlying aquifer.
2.9.1 The risk assessment must consider the risks posed to groundwater associated with leaving the cable in-situ at the end of the cable's 40 year design life.
Table 3.1 Hydrological Receptors - Effects of and on solution features, aquifer, water quality including turbidity must be included.
3.11.2 The assessment must be designed to understand the potential for pathway creation through impacted soils and/or long-term spill and incident management if preferential

pathways are created.
3.13.3 Portsmouth Water would like to guarantee consultation via the LPA.
5.3.17 Traffic routes should be directed away from Source Protection Zones where feasible to reduce risk of collision and/or spills during construction and operation.
18.3.20 The preparation of a Construction Environmental Management Plan (CEMP) is supported.

Ground conditions / Contamination

Comments in respect of ground conditions should be read in conjunction with the above section on water resources.

13.1.1 The study must incorporate information on solution features and cavities due to potentially rapid transit times in the catchment posing a risk to Portsmouth Water's public drinking water supply.
13.1.2 The Ground Conditions chapter is proposed to include water quality therefore due the nature of the catchment being karstic in places the 250m study area is considered too narrow and should be extended to at least 500m.
13.1.14 The proposed route passes within SPZs for the Havant & Bedhampton Springs, the study must reflect this.
13.2.1 Sites of geological interest should include solution features.
13.2.6 The Conceptual Site Model (CSM) should also look at the development phase as well as legacy contamination and how mitigation measures can be deployed to prevent pollution occurring during the pre-development, during and operational phases. Table 13.1 - Where Secondary A Aquifers overlie Principal Aquifers this should have a receptor assessment of High due to the potential connectivity of the aquifer and the presence of solution features. Secondary A and B Aquifers should lie in Moderate Risk and it is recommended that Unproductive Strata is present in Low Risk.
13.3.15 Operational sources of contamination should consider new preferential pathways and, if relevant, Oil filled cables.

Appropriate attention is given to addressing potential contamination issues.

Access and recreation
The EIA should consider potential impacts on access land, public open land, rights of way in the vicinity of the development. Appropriate mitigation measures should be incorporated for any adverse impacts. We also recommend reference to the relevant Right of Way Improvement Plans (ROWIP) to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.

Hampshire County Council as Highway Authority for Public Rights of Way would like to make the applicant aware that there must be no surface alterations to the rights of way, nor any works carried out which could affect their surface, without first seeking the permission of this department. We welcome that the proposal includes the reinstatement of the land after the works have been completed. The specification of any repair works to the rights of way should be agreed in advance with this department and carried out to Countryside Service Design Standards. Advice is also given that the applicant seeks to minimise any disruption or risk to users of the rights of way throughout the construction period, such as through directing construction traffic away from public footpaths.

The applicant will need to apply for Temporary Closure Orders of the rights of way. We would expect suitable alternative routes to be provided throughout the temporary closure period, where possible. Further details on Closure Orders can be found here:
http://www3.hants.gov.uk/row/making-changes/tempclosures.htm

Drainage
Southern Water's (SW) current sewerage records shows that there are multiple public

sewerage infrastructure (minor and major) within the boundaries or the proposed works, please see attachments. The exact position of this public apparatus must be determined on site by the applicant. No excavation, mounding, new development/building works or tree planting should be carried out close to the existing sewers. Reference should be made to our guidance on standoff distances of the public apparatus:
https://www.southernwater.co.uk/media/default/PDFs/stand-off-distances.pdf

SW have also advised that any works within highway / access road will need to be agreed and approved by SW under NRSWA enquiry to protect public apparatus. It may be possible that also land located within Southern Water's ownership (Pumping Stations sites and Wastewater Treatment Works sites) may be affected by the above proposals. The developer is required to discuss the matter further with Southern Water.

Southern Water requires existing access arrangements to Waste Water Treatment Works and Pumping Stations sites to be maintained with regards to unhindered 24 hour / 7 days a week access. Southern Water operates a closed gate policy during maintenance works for Health and Safety reasons.

No further comments are made in respect of the remaining issues covered in the Scoping Report:

- Carbon and Climate Change
- Human Health
- Soils and Land Use
- Electric and Magnetic Fields
- Waste and Material Resources

Conclusion

The Council has reviewed the topic areas and conclude that generally they adequately address the subject areas under which the development proposals may have significant environmental effects, subject to the above comments being addressed and incorporated into the EIA.

Yours faithfully

Mr L Oliver
Principal Planning Officer
Planning Services
Havant Borough Council

Our Ref: GEN/18/00101
Attachements - Consultation responses

Consultee Comments for Planning Application GEN/18/00101

Application Summary
Application Number: GEN/18/00101
Address: A3, Hambledon Road, Milton Road within Havant Borough Council
Proposal: Scoping Opinion for Aquind Interconnector Project for power transmission cable between England and France. The element of the proposal in Havant Borough Council administrative area comprises the cable route. This proposal forms part of the wider project comprising the following components; HVDC subsea cables, Land/sea transition joint, HVDC underground cables, HVAC underground cables, located largely in Portsmouth City Council administrative area and supporting infrastructure in the form of HVDC converter stations in the UK, which are to be located in either Winchester City Council and/or East Hampshire District Council administrative areas (location to be determined at a later date).
Case Officer: Lewis Oliver

Consultee Details
Name: Mr Neil Adam
Address: Hampshire County Council, Strategic Envionment Group, Winchester SO23 8UD
Email: historic.environment@hants.gov.uk
On Behalf Of: County Archaeologist

Comments
Dear Mr Oliver,

Thank you for your request. The proposed route of the cable crosses an mainly urban landscape but one with some archaeological potential with evidence for prehistoric, Roman and medieval activity recorded to date.

With this in mind I would draw your attention to the EIA Scoping Report which is included among the documentation attached to the above application on your website. Chapter 9 of this Scoping Report addresses the topic of Historic Environment and Archaeology and I am pleased to see that this chapter commits the developer to producing an archaeological Desk-Based Assessment (DBA) that should address the below ground archaeological issues along the cable route. This DBA should set out the nature of the archaeological potential of the site and the impact of any proposals on that archaeological potential as well as a mitigation strategy (which is also anticipated by the Scoping Report) to satisfy the planning authority that all archaeological issues will be sustainably dealt with during development under the terms of NPPF. According to the Scoping Report the DBA will also form the basis of a Historic Environment and Archaeology chapter in the forthcoming Environmental impact Assessment (EIA) that will accompany a future planning application. I endorse this plan of action to you.

If you have any further queries regarding this proposal, then please do not hesitate to contact me.

Yours sincerely,

Neil J. Adam BA ACIfA
Senior Archaeologist
Hampshire County Council

Consultee Comments for Planning Application GEN/18/00101

Application Summary

Application Number: GEN/18/00101

Address: A3, Hambledon Road, Milton Road within Havant Borough Council

Proposal: Scoping Opinion for Aquind Interconnector Project for power transmission cable between England and France. The element of the proposal in Havant Borough Council administrative area comprises the cable route. This proposal forms part of the wider project comprising the following components; HVDC subsea cables, Land/sea transition joint, HVDC underground cables, HVAC underground cables, located largely in Portsmouth City Council administrative area and supporting infrastructure in the form of HVDC converter stations in the UK, which are to be located in either Winchester City Council and/or East Hampshire District Council administrative areas (location to be determined at a later date).

Case Officer: Lewis Oliver

Consultee Details

Name: Mr Stephen Mountain

Address: Public Service Plaza, Civic Centre Road, Havant PO9 2AX

Email: steve.mountain@havant.gov.uk

On Behalf Of: Engineering Services

Comments

No specific land drainage comments

From:	FWM Statutory SWM Consultee mailbox
To:	Havant Planning and Development Mailbox New
Subject:	RE: Scoping Opinion GEN/18/00101 A3, Hambledon Road, Milton Road within Havant Borough Council
Date:	01 March 2018 08:51:46

Thank you for requesting a scoping opinion on the above application.

Due to the size of the development, we would expect to see a full Flood Risk Assessment with a surface water drainage strategy, please direct the applicant to our website https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/planning for full guidance on what is required and further information on recommended surface water drainage techniques.

Also, please note that if the proposals include works to an ordinary watercourse, under the Land drainage Act 1991, as amended by the Flood and Water Management Act 2010, prior consent of the Lead Local Flood Authority is required for this work. This consent is required as a separate permission to planning. Details can be found here https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/changewatercourse

Many Thanks

Flood & Water Management
Economy, Transport & Environment Department,
Hampshire County Council, 1st Floor, EII Court West,
The Castle, Winchester, Hampshire SO23 8UD
Tel: 01962 846730 Fax: 01962 847055
Email: swm.consultee@hants.gov.uk<mailto:swm.consultee@hants.gov.uk>
Web: http://www3.hants.gov.uk/flooding

The HCC Flood and Water Management Team now offer a Flood and Water Management information service for Local Authorities and developers offering both historic site information and a full Pre-Application assessment of a proposed development's Surface Water Drainage features. For full information please visit our website<http://documents.hants.gov.uk/flood-water-management/Surfacewaterandpre-applicationguide-Nov2015.pdf>

From: planning.development@havant.gov.uk [mailto:planning.development@havant.gov.uk]
Sent: 28 February 2018 12:50
To: FWM Statutory SWM Consultee mailbox
Subject: Scoping Opinion GEN/18/00101 A3, Hambledon Road, Milton Road within Havant Borough Council

This email is a consultation request regarding a Scoping Opinion, reference GEN/18/00101.

The attached letter contains contact details should you wish to discuss the application with the Case Officer.

To see the details of the application and associated documents on Havant Borough Council's Public Access pages, follow this link<https://planningpublicaccess.havant.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=DCAPR_242785>.

If you require any further information please email planning.development@havant.gov.uk<mailto:planning.development@havant.gov.uk> or telephone (023) 92 446263.

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We can provide a User Guide on request.

Ref: Mr L Oliver
Proposal: Scoping Opinion for Aquind Interconnector Project for power transmission cable between England and France. The element of the proposal in Havant Borough Council administrative area comprises the cable route. This proposal forms part of the wider project comprising the following components; HVDC subsea cables, Land/sea transition joint, HVDC underground cables, HVAC underground cables, located largely in Portsmouth City Council administrative area and supporting infrastructure in the form of HVDC converter stations in the UK, which are to be located in either Winchester City Council and/or East Hampshire District Council administrative areas (location to be determined at a later date)
Site: A3, Hambledon Road, Milton Road within Havant Borough Council
Ref: GEN/18/00101

Thank you for providing us with this consultation opportunity. Please accept this response as being on behalf of Hampshire County Council's Countryside Service. In addition to our statutory responsibility as the Highway Authority for Public Rights of Way, the Countryside Service manages Countryside Sites and Country Parks throughout Hampshire.

Comment

We agree with table 3.1 which lists PRoW users as a sensitive receptor, and note point 8.1.17 which states that:

> "Visual effects associated with the laying of the cable routes and land/sea transition bay will be temporary and experienced by a variety of users including recreational users utilising PRoWs and public footpaths, local residents and road users including cycles and horse riders. The land will be reinstated following the installation of the cables and thus returned to its previous use. There will be no permanent visible sign of the works."

We would like to make the applicant aware that there must be no surface alterations to the rights of way, nor any works carried out which could affect their surface, without first seeking the permission of this department. We welcome that the proposal includes the reinstatement of the land after the works have been completed. The specification of any repair works to the rights of way should be agreed in advance with this department and carried out to Countryside Service Design Standards:
https://www.hants.gov.uk/landplanningandenvironment/countryside/designstandards

We also request that the applicant seeks to minimise any disruption or risk to users of the rights of way throughout the construction period, such as through directing construction traffic away from public footpaths.

The applicant will need to apply to our department for Temporary Closure Orders of the rights of way. We would expect suitable alternative routes to be provided throughout the temporary closure period, where possible. Further details on Closure Orders can be found here: http://www3.hants.gov.uk/row/making-changes/temp-closures.htm

We request that the applicant contact us as soon as possible to discuss the impact of their proposal upon the rights of way network in more detail.

Regards,

Owen Devine

Countryside Planning Officer
Hampshire County Council

CONSULTATION UNDER THE TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE ENGLAND) ORDER 2010	
Applicant:	**Aquind Ltd**
Planning Application Reference:	**East Hants 57524/002**
Proposal:	**Request for Scoping Opinion - Installation of HVDC converter station**
Location:	**Land south and West of Lovedean Electricity Sub Station, Broadway Lane, Lovedean, Waterlooville**
Date:	**13 March 2018**

Portsmouth Water have reviewed the application for a request for a scoping opinion – installation of a HVDC converter station and have the following comments. Our response is based on the review of the following documents:

- AQUIND_EIA_SCOPING_REPORT_ISSUE__NO_FIGURES_.-769527;
- FIGURE_1.1-769526;
- FIGURE_1.2-769525;
- FIGURE_9.4-769523;
- FIGURE_10.1-769524; and
- FIGURES_9.2_-_9.3-769522.

Portsmouth Water have identified this application as one that is of interest to us. We recognise that there is no statutory requirement for you to consult us however we respectfully ask to be pro-actively consulted on this application in the future. This is to ensure that adequate provision of water industry infrastructure can be assessed and protection of our sources and assets are considered in the decision process.

Portsmouth Water have particular interest in the following chapters of assessment and welcome their inclusion in the Environmental Impact Assessment (EIA):

- 7 Noise and vibration;
- 12 Water Resources and Flood Risk;
- Ground Conditions; and
- Soils and Land Use.

Specific comments on these chapters are presented below, where relevant our comments are referenced using the Aquind EIA Scoping Report's nomenclature for ease of reference.

Chapter 7 Noise and Vibration

The noise and vibration assessment must include any anticipated vibration impacts on groundwater i.e. increased turbidity, on Portsmouth Water's supply. Vibrations caused during development must form part of this assessment to understand potential risks associated with turbidity.

Mitigation of vibration causing increased turbidity is challenging therefore it is best dealt with during the design phase.

Chapter 12 Water Resources and Flood Risk

12.1.1 The study area should encompass ground and surface water features within at least 1000m when reviewing baseline conditions. There are potential impacts on groundwater abstractions due to solution features and rapid transit times between proposed site and drinking water sources.

The proposed cable route has solution features present. These features contribute to a karstic environment with rapid transit times therefore pollution prevention is key. Consideration of the solution features must form part of the scope of work particularly in key areas i.e. close to the Lambeth Group and Chalk boundaries and Clay with Flints and Chalk boundaries.

12.1.37 The route of the cable lies on Superficial Geology overlying Bedrock and, in places, directly on Bedrock that is classified as Principal Aquifer. This must be reflected in the study along with karstic hydrogeology and solution features.

12.2.1 Surface-borne and subsurface pollutants should be considered in the study to account for legacy contamination derived from historic land use.

Chapter 13 Ground Conditions

13.1.1 The study must incorporate information on solution features and cavities due to potentially rapid transit times in the catchment posing a risk to Portsmouth Water's public drinking water supply.

13.1.2 The Ground Conditions chapter is proposed to include water quality therefore due the nature of the catchment being karstic in places the 250m study area is considered too narrow and should be extended to at least 500m.

13.1.14 The proposed route passes within SPZs for the Havant & Bedhampton Springs, the study must reflect this.

13.2.1 Sites of geological interest should include solution features.

13.2.6 The Conceptual Site Model (CSM) should also look at the development phase as well as legacy contamination and how mitigation measures can be deployed to prevent pollution occurring during the pre-development, during and operational phases.

Table 13.1 – Where Secondary A Aquifers overlie Principal Aquifers this should have a receptor assessment of High due to the potential connectivity of the aquifer and the presence of solution features. Secondary A and B Aquifers should lie in Moderate Risk and it is recommended that Unproductive Strata is present in Low Risk.

13.3.15 Operational sources of contamination should consider new preferential pathways and, if relevant, Oil filled cables?

General Comments

2.2.6 The Source Protection Zones (SPZ) must be identified in any future reporting to ensure the appropriate level of risk is assigned to the risk assessments and design/operations.

2.5.5 What are the proposed cooling options at the convertor station, do they involve the use of oils?

2.5.7 Details of temporary laydown areas will be required, the applicant should ensure these are low permeability and that pollution prevention measures are in place prior to use such as spill kits and incident management systems.

2.5.14 Details of Horizontal Directional Drilling (HDD) locations and methodology will be required for approval prior to commencement to understand the pollution prevention methodologies employed to mitigate potential impacts on groundwater. The potential land contamination risks must be addressed prior to commencement.

2.5.19 Construction details of the proposed joint bays should be provided for approval.

2.6.2 The specification and location of all oil filled cables, existing and proposed, should be provided to understand the potential risks posed to groundwater in the catchment.

2.7.2 Environment Surveys and Inspections must include consideration of soils, potential contamination, geology, superficial cover, bedrock, hydrogeology, solution features, source protection zones and nearby abstractions.

2.7.9 Please provide details/method statement for trenchless techniques for the installation of cable ducts.

2.7.35 All imported soils material must be clean and inert and not pose a contaminant threat to the underlying aquifer.

2.9.1 The risk assessment must consider the risks posed to groundwater associated with leaving the cable in situ at the end of the cable's 40 year design life.

Table 3.1 Hydrological Receptors – Effects of and on solution features, aquifer, water quality including turbidity must be included.

3.11.2 The assessment must be designed to understand the potential for pathway creation through impacted soils and/or long-term spill and incident management if preferential pathways are created.

3.13.3 Portsmouth Water would like to guarantee consultation via the LPA.

5.3.17 Traffic routes should be directed away from Source Protection Zones where feasible to reduce risk of collision and/or spills during construction and operation.

18.3.20 We agree with and recommend the preparation of a Construction Environmental Management Plan (CEMP).

Summary

The proposed technical approach appears acceptable providing our comments are incorporated in the process and catchment-specific characteristics are considered including concerns over increased turbidity, solution features, contamination pathways and impacts on groundwater.

From:	Minky Albon
To:	Havant Planning and Development Mailbox New
Subject:	RE: Scoping Opinion GEN/18/00101 A3, Hambledon Road, Milton Road within Havant Borough Council
Date:	16 March 2018 08:28:24

RE TATA Telecommunications' Network

Thank you for your enquiry.

Enquiry: NOT AFFECTED

With Regards,

Minky Albon
Streetworks Administrator

DDI 01992 655919 f. 01992 788026
e. minky.albon@jsmgroup.com<mailto:minky.albon@jsmgroup.com> w.
www.jsmgroup.com<http://www.jsmgroup.com/>

Sterling House
Mutton Lane
Potters Bar
Hertfordshire EN6 3AR

From: planning.development@havant.gov.uk [mailto:planning.development@havant.gov.uk]
Sent: 28 February 2018 12:50
To: tatadiversions <tatadiversions@jsmgroup.com>
Subject: Scoping Opinion GEN/18/00101 A3, Hambledon Road, Milton Road within Havant Borough Council

This email is a consultation request regarding a Scoping Opinion, reference GEN/18/00101.

The attached letter contains contact details should you wish to discuss the application with the Case Officer.

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Consultee Comments for Planning Application GEN/18/00101

Application Summary
Application Number: GEN/18/00101
Address: A3, Hambledon Road, Milton Road within Havant Borough Council
Proposal: Scoping Opinion for Aquind Interconnector Project for power transmission cable between England and France. The element of the proposal in Havant Borough Council administrative area comprises the cable route. This proposal forms part of the wider project comprising the following components; HVDC subsea cables, Land/sea transition joint, HVDC underground cables, HVAC underground cables, located largely in Portsmouth City Council administrative area and supporting infrastructure in the form of HVDC converter stations in the UK, which are to be located in either Winchester City Council and/or East Hampshire District Council administrative areas (location to be determined at a later date).
Case Officer: Lewis Oliver

Consultee Details
Name: Consultee Environmental Health (Environment Team)
Address: Public Service Plaza, Civic Centre Road, Havant PO9 2AX
Email: EHEnvironment@havant.gov.uk
On Behalf Of: Environmental Health Manager, Community Group

Comments
I have reviewed the Onshore UK scoping report. As with all EIA's, the need to include or exclude items from the EIA (as being distinct from 'ordinary' environmental assessments that would be required for a planning application) is a matter of interpretation of the available guidance; of which there are different schools of thought.

I note that Aquind Ltd. has opted to voluntarily address the environmental issues associated with this development within the framework of the EIA regulations, despite the proposal not clearly meeting any specific description or threshold of scale which would compel the need for a mandatory EIA. I also note that the applicant has adopted an approach whereby the proposed environmental statement is to be comprehensive, without segregating issues from EIA framework where they are 'more routine' assessments. I would consider this approach to represent best practice.

In terms of the scoping report itself, it would appear to be as comprehensive as might be expected for a voluntary adherence to the stricter regime of environmental reporting under the EIA Regulations framework. I note in particular that the applicant has comprehensively identified the potential traffic impacts, air quality implications, contamination risks, and nuisance issues (noise/vibration/light). Matters scoped in, and scoped out, are both broadly agreed insofar as there is direct relevance or an associated link with Environmental Health.

I have not noted any obvious omissions from the proposed scope, and would consider that submission of the application along with a supporting environmental statement of the scope described, would be sufficient to allow determination of the application. Assuming the content of the assessments is as thorough as the treatment of the range of potential environmental impacts, I would imagine that efficient targeting of any conditions that may be required following- or as a result of- the outcome of those assessments, can be achieved.

I have no adverse comments to make on the principle of this development, nor the proposed scope of the environmental statement.

Southern Water

Department of Planning and Development
Havant Borough Council
Public Service Plaza
Civic Centre Road
Havant
Hampshire
PO9 2AX

Developer Services
Southern Water
Sparrowgrove House
Sparrowgrove
Otterbourne
Hampshire
SO21 2SW

Tel: 0330 303 0119
Email: southernwaterplanning@atkinsglobal.com

Your Ref
GEN/18/00101
Our Ref
PLAN-022078
Date
19/03/2018

Dear Sirs,

Proposal: Scoping Opinion for Aquind Interconnector Project for power transmission cable between England and France. The element of the proposal in Havant Borough Council administrative area comprises the cable route. This proposal forms part of the the wider project comprising the following components; HVDC subsea cables, Land/sea transition joint, HVDC underground cables, HVAC underground cables, located largely in Portsmouth City Council administrative area and supporting infrastructure in the form of HVDC converter stations in the UK, which are to be located in either Winchester City Council and/or East Hampshire District Council administrative areas (location to be determined at a later date)
Site: A3, Hambledon Road, Milton Road within Havant Borough Council, PO8 0SJ.
GEN/18/00101

Thank you for your letter of 28/02/2018.

Further to your scoping/ screening document for the above site I have the following observations to make in respect of the proposed development:-

- Southern Water's current sewerage records shows that there are multiple public sewerage infrastructure (minor and major) within the boundaries or the proposed works. The exact position of this public apparatus must be determined on site by the applicant. No excavation, mounding, new development/building works or tree planting should be carried out close to the existing sewers. Reference should be made to our guidance on standoff distances of the public apparatus: https://www.southernwater.co.uk/media/default/PDFs/stand-off-distances.pdf

- Furthermore, due to changes in legislation that came in to force on 1st October 2011 regarding the future ownership of sewers it is possible that a sewer/s now deemed to be public could be crossing the above property.
- Any works within highway / access road will need to be agreed and approved by SW under NRSWA enquiry in order to protect public apparatus.
- It may be possible that also land located within Southern Water's ownership (Pumping Stations sites and Wastewater Treatment Works sites) may be affected by the above proposals. The developer is required to discuss the matter further with Southern Water.
- Southern Water requires existing access arrangements to Waste Water Treatment Works and Pumping Stations sites to be maintained with regards to unhindered 24 hour / 7 days a week access. Southern Water operates a closed gate policy during maintenance works for Health and Safety reasons

If you require any further information please do not hesitate to contact this office on the numbers above.

Yours sincerely

[redacted]

Developer Services

SOUTHERN WATER

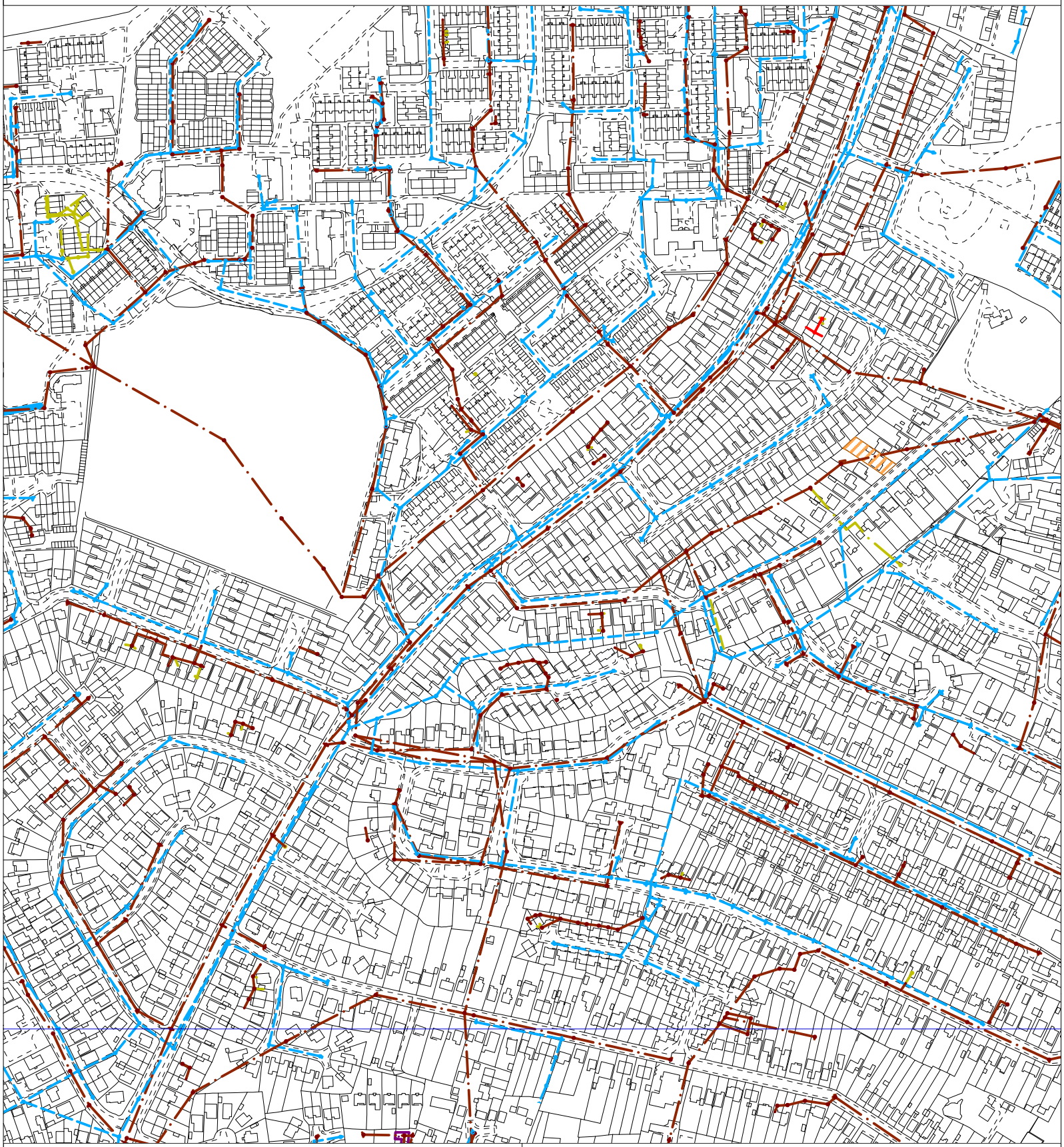
The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

Southern Water

O.S. REF: SU6812SE	Scale: 1:4429	Printed By: banuh	Date: 8-3-2018
Screen Print		Southern Water MapGuide Browser	
WARNING: BAC pipes are constructed of Bonded Asbestos Cement		Requested By:	
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

N

SOUTHERN WATER



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Southern Water

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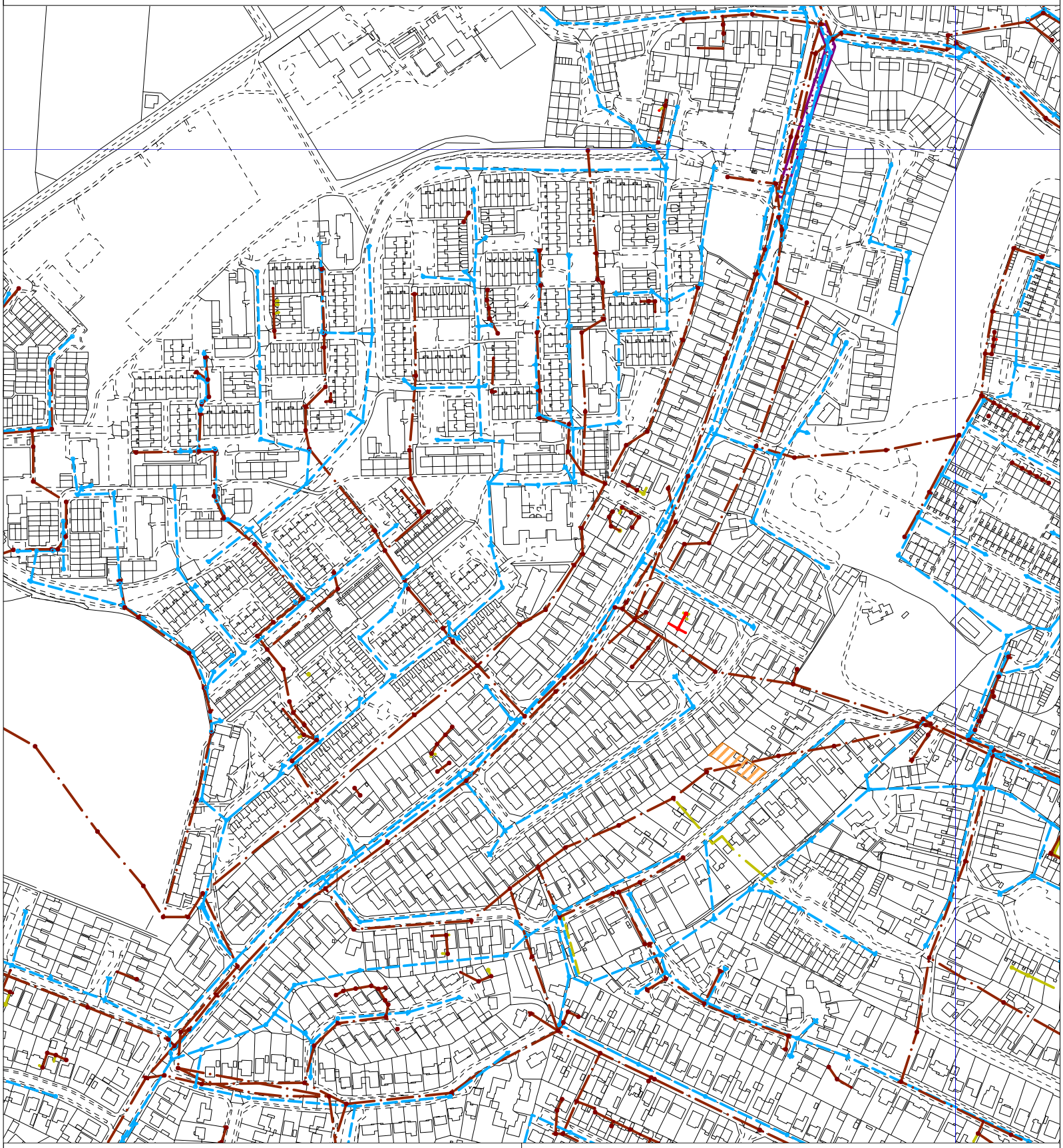
SOUTHERN WATER



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Southern Water

O.S. REF: SU6811NE	Scale: 1:4065	Printed By: banuh	Date: 8-3-2018
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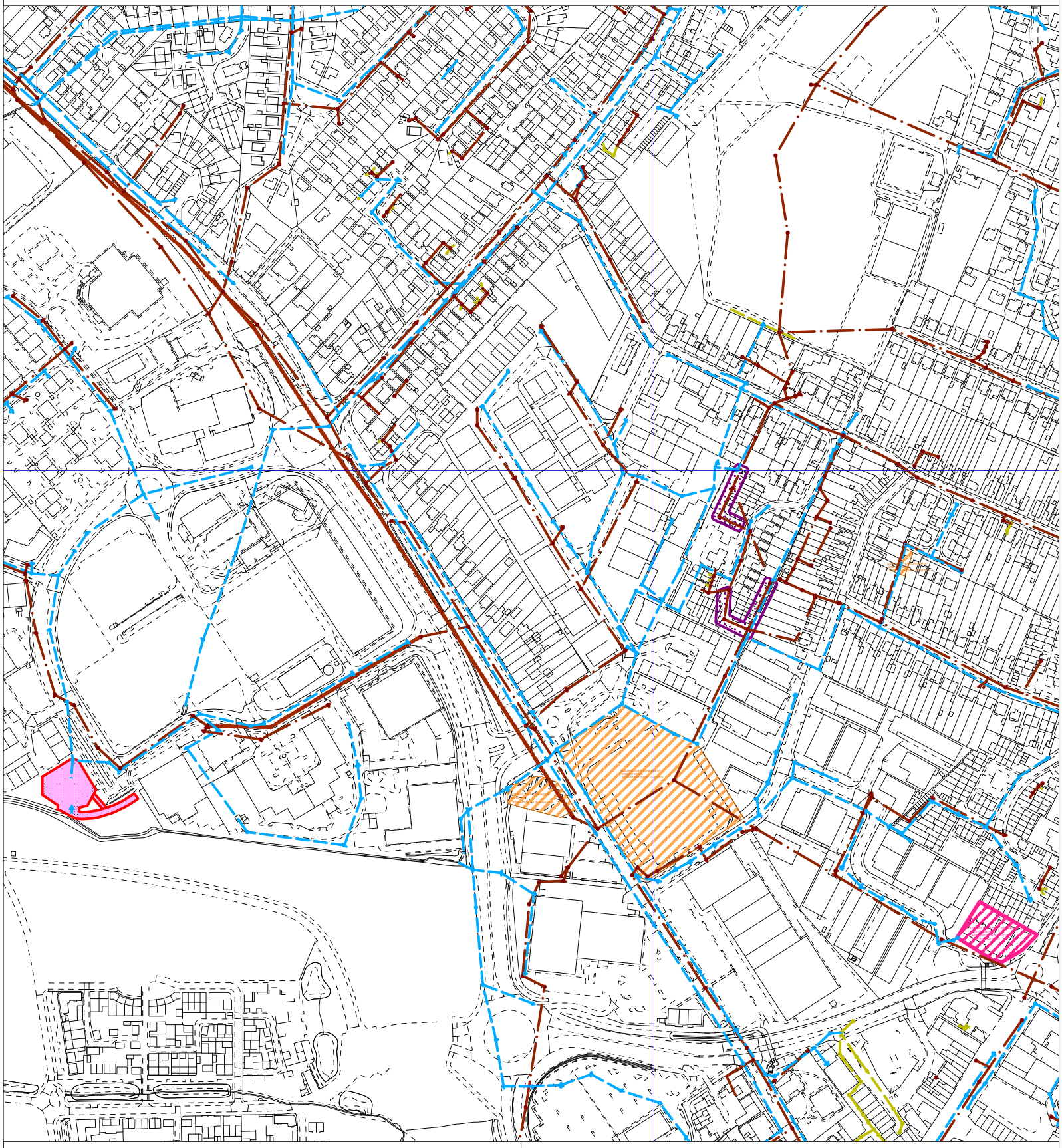
SOUTHERN WATER



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Southern Water

O.S. REF: SU6709NE	Scale: 1:4548	Printed By: banuh	Date: 8-3-2018
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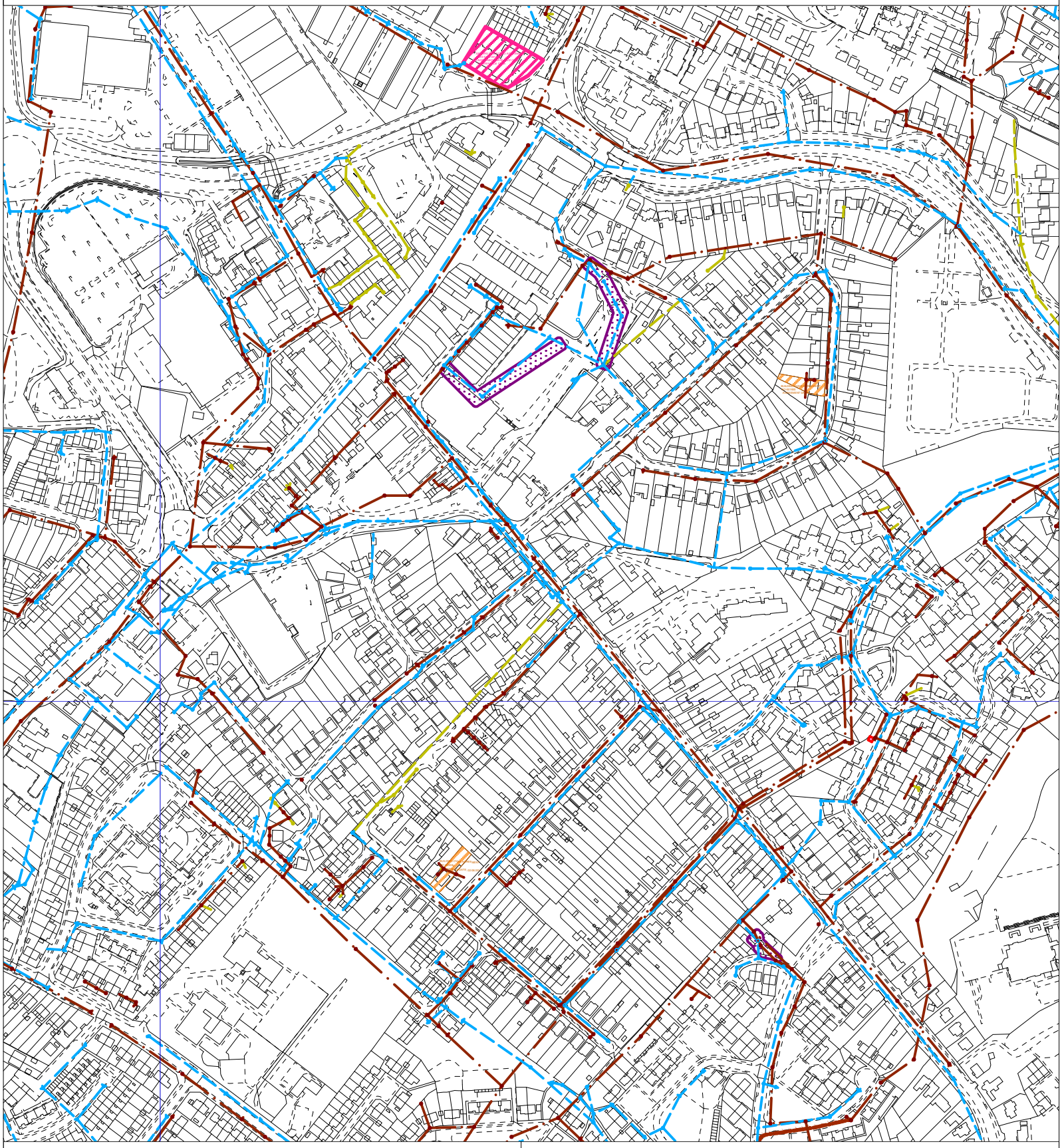
SOUTHERN WATER



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Southern Water

O.S. REF: SU6809SW	Scale: 1:4548	Printed By: banuh	Date: 8-3-2018
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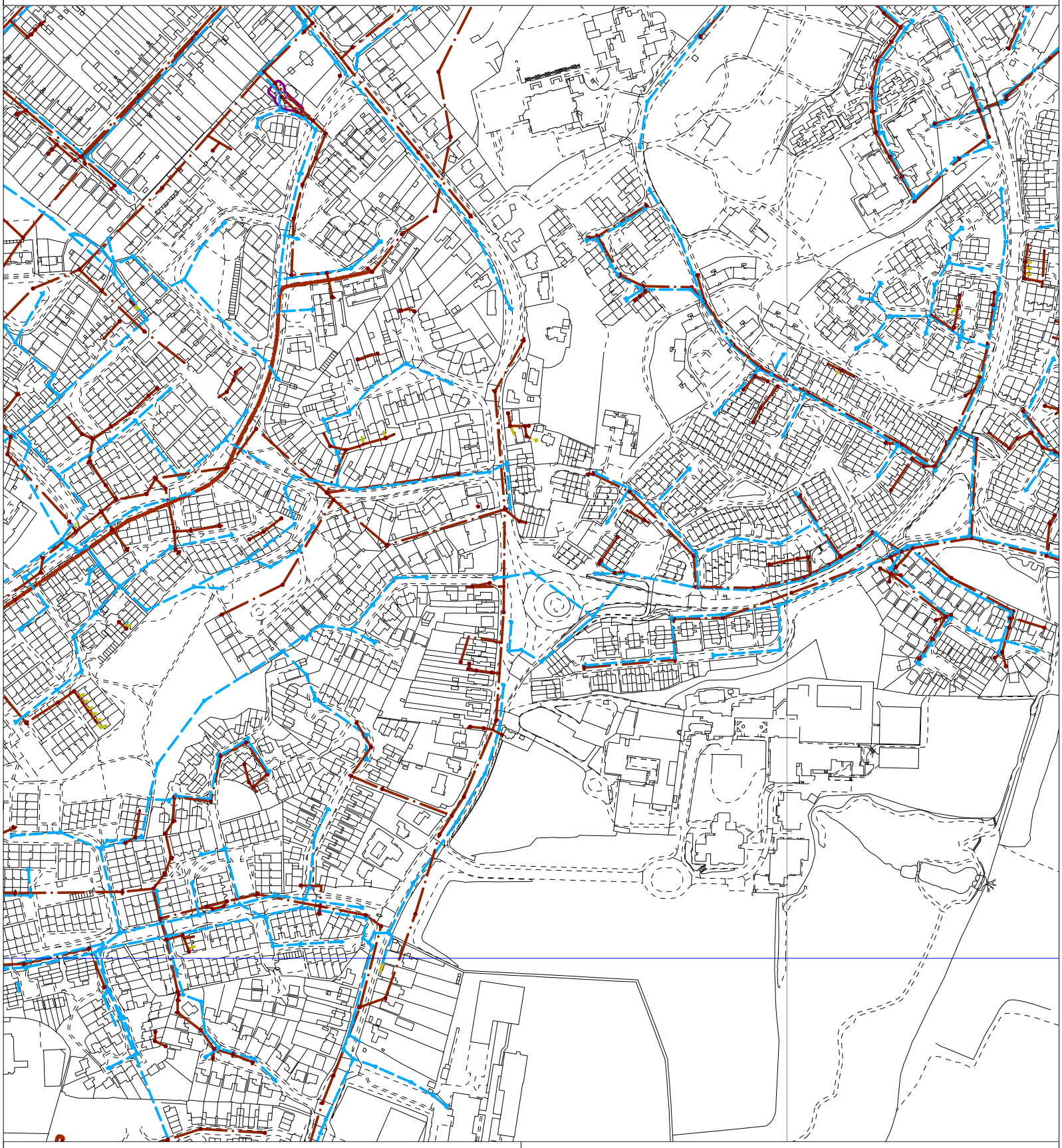
SOUTHERN WATER



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Southern Water

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			Date: 8-3-2018
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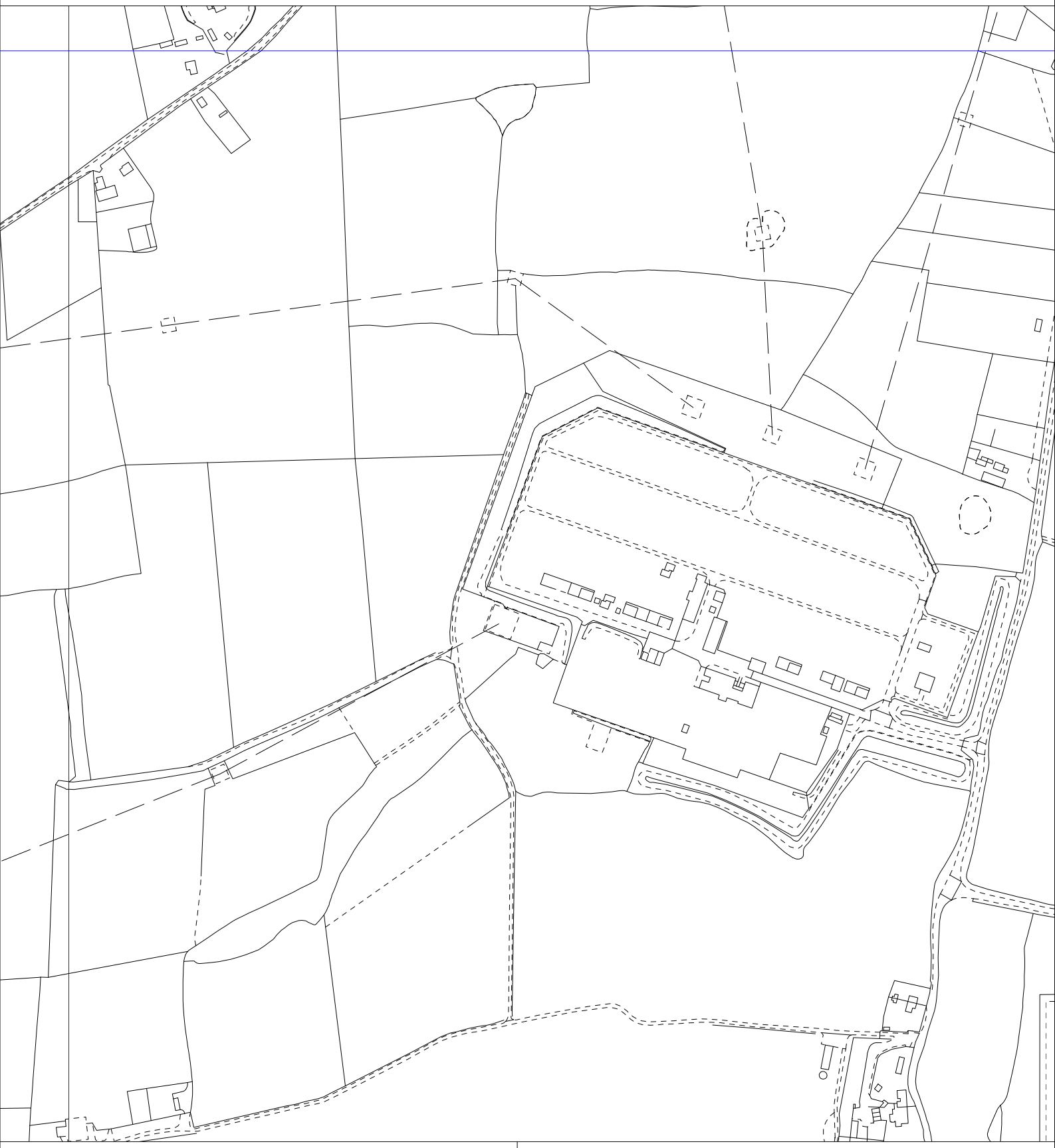
SOUTHERN WATER



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Southern Water

O.S. REF: SU6713SW	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
Screen Print		Southern Water MapGuide Browser	
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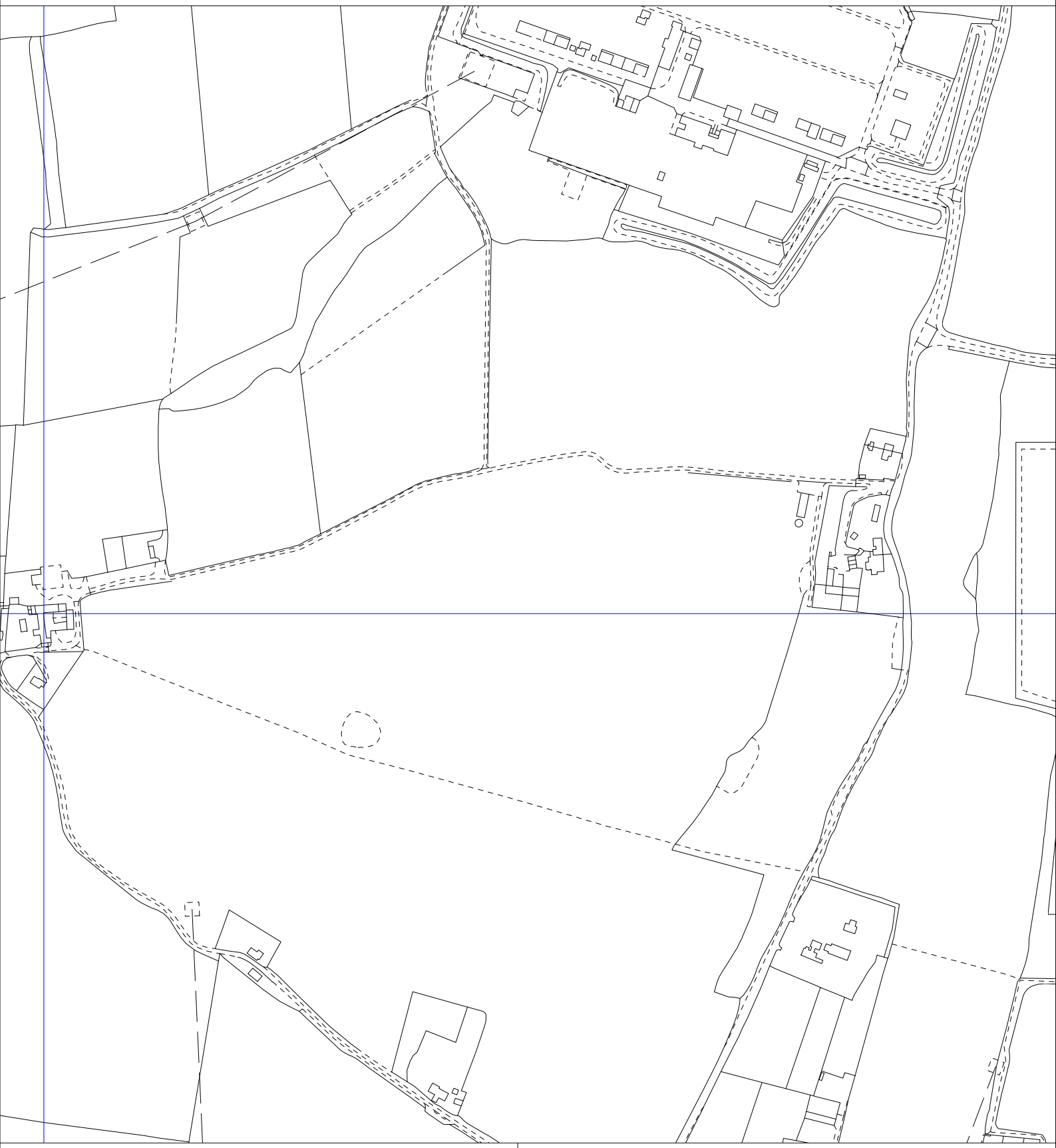
SOUTHERN WATER



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Southern Water

O.S. REF: SU6712NW	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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SOUTHERN WATER

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Southern Water

O.S. REF: SU6614SE	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
Screen Print		Southern Water MapGuide Browser	
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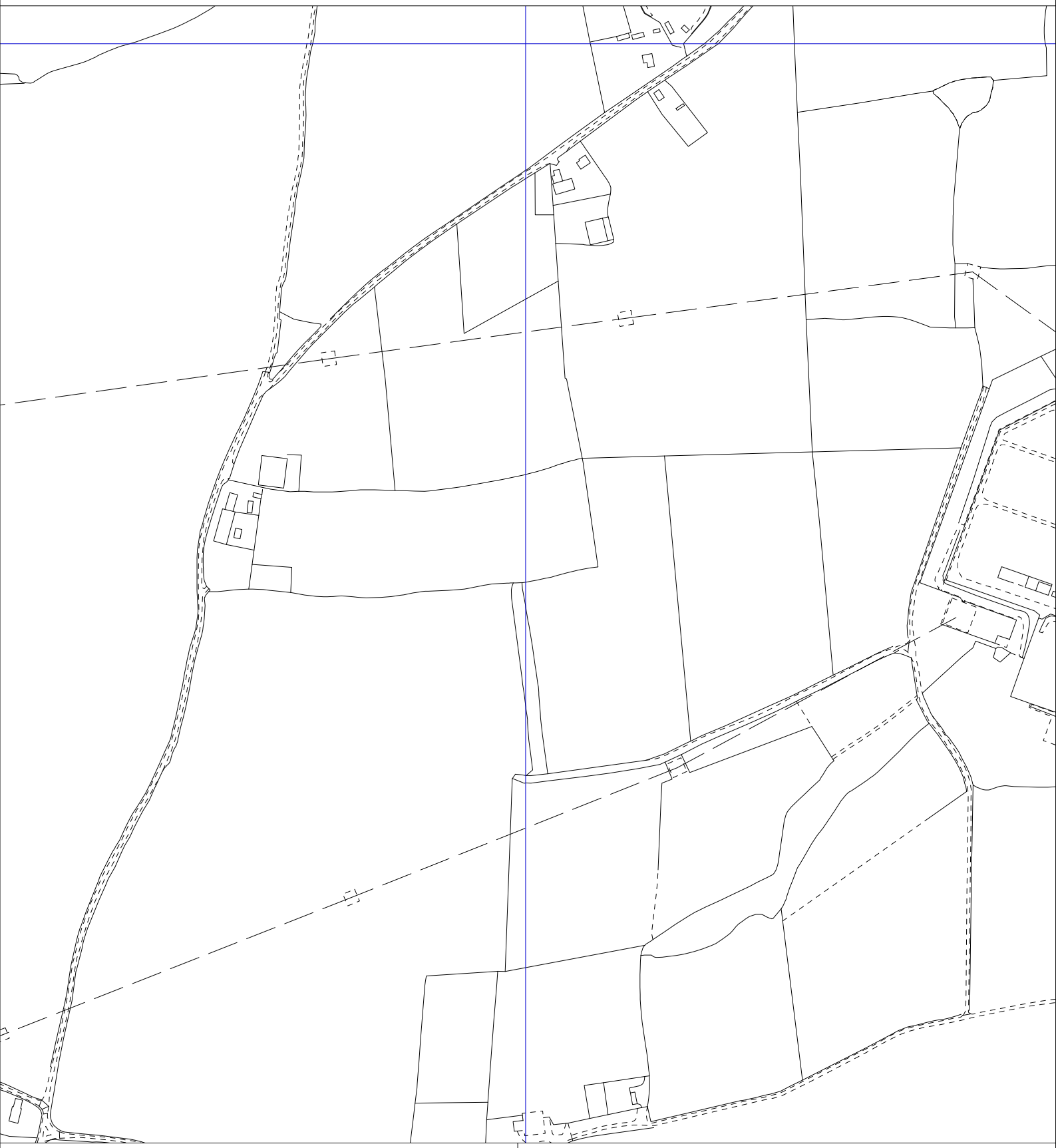
SOUTHERN WATER



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Southern Water

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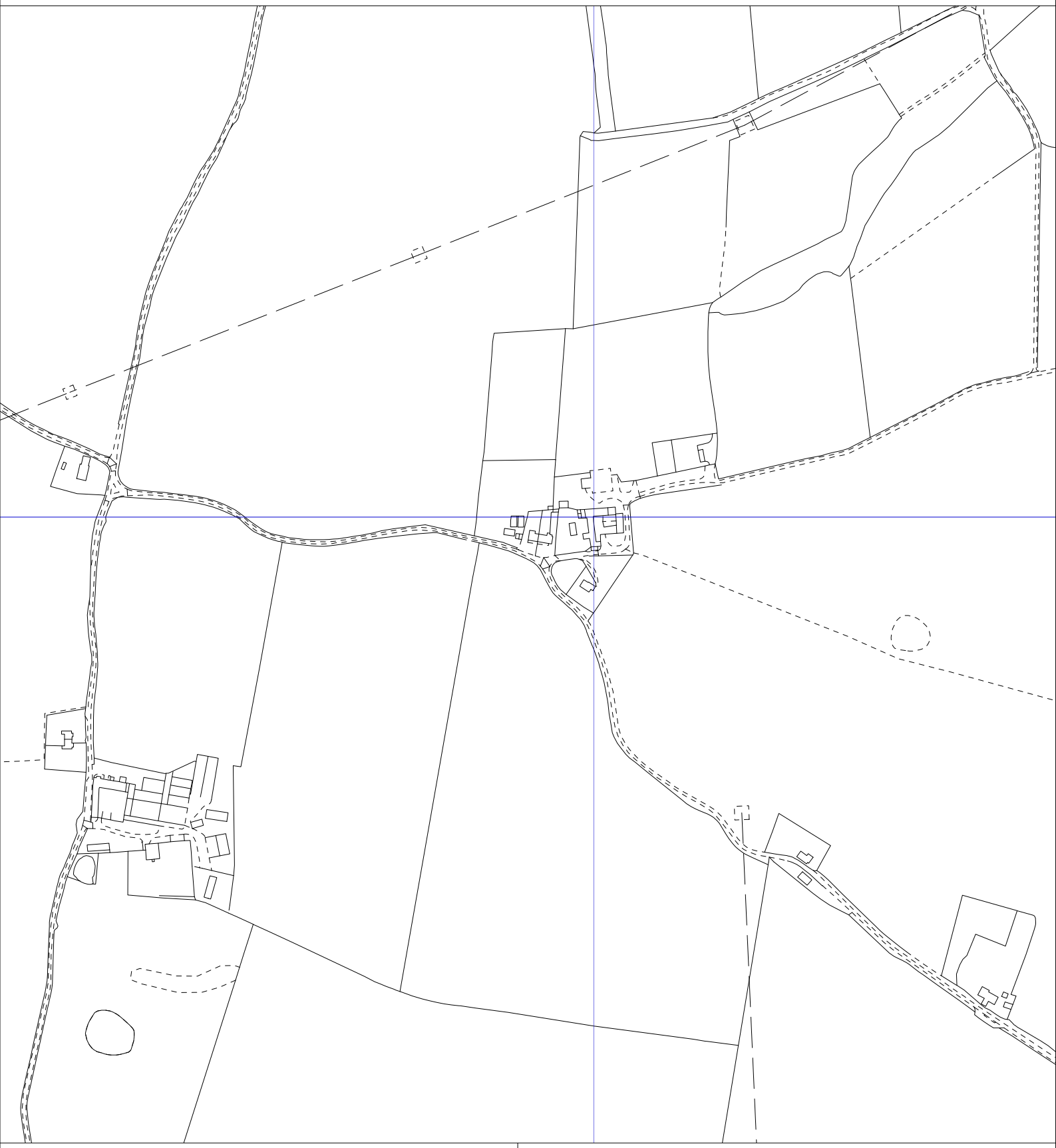
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

SOUTHERN WATER



The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

Southern Water

O.S. REF: SU6612NE	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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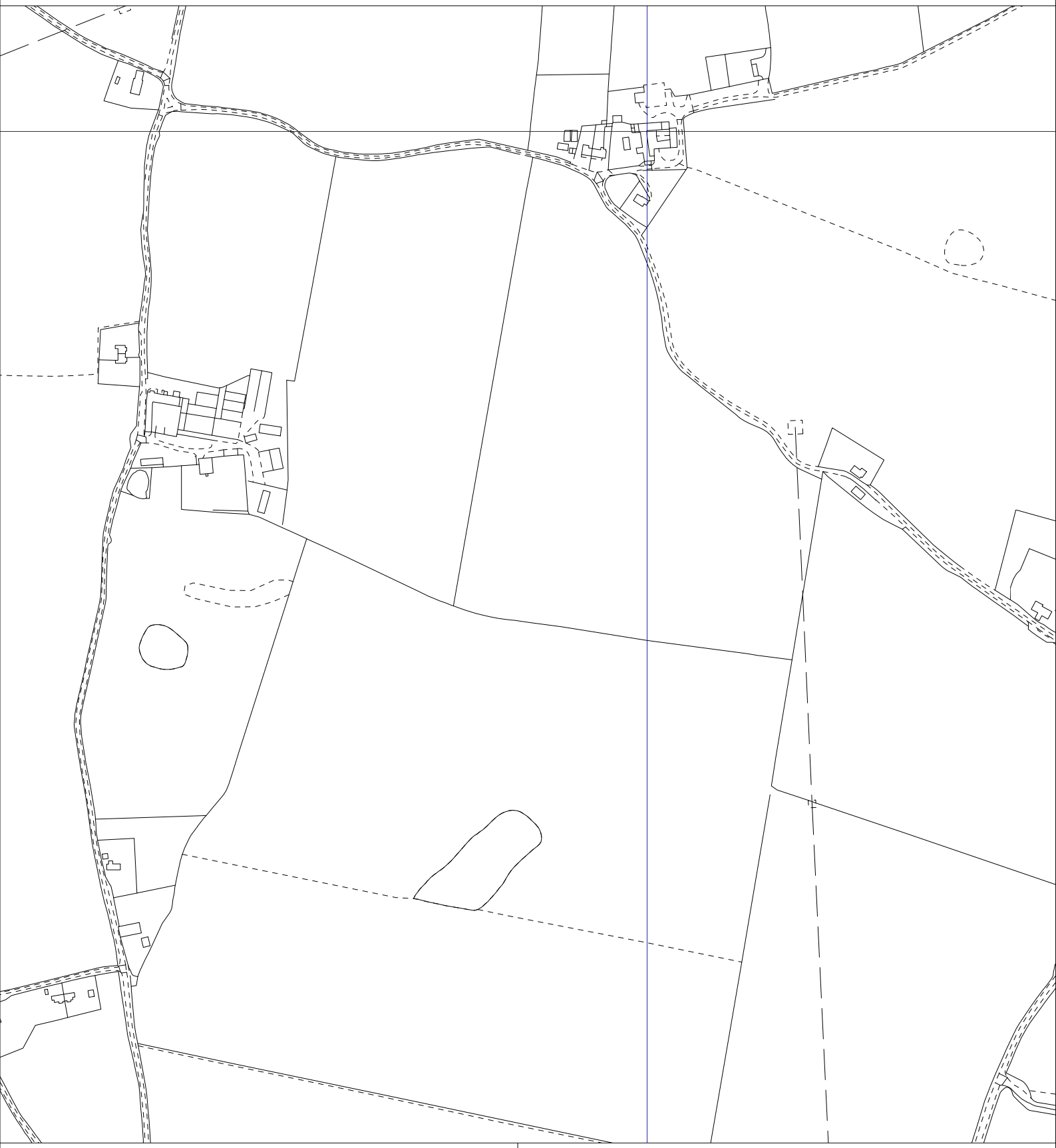
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

SOUTHERN WATER



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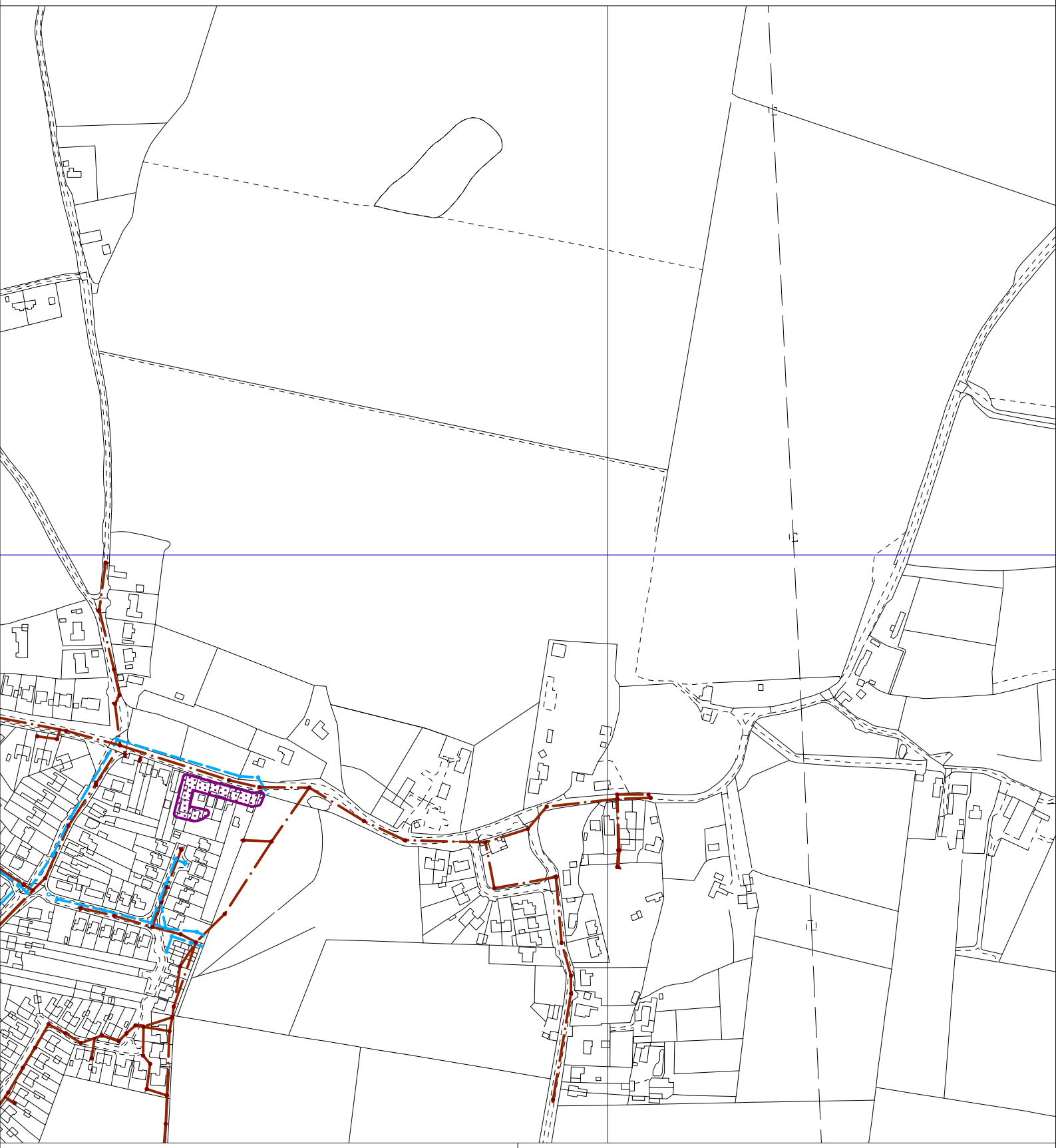
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

SOUTHERN WATER



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Southern Water

O.S. REF: SU6611NE	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

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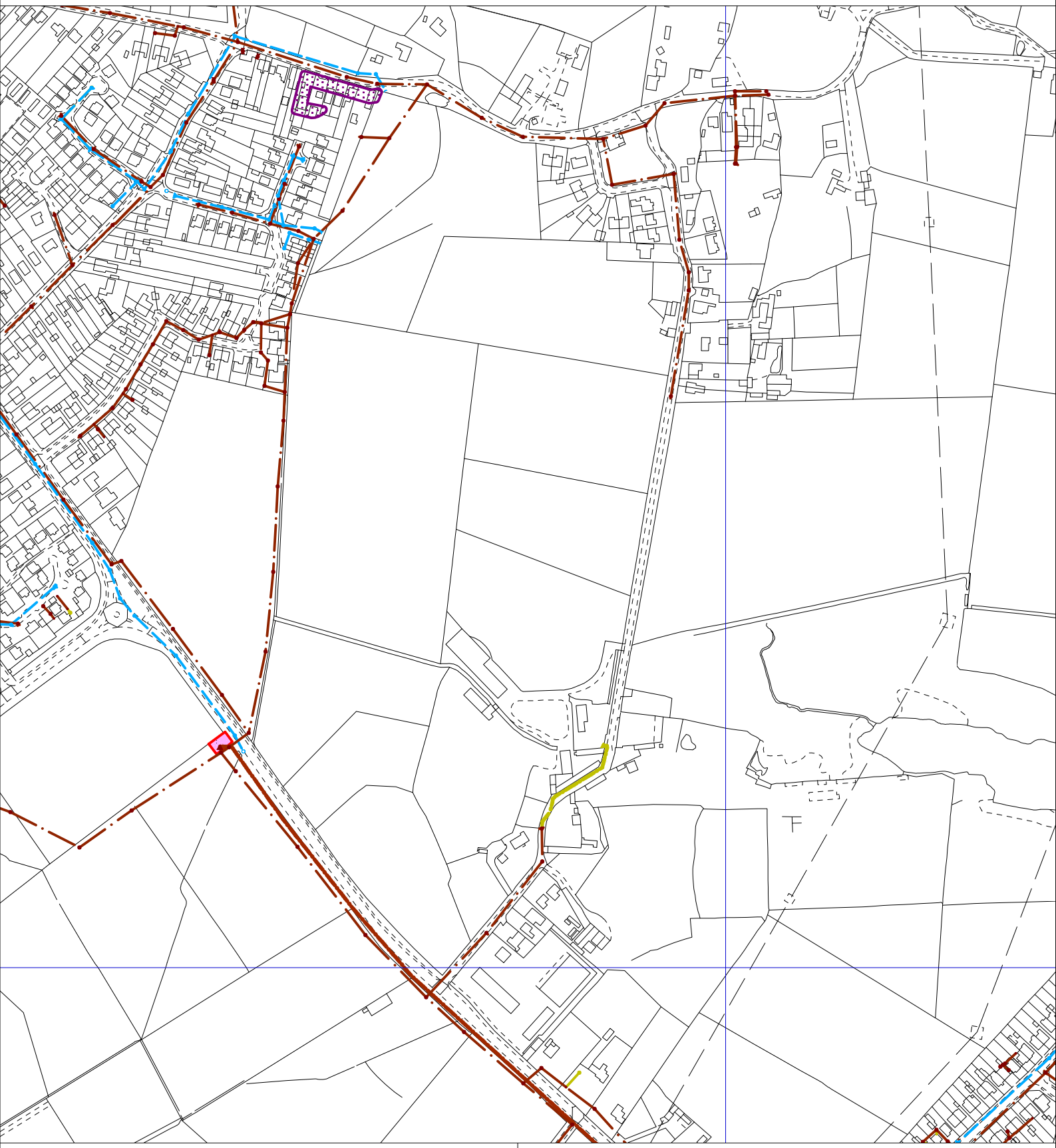
SOUTHERN WATER



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Southern Water

O.S. REF: SU6611SE	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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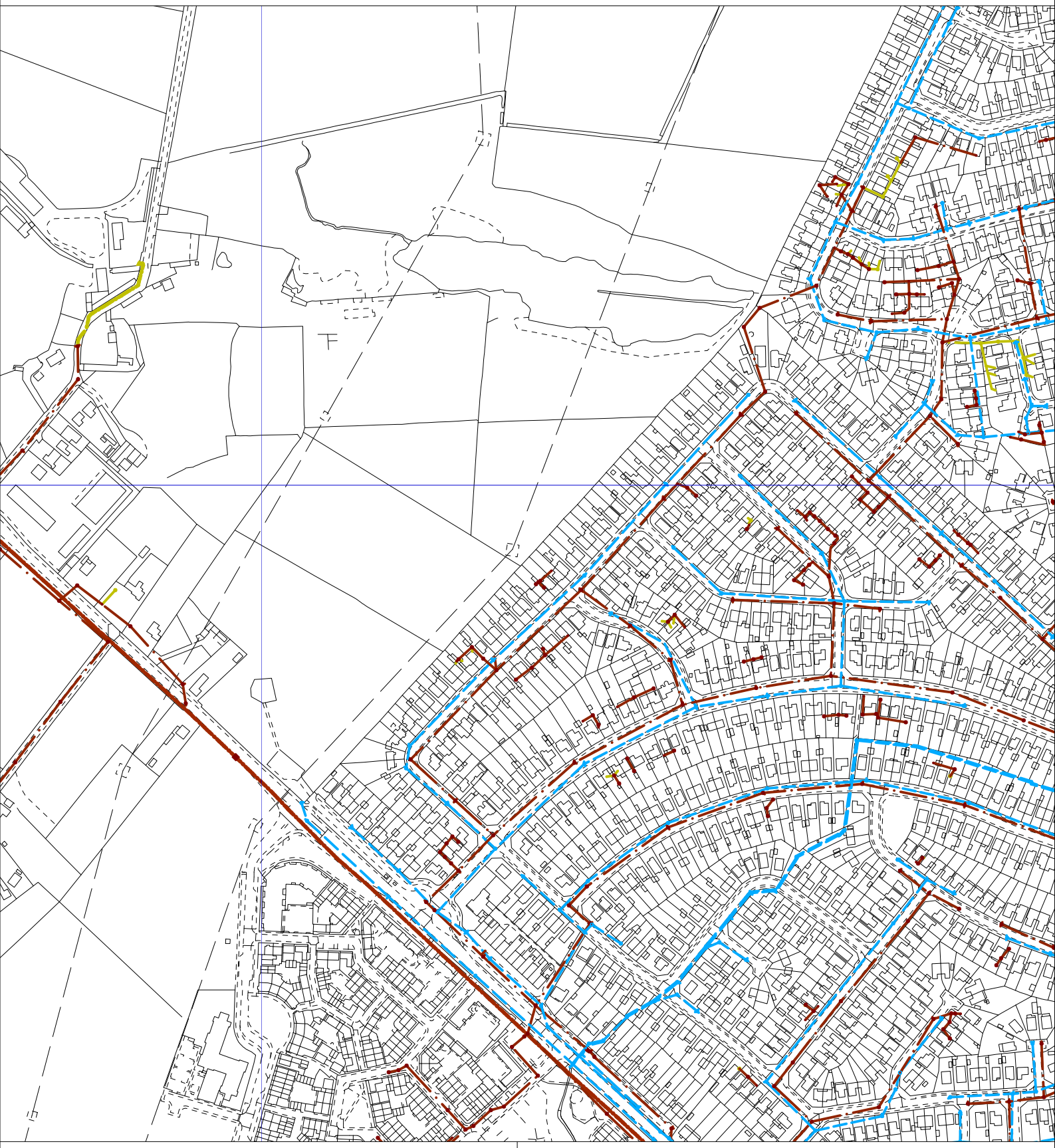
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

SOUTHERN WATER



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Southern Water

O.S. REF: SU6710NW	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
Screen Print		Southern Water MapGuide Browser	
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WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

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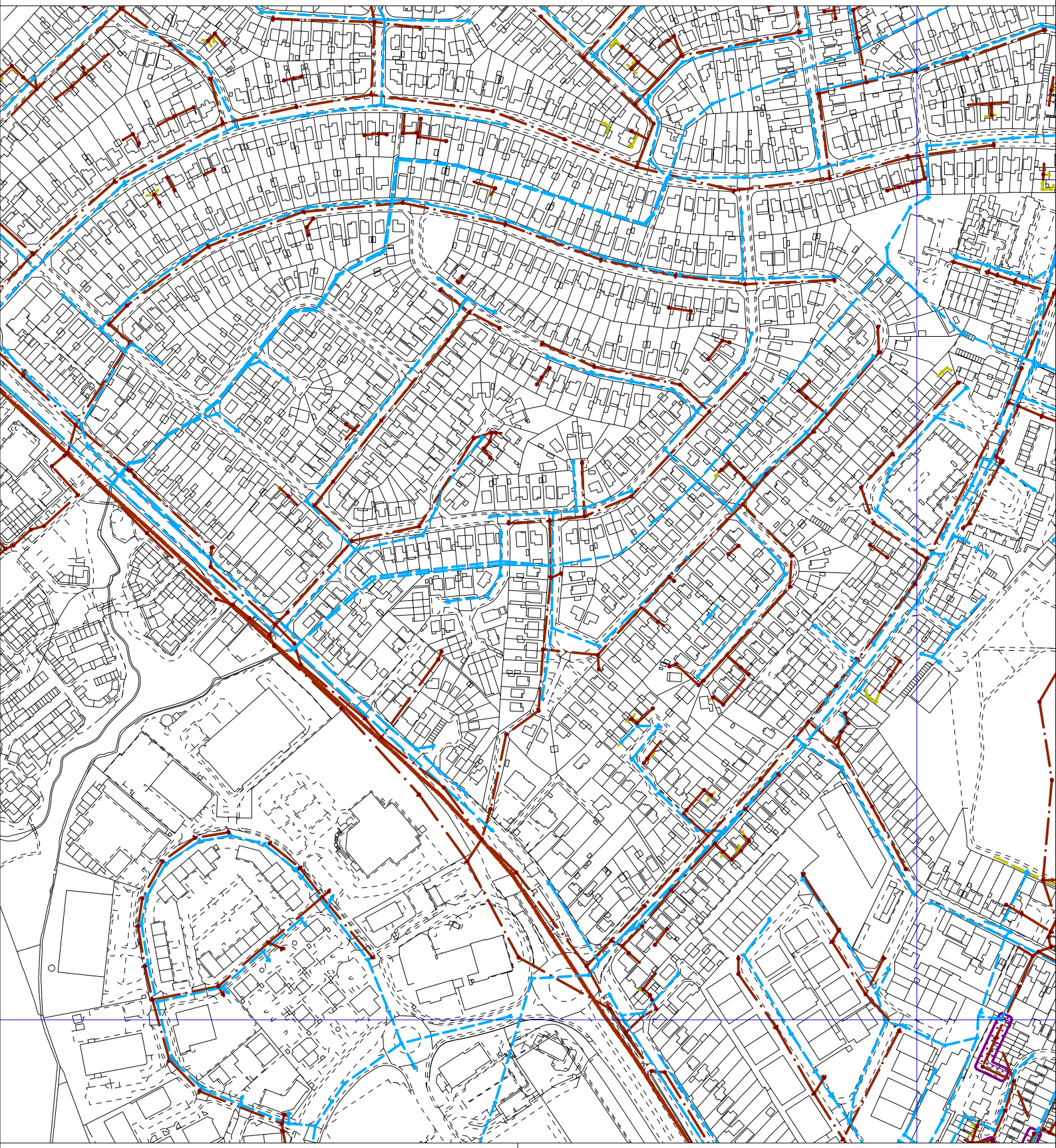
SOUTHERN WATER



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Southern Water

O.S. REF: SU6710SE	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

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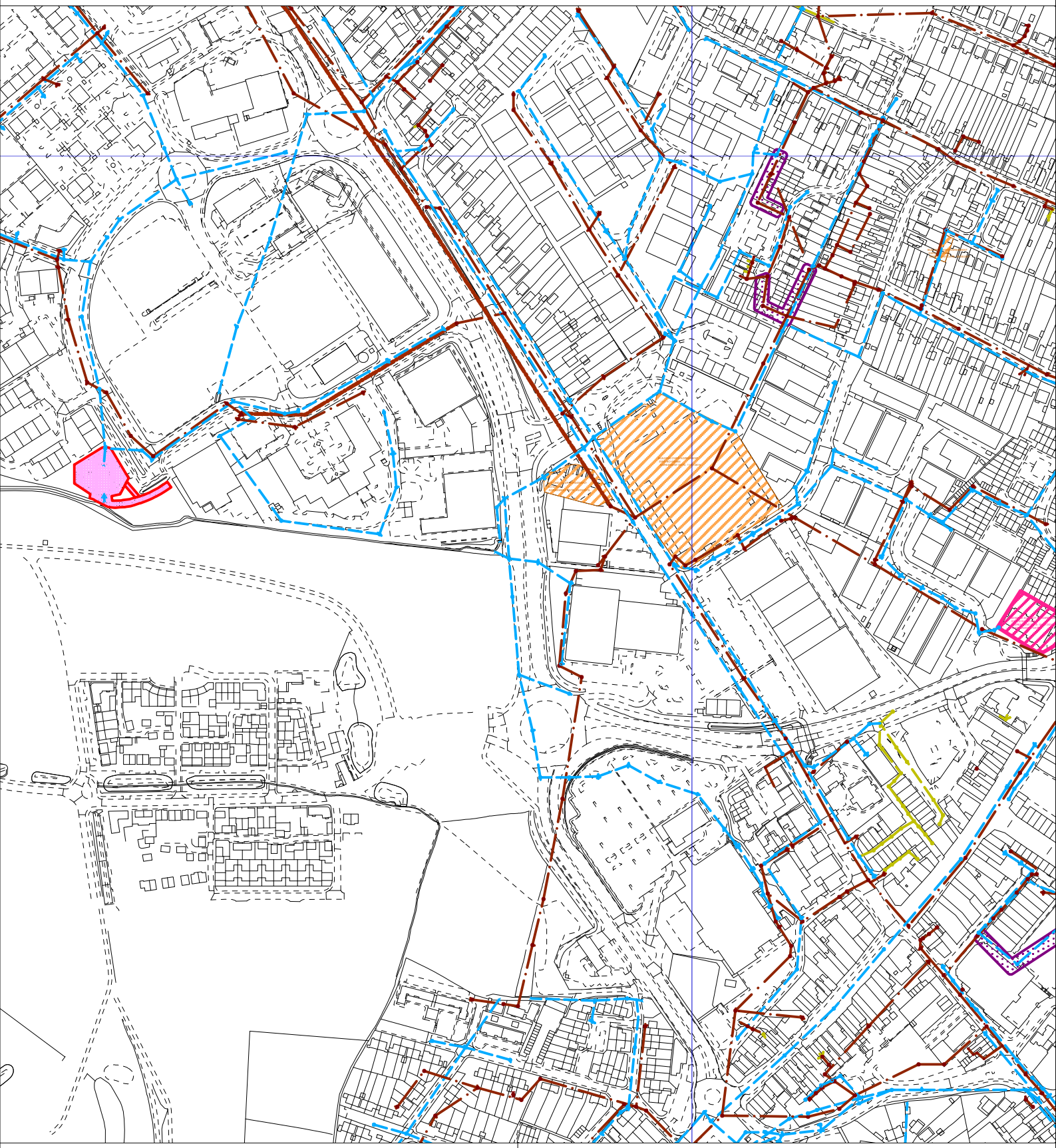
SOUTHERN WATER



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Southern Water

O.S. REF: SU6709NE	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
Screen Print		Southern Water MapGuide Browser	
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WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

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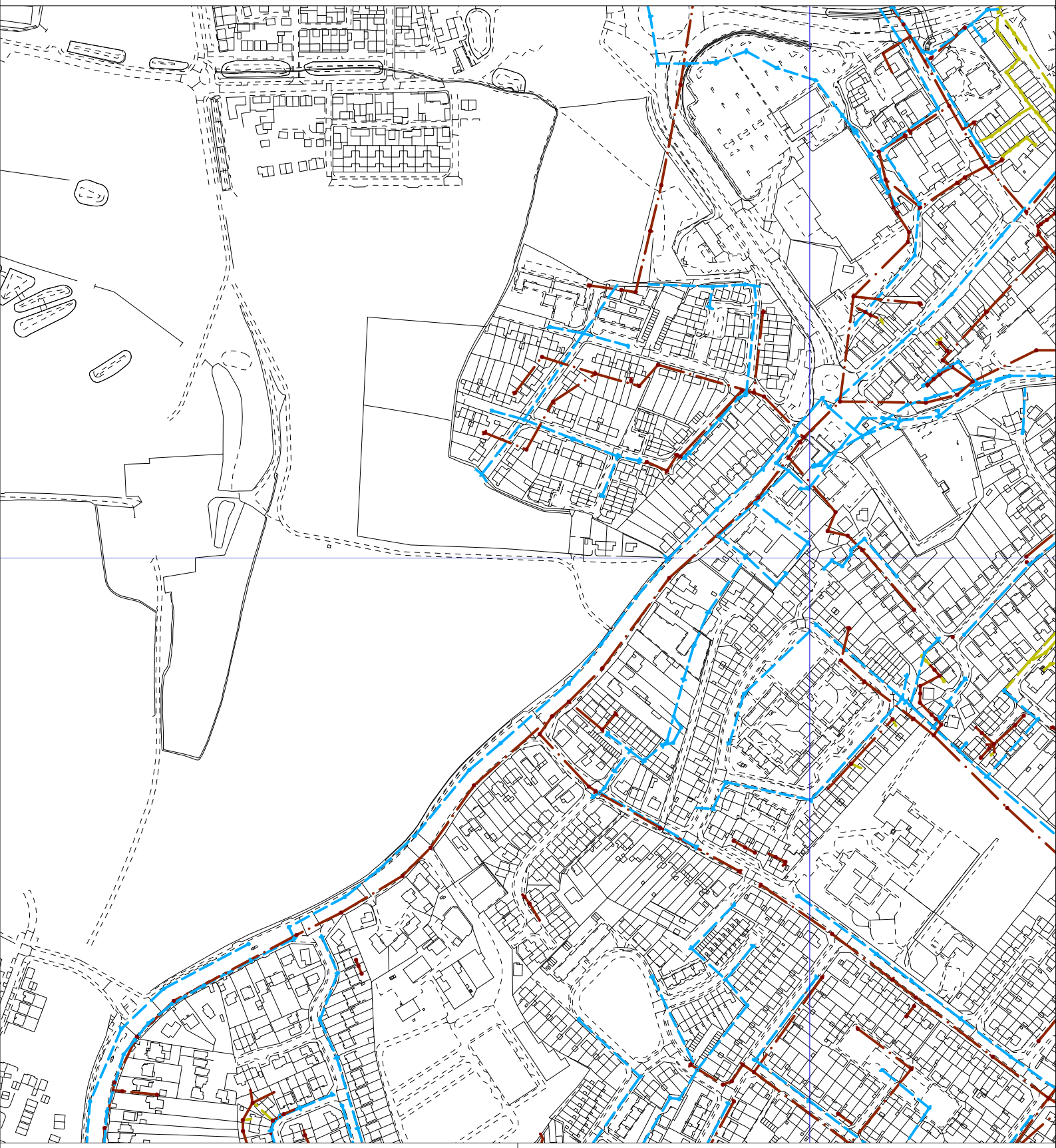
SOUTHERN WATER



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Southern Water

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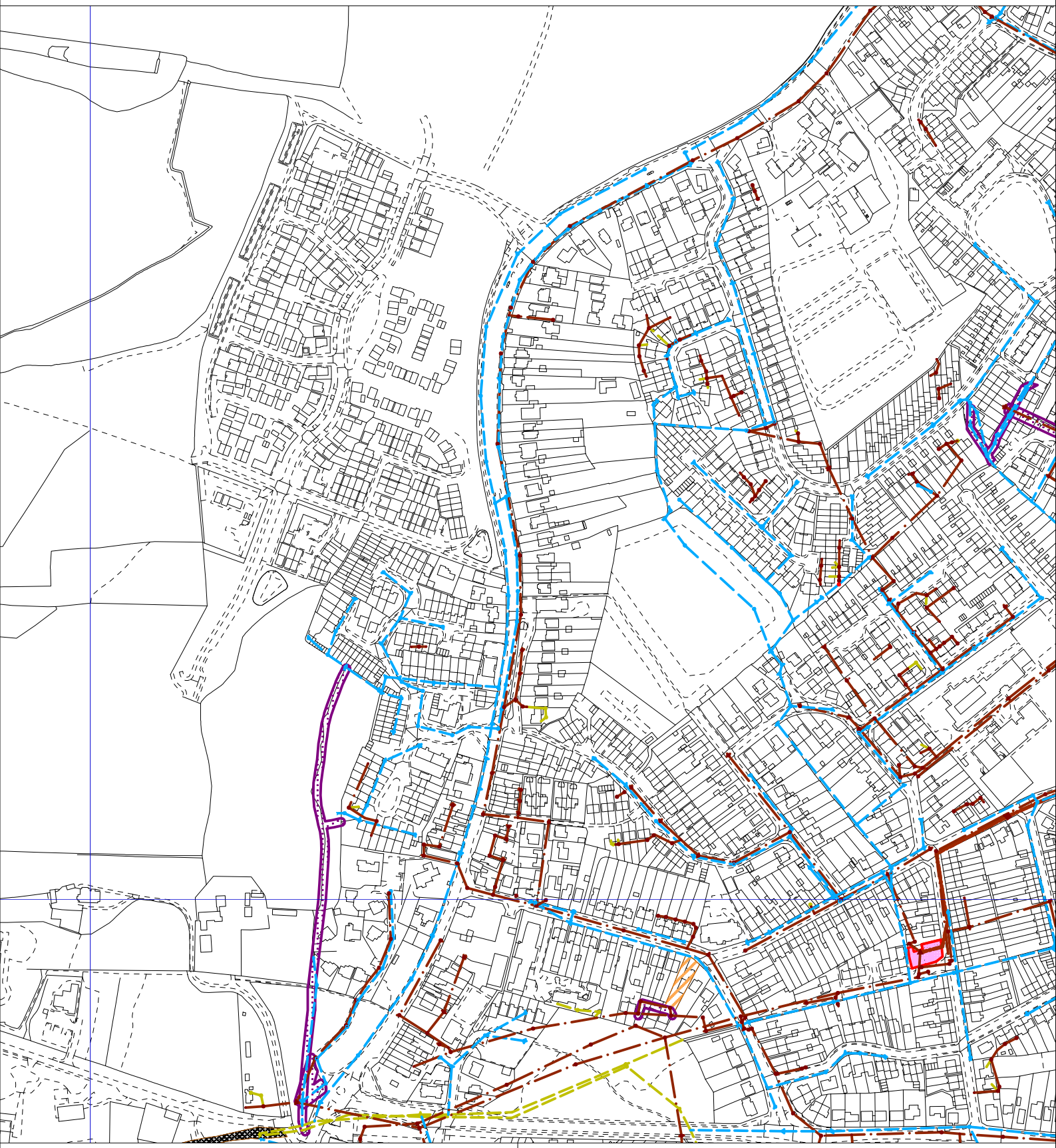
SOUTHERN WATER



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Southern Water

O.S. REF: SU6708SW	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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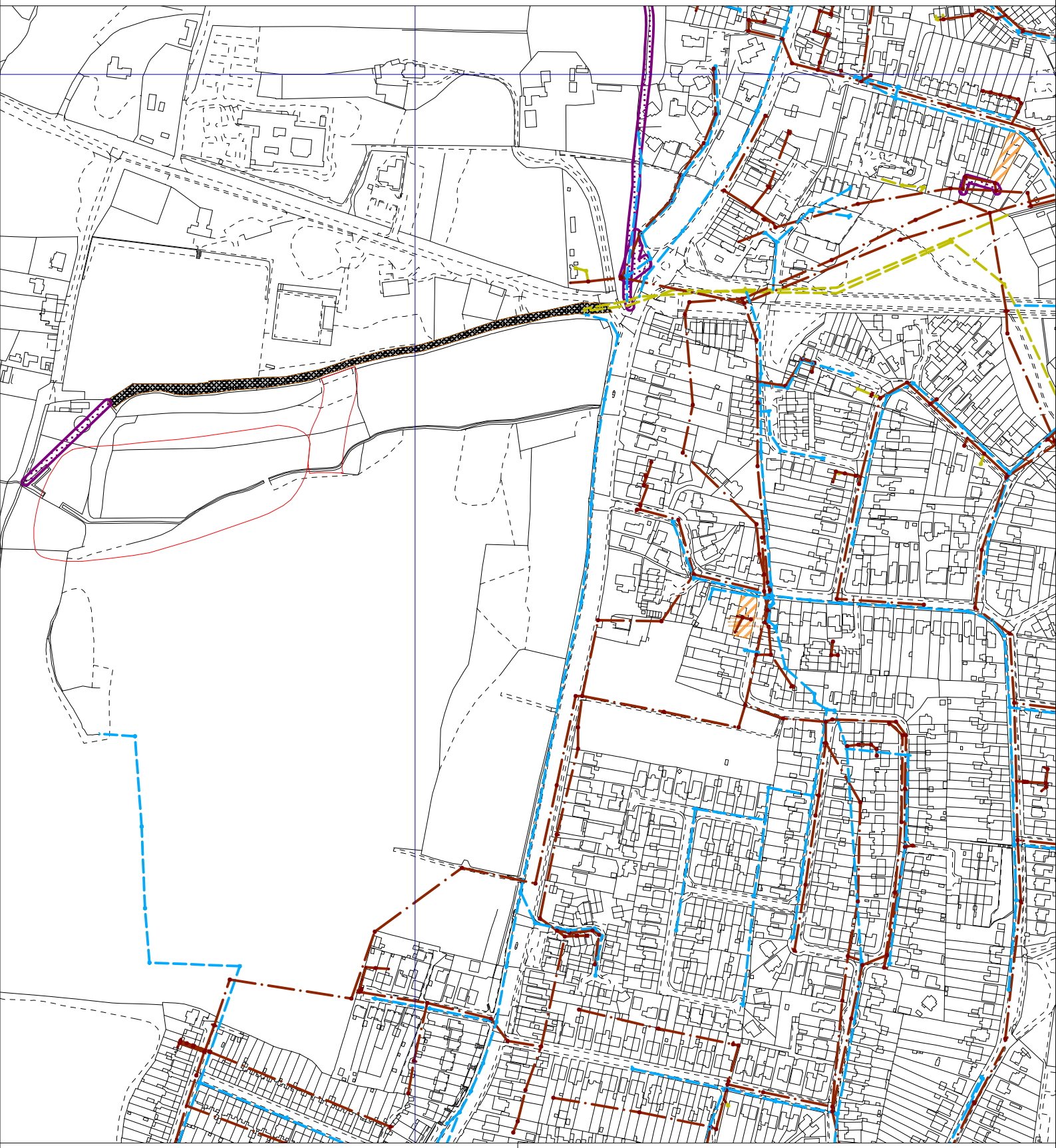
SOUTHERN WATER



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Southern Water

O.S. REF: SU6707SW	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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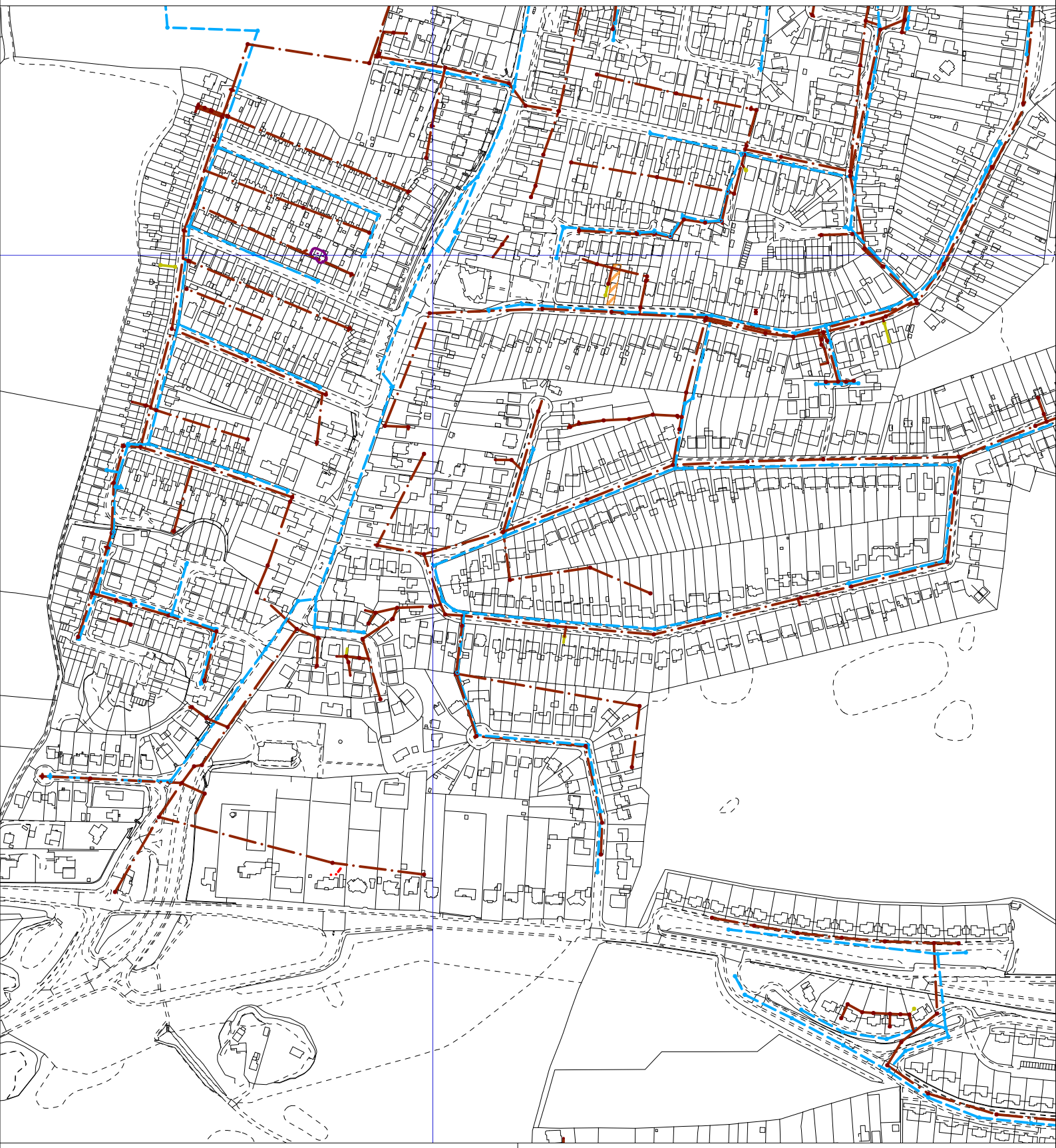
SOUTHERN WATER



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Southern Water

O.S. REF: SU6706NW	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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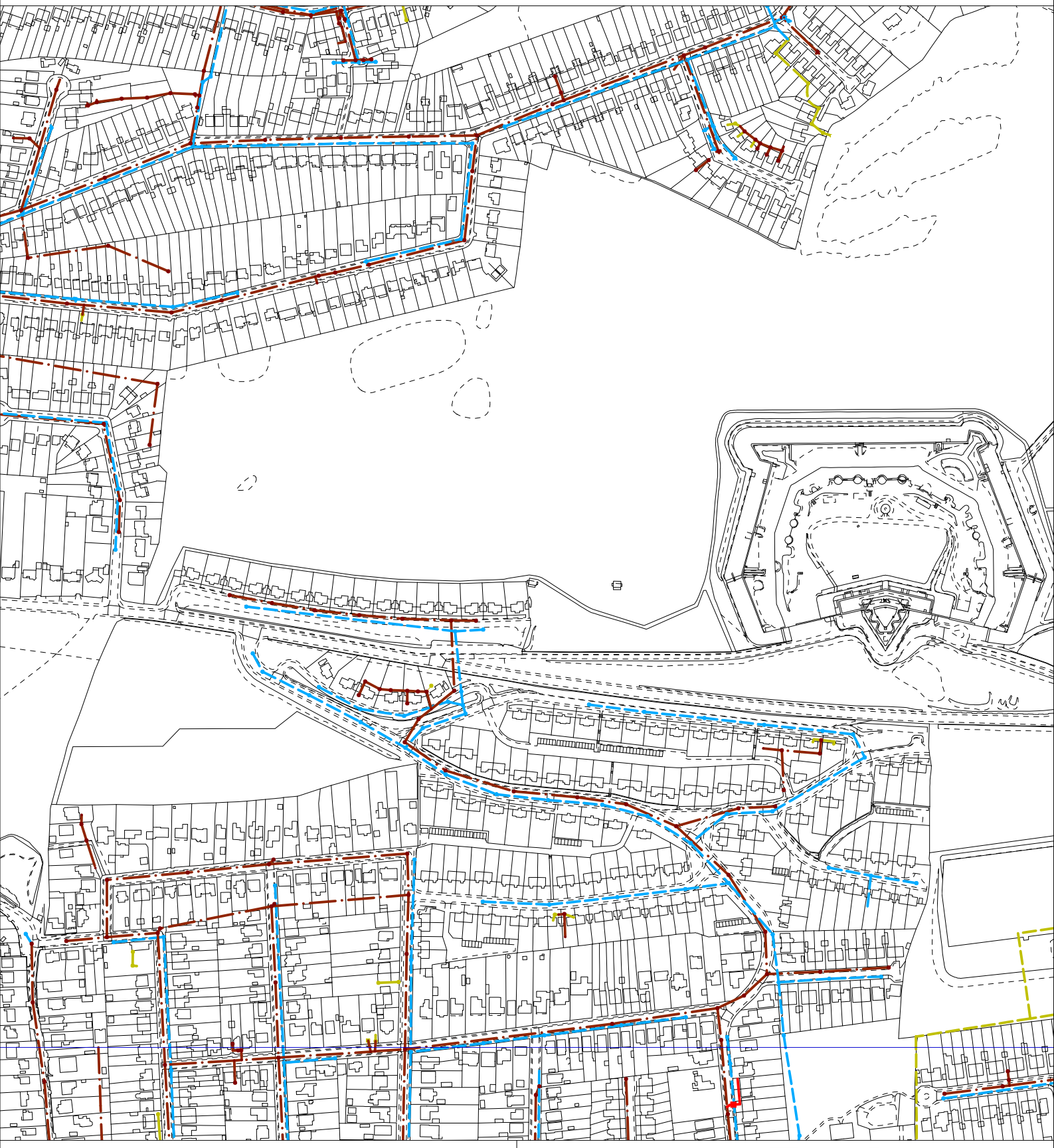
SOUTHERN WATER



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Southern Water

O.S. REF: SU6706SE	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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SOUTHERN WATER

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Southern Water

O.S. REF: SU6705NE	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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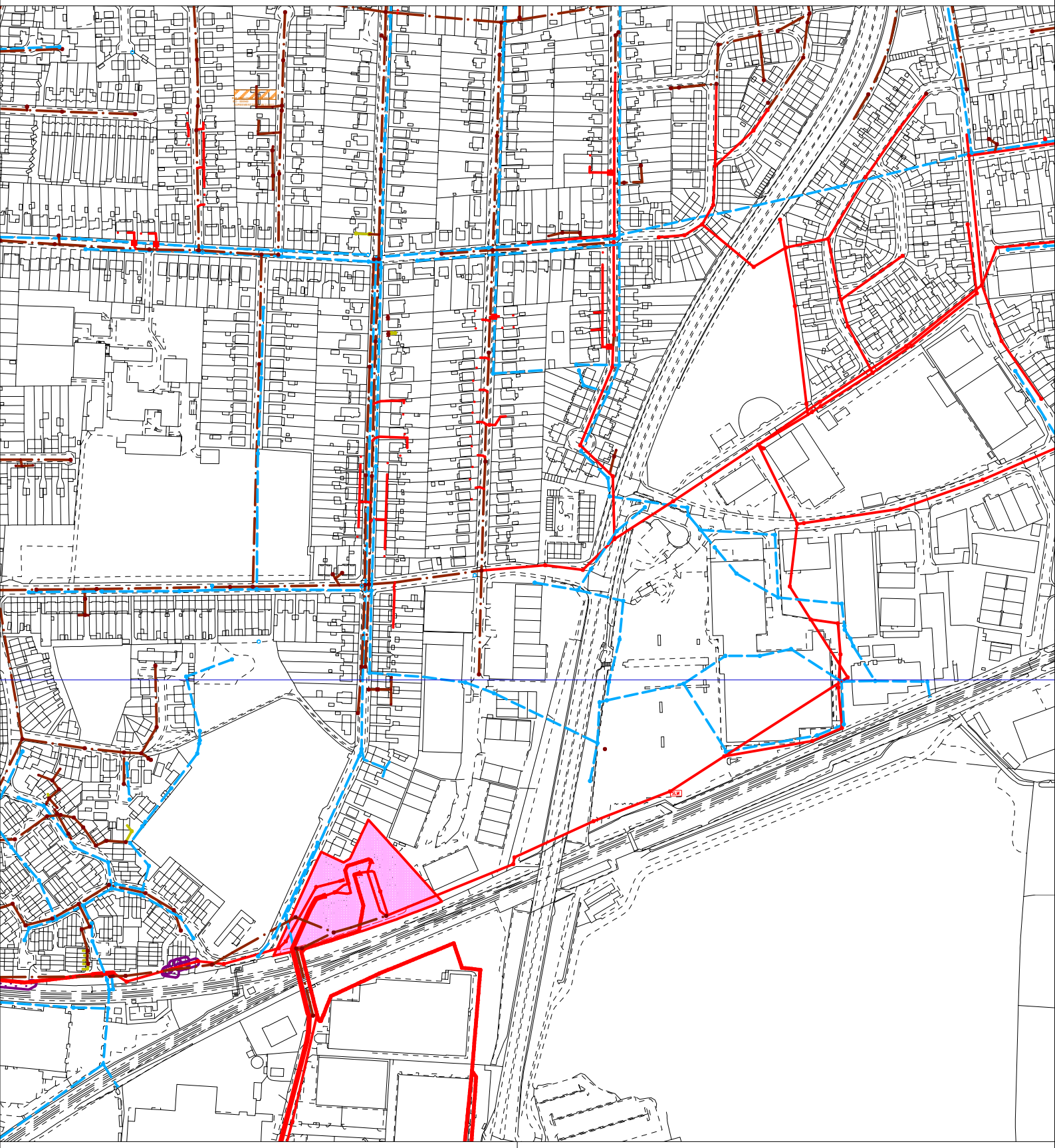
SOUTHERN WATER



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Southern Water

O.S. REF: SU6705SE	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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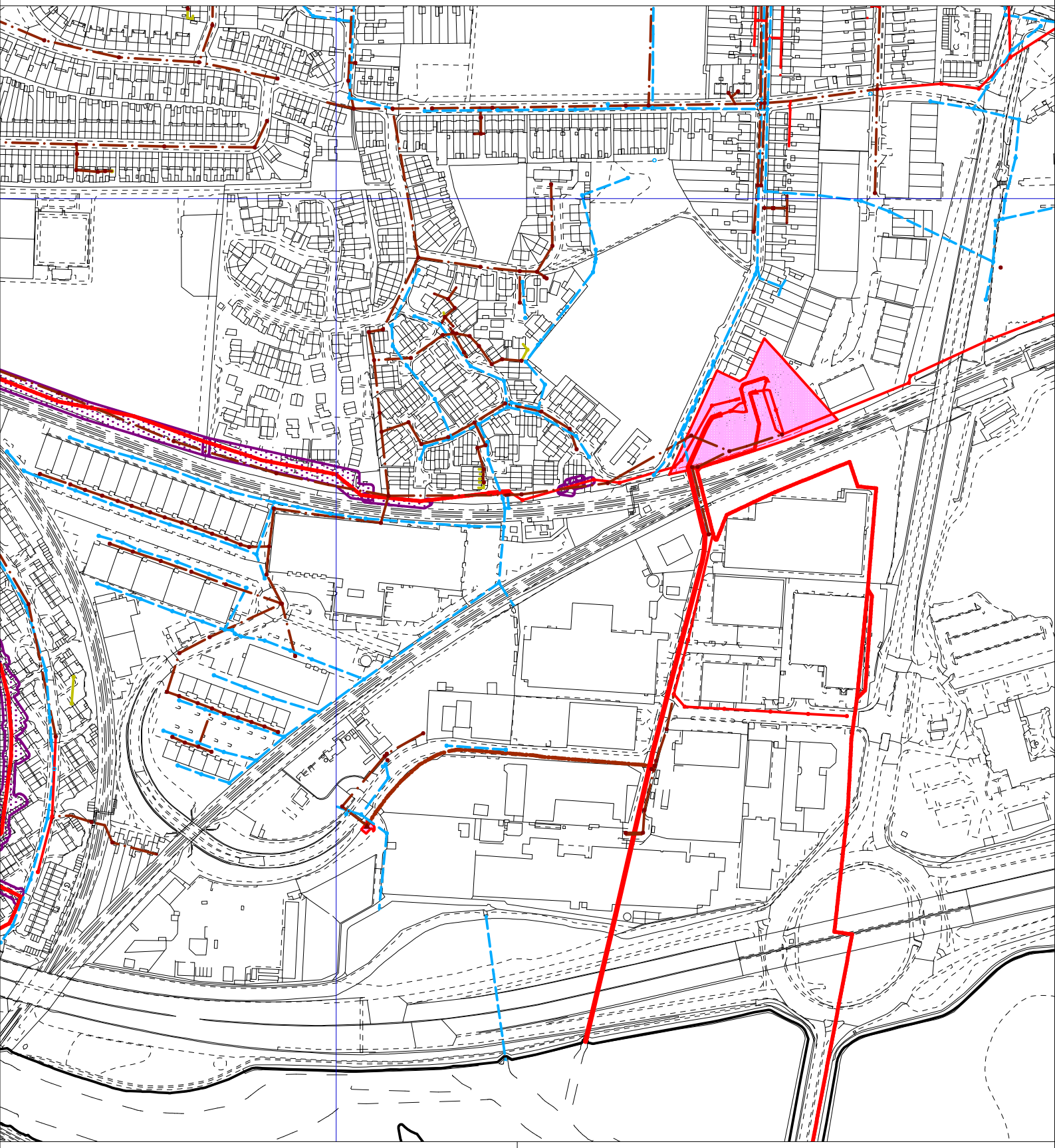

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O.S. REF: SU6704NW	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
Screen Print		Southern Water MapGuide Browser	
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WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

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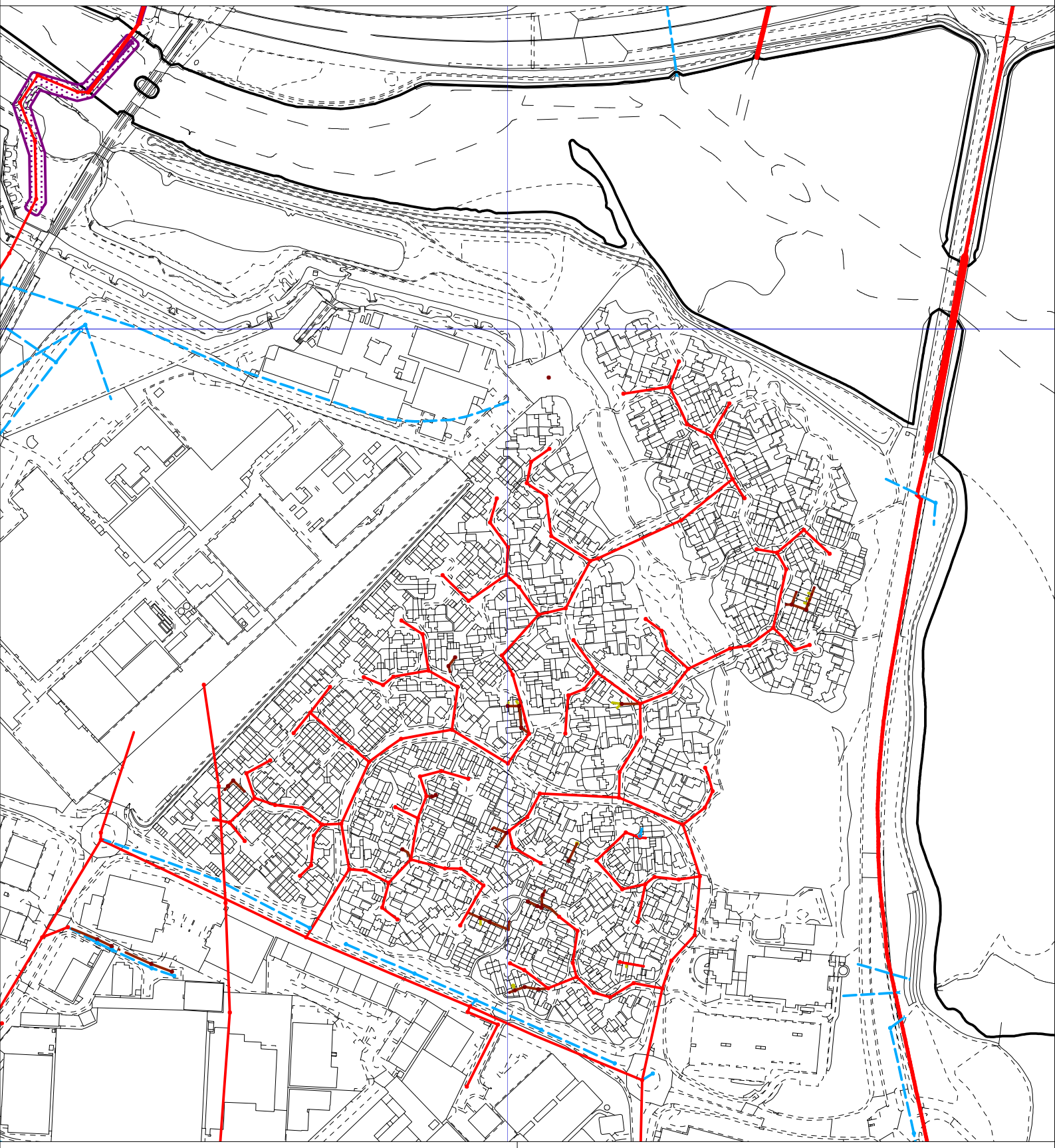
SOUTHERN WATER



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Southern Water

O.S. REF: SU6703NW	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

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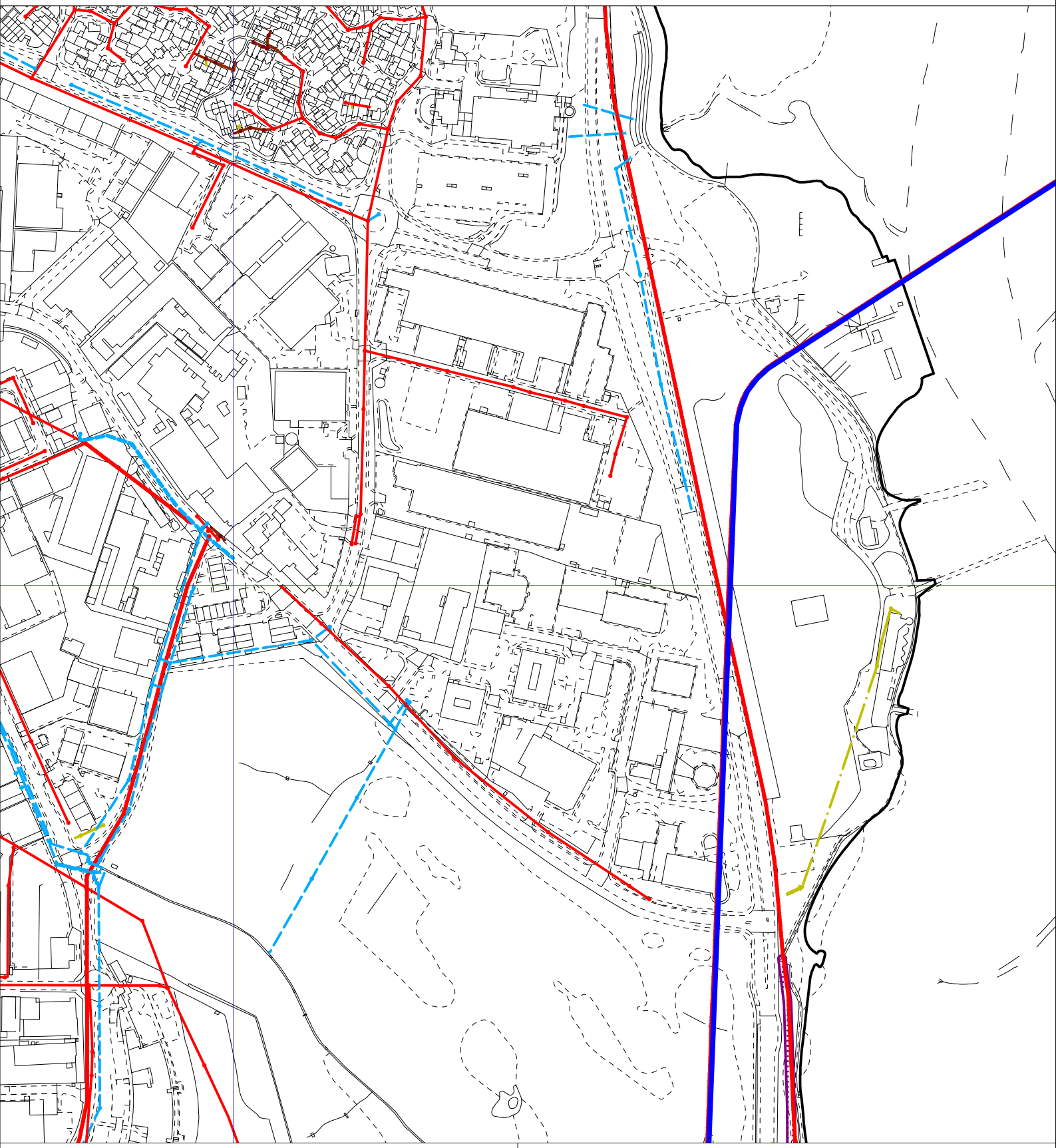
SOUTHERN WATER



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Southern Water

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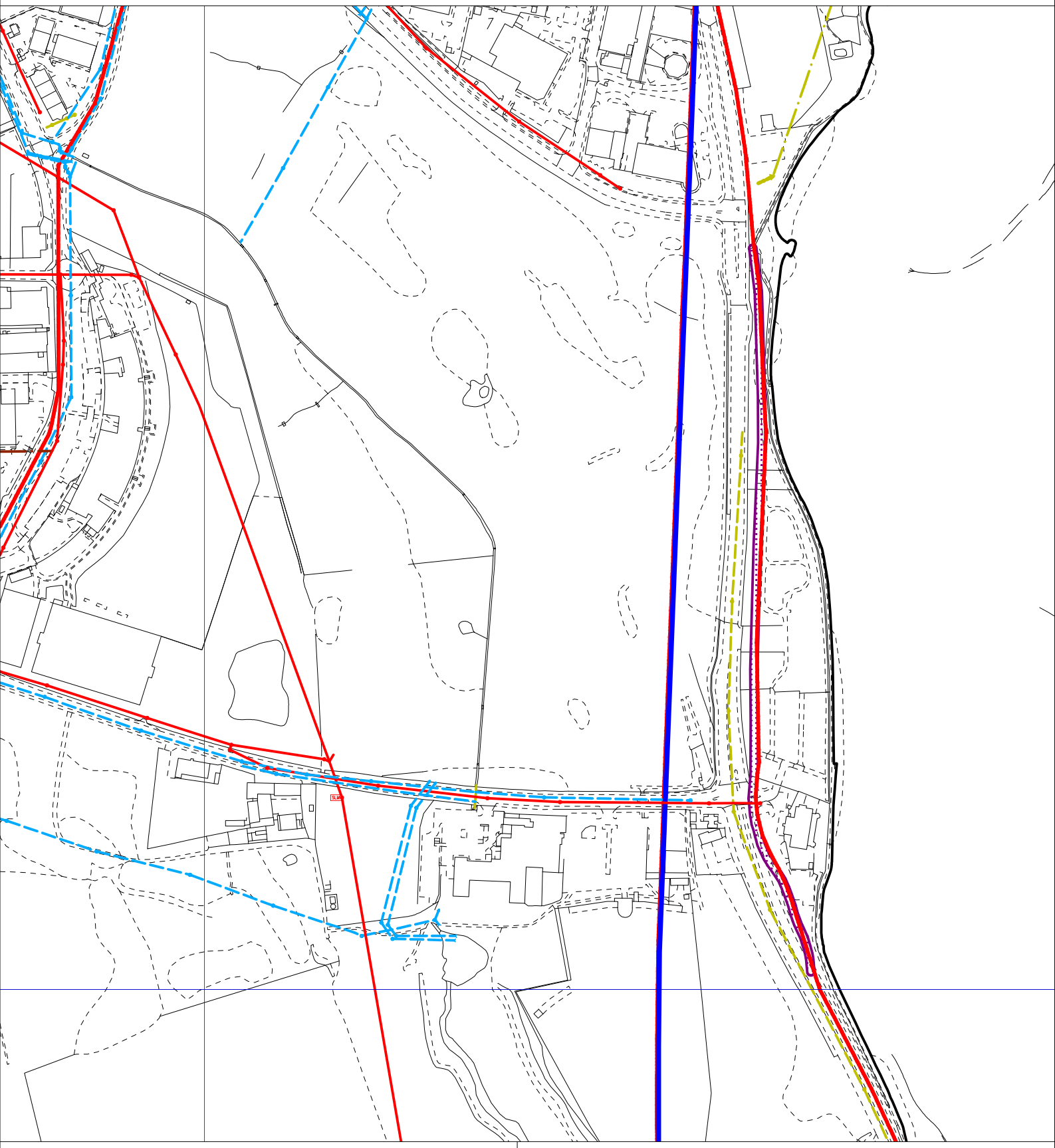
SOUTHERN WATER



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O.S. REF: SU6702SW	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
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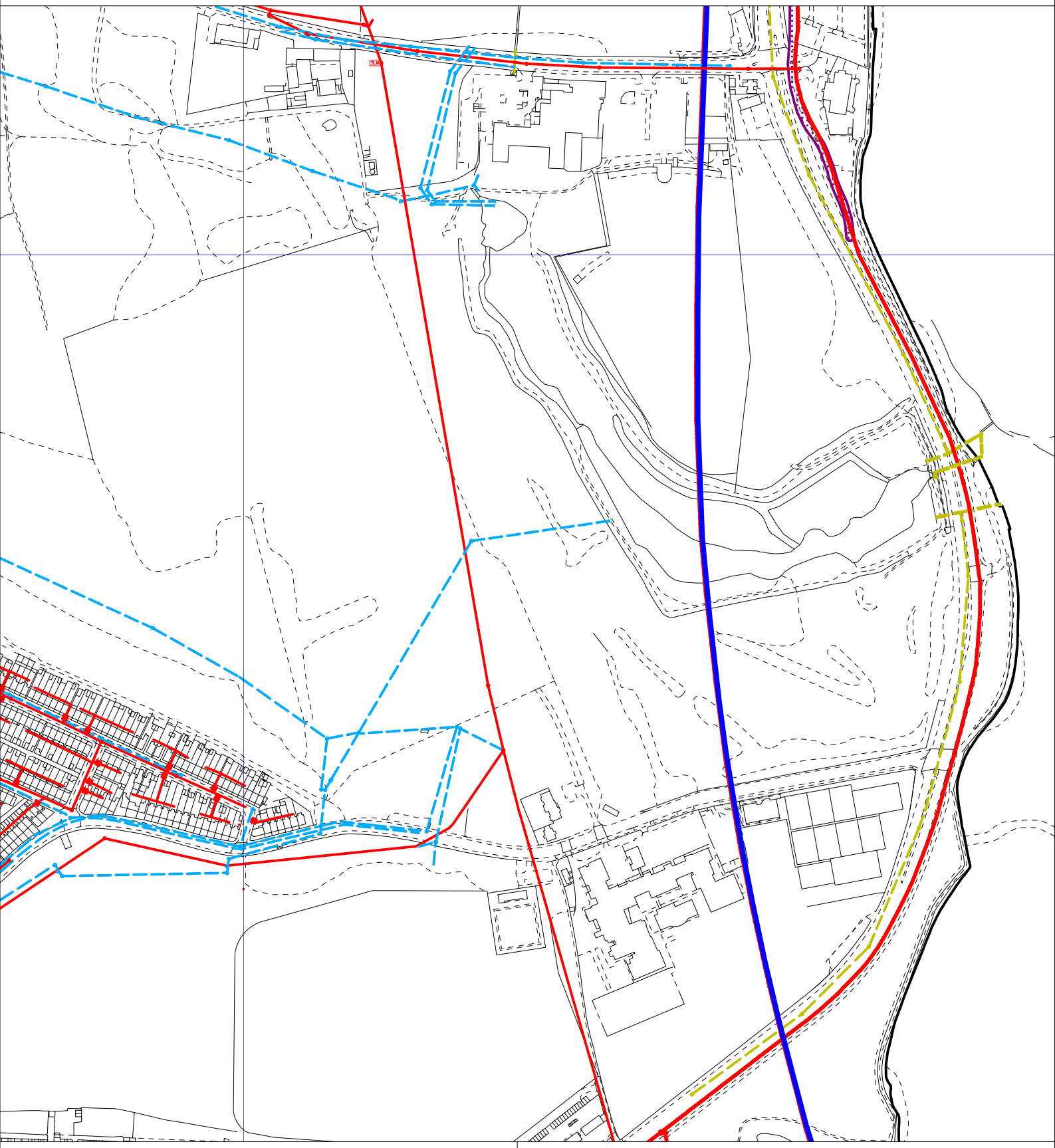
SOUTHERN WATER



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WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

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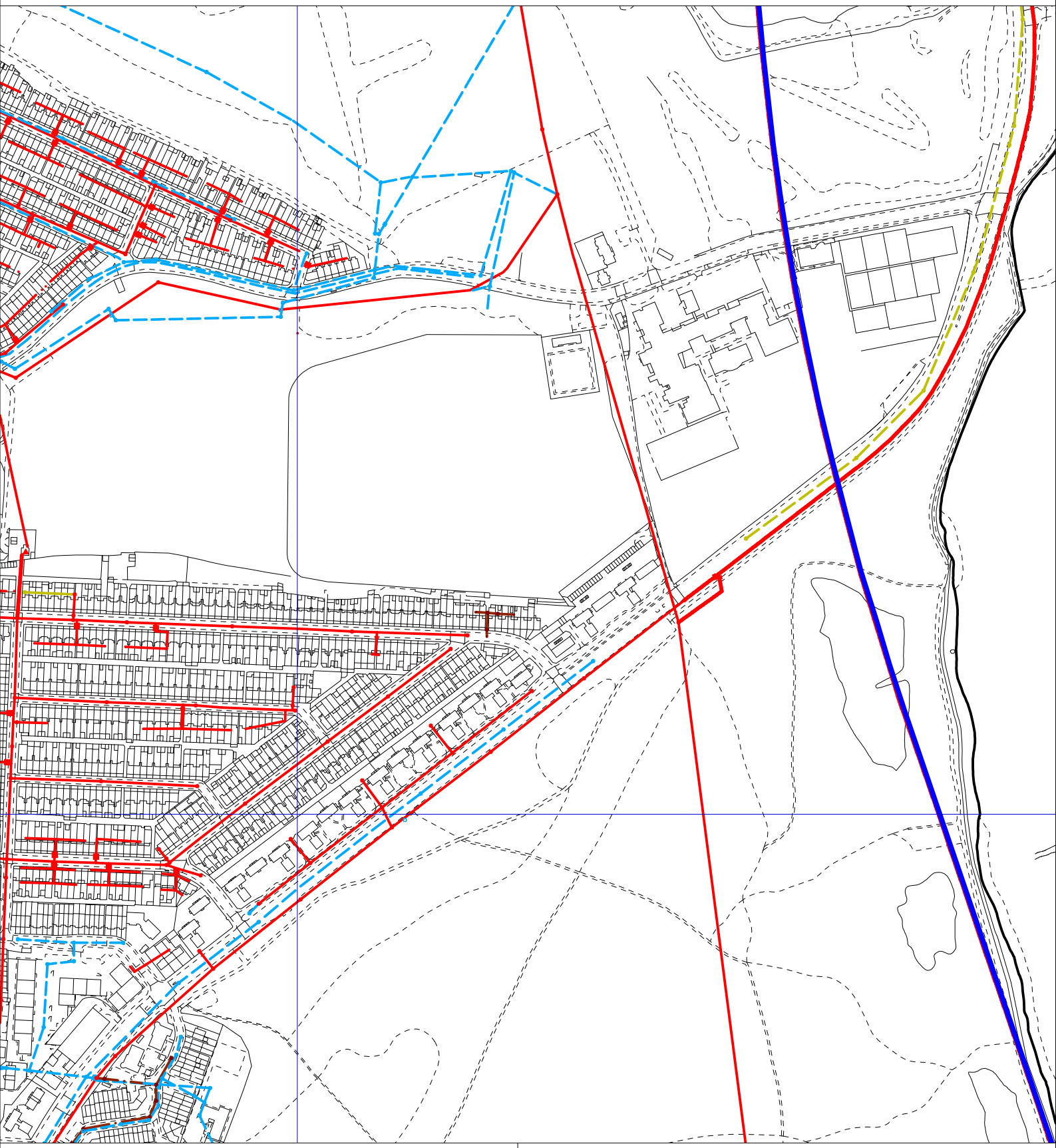
SOUTHERN WATER



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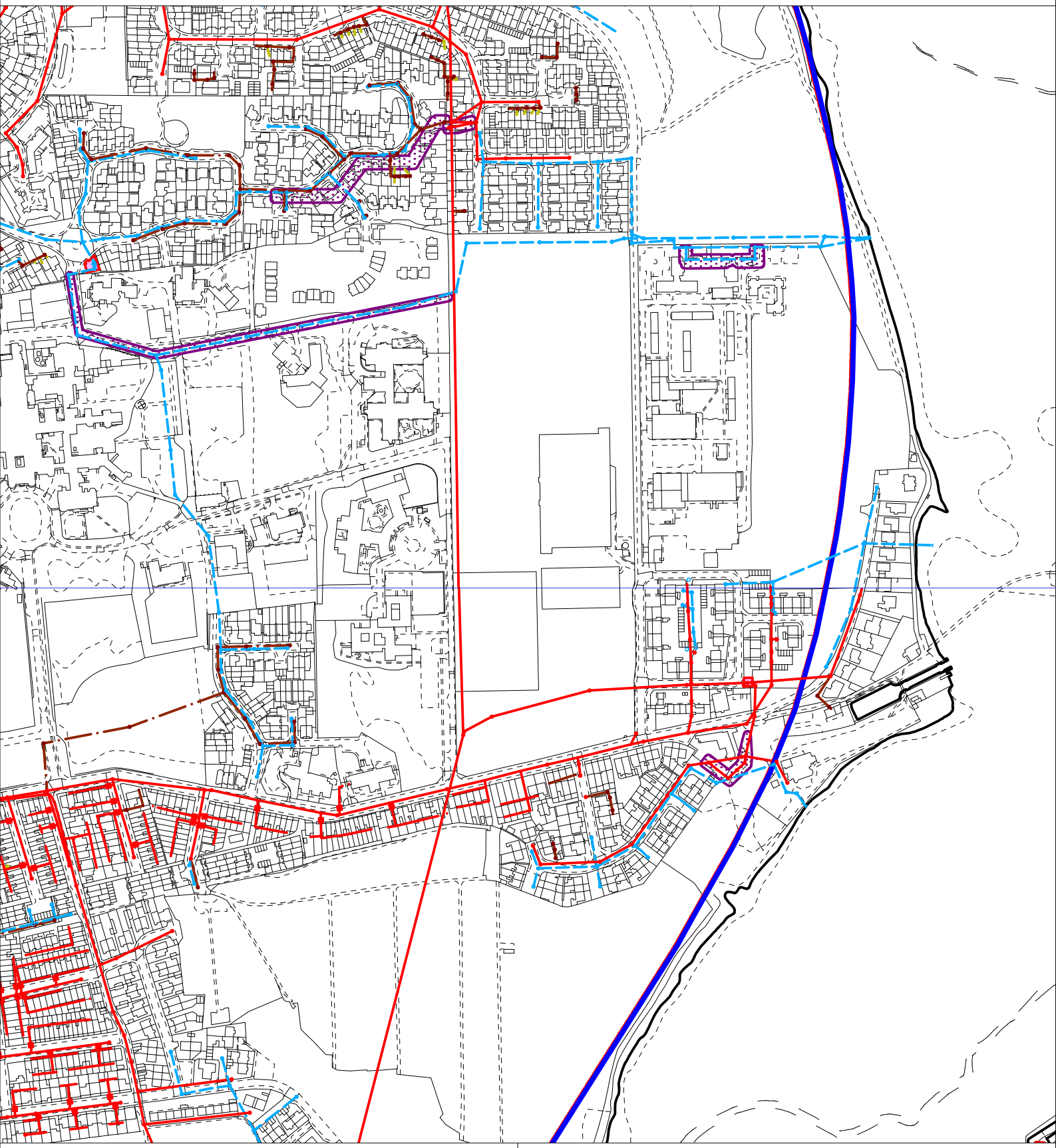
SOUTHERN WATER



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O.S. REF: SZ6799NW	Scale: 1:4509	Printed By: NadigaJ	Date: 7-3-2018
Screen Print		Southern Water MapGuide Browser	
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WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

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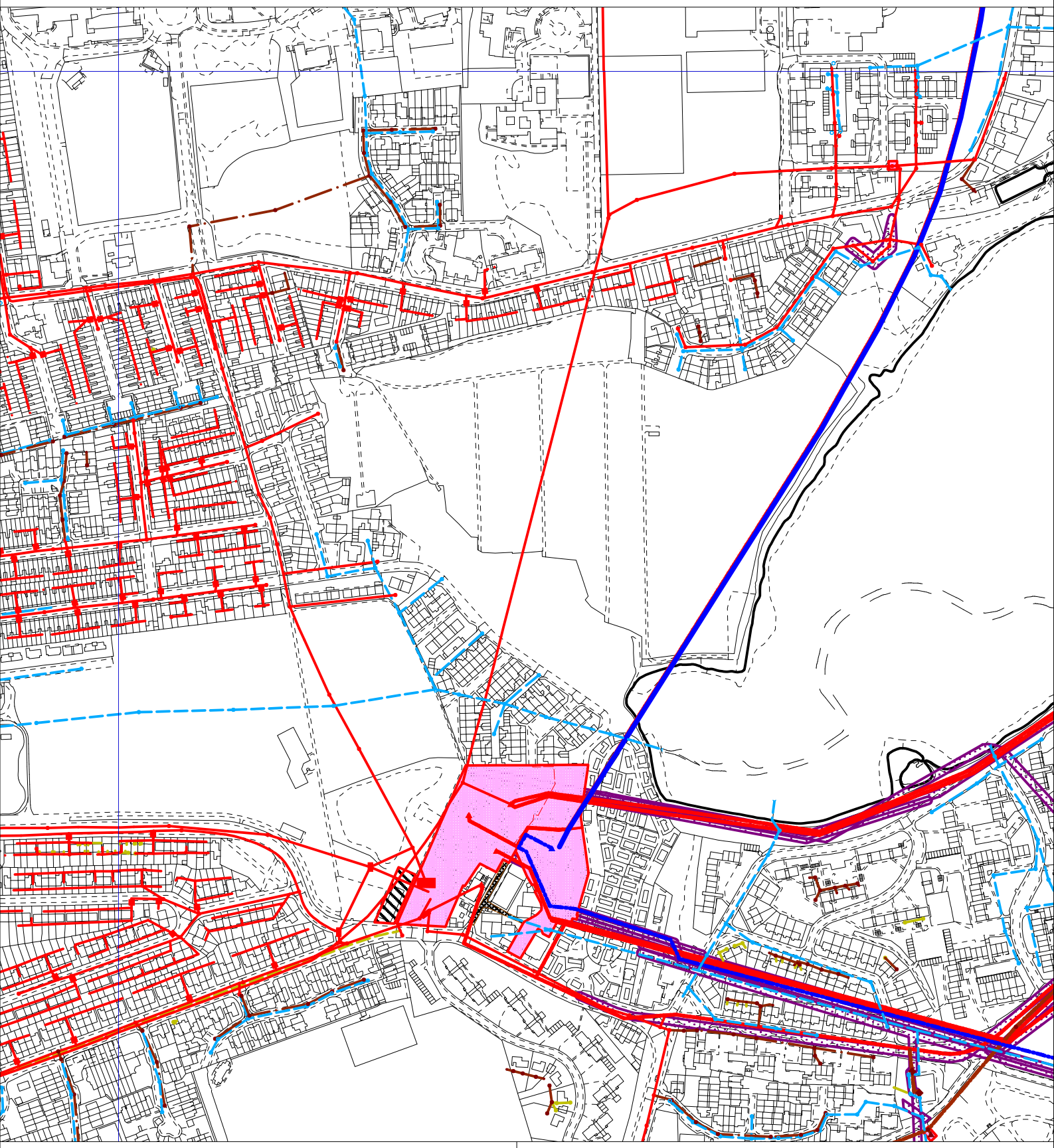
SOUTHERN WATER



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Screen Print		Southern Water MapGuide Browser	
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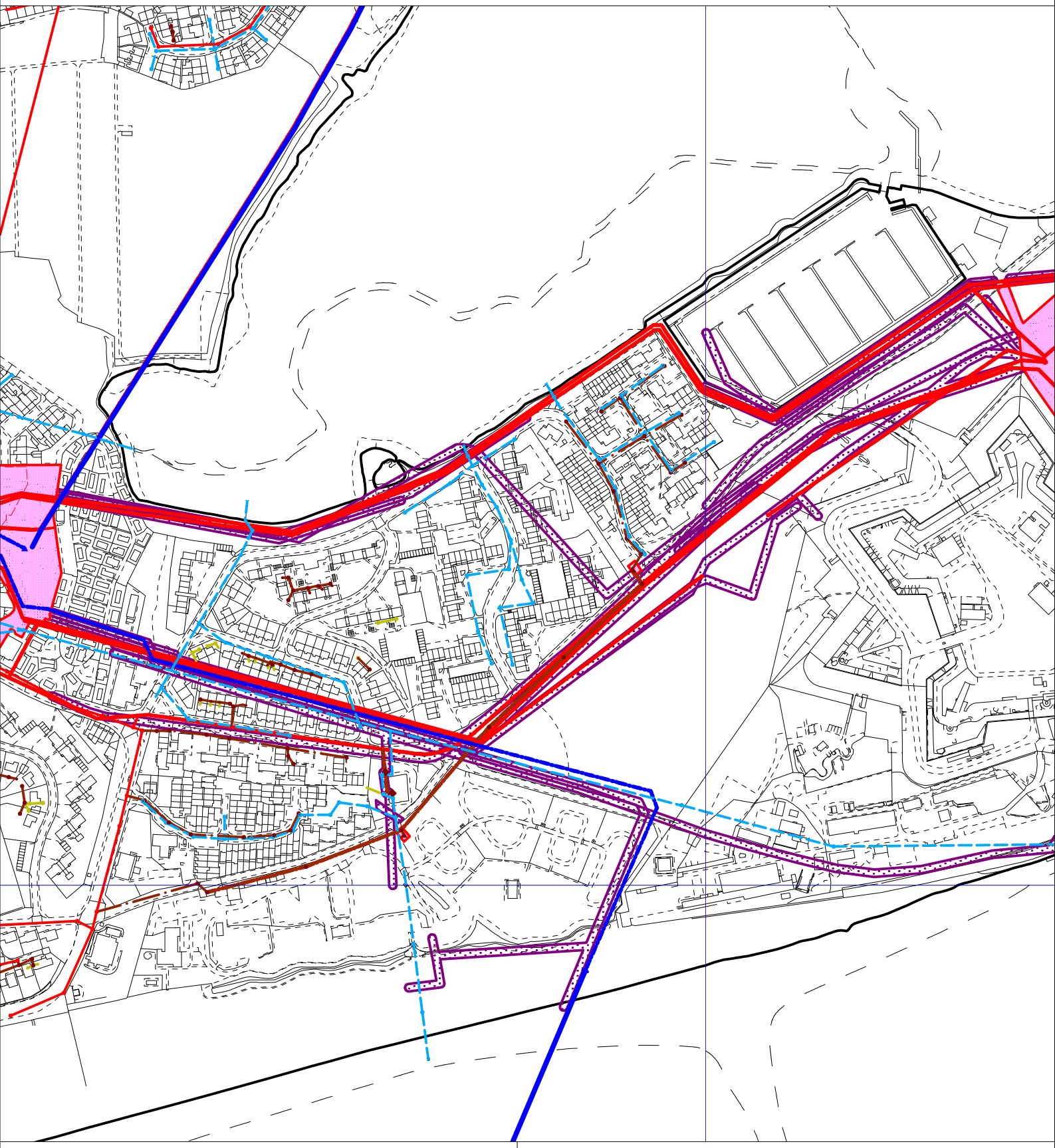
SOUTHERN WATER



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Screen Print		Southern Water MapGuide Browser	
WARNING: BAC pipes are constructed of Bonded Asbestos Cement		Requested By:	
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

N

From:	Norton, Tristan
To:	Oliver, Lewis
Cc:	Havant Planning and Development Mailbox New
Subject:	GEN/18/00101 A3, Hambledon Road, Milton Road within Havant Borough Council 18.0400
Date:	20 March 2018 12:27:35

Dear Lewis,

GEN/18/00101 | Scoping Opinion for Aquind Interconnector Project for power transmission cable between England and France. The element of the proposal in Havant Borough Council administrative area comprises the cable route. This proposal forms part of the wider project comprising the following components; HVDC subsea cables, Land/sea transition joint, HVDC underground cables, HVAC underground cables, located largely in Portsmouth City Council administrative area and supporting infrastructure in the form of HVDC converter stations in the UK, which are to be located in either Winchester City Council and/or East Hampshire District Council administrative areas (location to be determined at a later date). | A3, Hambledon Road, Milton Road within Havant Borough Council 18.0400

Thank you for consulting me on this EIA Scoping submission.

I am content with the scope of works as set out in Chapter 10 of the submitted Scoping Report (Aquind, February 2018). The proposed cable route runs predominantly through urban/suburban areas and therefore ecological constraints are likely to be limited. There may be specific constraints resulting from impacts to e.g. trees, hedgerows or other habitat with potential to support protected species or which is otherwise of ecological value.

If you have any queries please don't hesitate to contact me.

Kind regards,

Tristan

Tristan Norton

Senior Ecologist
Ecology Team

Specialist Environment Services
Economy, Transport and Environment Department
Hampshire County Council
Elizabeth II Court West
The Castle, Winchester
Hampshire SO23 8UD
Direct Line: 01962 832335
E-mail: tristan.norton@hants.gov.uk<mailto:tristan.norton@hants.gov.uk>;
www.hants.gov.uk/biodiversity<http://www.hants.gov.uk/biodiversity>

Hampshire Services offers a range of professional consultancy services to partner organisations. Specialist Environment Services provides data, advice and assessments for ecology, heritage and landscape.

www.hants.gov.uk/sharedexpertise<http://www.hants.gov.uk/sharedexpertise>
• Please consider the environment before printing this email.

Hampshire County Council

Economy, Transport and Environment Department
Elizabeth II Court West, The Castle
Winchester, Hampshire SO23 8UD

Tele: 0845 603 5638 (General Enquiries)
0845 603 5633 (Roads and Transport)
0845 603 5634 (Recycling Waste & Planning)
Textphone 0845 603 5625
Fax 01962 847055
www.hants.gov.uk

Head of Planning
Havant Borough Council
Civic Offices
Civic Centre Road
HAVANT
Hampshire
PO9 2AX

Enquiries to	Holly Drury	*My reference*	HD 6/3/6/400
Direct Line	01962 826996	*Your reference*	GEN/18/00101
Date	22nd March 2018	*Email*	Holly.drury@hants.gov.uk

For the attention of L Oliver

Dear Sir,

A3, Hambledon Road, Milton Road within Havant Borough Council: Scoping Opinion for Aquind Interconnector Project for power transmission cable between England and France. The element of the proposal in Havant Borough Council administrative area comprises the cable route. This proposal forms part of the wider project comprising the following components; HVDC subsea cables, Land/sea transition joint, HVDC underground cables, HVAC underground cables, located largely in Portsmouth City Council administrative area and support infrastructure in the form of HVDC converter stations in the UK, which are to be located in either Winchester City Council and/or East Hampshire District Council administrative areas (locations to be determined at a later date).

Thank you for the opportunity to comment on the above pre-application which deals specifically with the cable-laying element of the project within Havant. All other works fall within adjoining Local Authority Areas.

The applicant has entered into the highway authority's pre-application service and discussions are ongoing. This response reflects progress to date and identifies areas were further information is sought to support the application.

Chapter 5 of the EIA scoping covers transport matters. Key routes to the proposed Lovedean site have been identified, although further details regarding the routes will need to be provided together with details of construction traffic.

The cable routing is shown and outlined in paragraph 5.1.6 this will need to be

discussed with the Highway Authority in more detail. Information regards cable laying proposals, carriageway widths required and appropriateness of routes should be provided to support any application. Consideration must also be given to committed development in the area and measures taken to ensure service information and highway layout is up to date.

As outline in section 5 of the EIA a Transport Assessment/Statement will be required to support the application. The EIA sets out appropriately the areas in which the Transport Assessment should consider and engagement with the Highway Authority to inform this assessment is welcomed.

Yours faithfully

[redacted]

Ben Clifton
Team Leader

CC Peter Marshall, Development Engineer, Havant Borough Council

Historic England

SOUTH EAST OFFICE

Mr L Oliver
Havant Borough Council
Public Service Plaza
Civic Centre Road
Havant
Hampshire
PO9 2AX

Direct Dial: 01483 252015

Our ref: PL00341644

26 March 2018

Dear Mr Oliver

A3 HAMBLEDON ROAD, MILTON ROAD, HAVANT BOROUGH

REQUEST FOR EIA SCOPING - UK/FRANCE HVDC INTERCONNECTOR; CABLE ROUTING

Thank you for contacting us on 6th March 2018 regarding an EIA scoping opinion in relation to the above site. We treat such requests as pre-application advice. On the basis of the latest information about the proposals, detailed below, I offer the following advice.**Advice**
The proposal is for scoping to inform a decision regarding routing of cabling. This is part of a larger scheme to include; HVDC subsea cables, land/sea transition joint, HVDC underground cables, and installation of supporting infrastructure (converter stations in the UK and France).

Development related to the wider project has the potential to impact upon both designated and undesignated heritage assets and their settings both within the boundary of the proposal areas and in the areas around the different sites. In line with the advice in the National Planning Policy Framework (NPPF), we would expect the Environmental Statement to contain a thorough assessment of the likely effects which the proposed development of this area might have upon those elements which contribute to the significance of these assets.

We would expect the assessment to clearly demonstrate that the extent of the proposed study area is of the appropriate size to ensure that all heritage assets likely to be affected by this development have been included and can be properly assessed. An arbitrary radial search is unlikely to accurately reflect the impact of the development on heritage assets in the wider area and a more tailored approach would be required, in particular with regards to assessing impacts to setting. Further guidance on setting can be found at our website (<https://content.historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/gpa3.pdf/>). Version 4 of this document is currently under review.

We would also expect the Environmental Statement to consider the potential impacts on non-designated features of historic, architectural, archaeological or artistic interest, since these can also be of national importance and make an important contribution to the character and local distinctiveness of an area and its sense of place. This information is available via the local authority Historic Environment Record (www.heritagegateway.org.uk) and relevant local authority staff.

We would strongly recommend that you involve your own conservation and archaeological staff at both Havant Borough Council and Hampshire County Council in the development of this assessment. They are well placed to advise on: local historic environment issues and priorities; the nature and design of any required mitigation measures (as decided at a further stage in any project); and opportunities for securing wider benefits for the future conservation and management of heritage assets.

With regard to designated heritage assets there needs to be an understanding of what makes these assets 'special', Significance can be harmed or lost through alteration or destruction of the heritage asset, or through development within its setting, so it needs to be demonstrated how these proposals would impact on significance.

The assessment should also take account of the potential impact which associated development activities (such as construction, servicing, and maintenance) might have upon perceptions, understanding, and appreciation of any heritage assets in the area. The assessment should also consider the likelihood of alterations to drainage and ground water patterns that might lead to in situ decomposition or destruction of below ground archaeological remains and deposits, and can also lead to subsidence of buildings and monuments.

The cable route is less likely to have an impact on designated heritage assets than some other aspects of the scheme. Where the cable routes follow existing roads/routes/developed land, the impacts to heritage assets are likely to be much lower than where new development occurs.

We would be pleased to provide further advice in due course on the proposals. We think it likely however that for the cable route, it will be local and regional conservation/archaeological staff that will lead on advice, in particular in relation to impacts on undesignated heritage assets and potential for archaeological impacts.

Recommendation

We urge you to address the above issues, and recommend that production of an Environmental Statement should continue in accordance with national and local policy guidance, and following your expert conservation advice. If you have any queries about any of the above, or would like to discuss anything further, please contact me for further advice.

Yours sincerely,

Rebecca Lambert
Inspector of Ancient Monuments
rebecca.lambert@HistoricEngland.org.uk

REQUEST FOR EIA SCOPING - UK/FRANCE HVDC INTERCONNECTOR; INSTALLATION OF HVDC CONVERTER STATION

List of information on which the above advice is based
Request for scoping opinion from Havant Borough Council dated 6th March 2018
Scoping Report for Environmental Impact Assessment; UK-France HVDC Interconnector [produced by Aquind February 2018]

Our ref: HA/2018/120215/01-L01
Your ref: GEN/18/00101

Date: 21 March 2018

Havant Borough Council
Development Control
Civic Offices Civic Centre Road
Havant
Hampshire
PO9 2AX

Dear Sir/Madam

Scoping opinion for Aquind Interconnector Project for power transmission cable between England and France

A3, Hambledon Road, Milton Road within Havant Borough Council

Thank you for consulting the Environment Agency on the above application.

Environment Agency Position

Groundwater
We are pleased to see that Water Resources (chapter 12) and Ground Conditions (chapter 13) have been scoped in to the EIA. The two potential sites for the converter station, together with a section of cable, are located within the groundwater Source Protection Zone 1 (SPZ1) for Portsmouth Water's Bedhampton and Havant springs and Lovedean public water supplies. These supply drinking water to over 250,000 homes. As such, careful consideration must be given to the acceptability of any activity which has the potential to impact groundwater quality in this area. We expect development and investigation proposals in the areas of greatest risk to be supported by detailed and site specific assessment to demonstrate that the risks to groundwater are acceptable. We expect such assessments to be included in the EIA.

In addition to the sites being located in SPZ1 they are also in an area where solution (karstic) features are prolific. Not only must the developer consider the geotechnical issues associated with these, they must also consider the increased risk to groundwater quality that they represent. Evidence available to us shows that pollutants entering these features can reach the springs rapidly with little opportunity for monitoring, attenuation or to be intercepted. We are also aware of concerns by Portsmouth Water regarding disturbance to the chalk (from, for example the installation of boreholes or piles) and the potential to cause turbidity and impact drinking water supplies. This must be considered in detail in the EIA (further detail below).

Section 3.10 of the report says that the EIA will discuss the main alternatives to the scheme. Two sites (options A and B) have been identified for the convertor stations. We would like to understand if these need to be located next to the existing National Grid Substation or if there are alternative and suitable locations which would move them outside of the SPZ1 and away from the area where Karst features have been identified. We would like to see this explained in the EIA.

The scoping document contains very limited information on the design of the convertor station and includes no information on the potential storage or use of hazardous substances or non-hazardous pollutants in the scheme (for example fuels and chemicals used in cables or in the convertor station or transformers). The EIA should include this information, provide an assessment of risks associated with the use and storage of these substances to groundwater and discuss how the risks to groundwater can be mitigated. Given the sensitively of groundwater in this area the EIA needs to include sufficient information to demonstrate that the risks are understood and that they can be mitigated. This information is needed to assess the appropriateness of any proposal or planning application.

Chapter 12 does not specifically identify the need to discuss the potential for pollution from the proposed development in the EIA. This, along with the mitigation measures needed to protect groundwater should be included.

Section 2.7.2 of the scoping report says that 'prior to the start of construction, respective ground/local environment inspections and surveys will be carried out to determine the nature of the soil and immediate area. This information will provide suitable data for the design and construction of temporary and permanent works as appropriate to meet the technical specification, required regulations and consent conditions.' As discussed above, solution features are known to be present in this area. The applicant should consider carrying out surveys of these features in determining the baseline conditions. The EIA will need to consider the implications of these features and risks to groundwater can be mitigated.

Chapters 12 and 13 mention that as part of the establishing baseline conditions BGS mapping has been reviewed. In establishing the baseline conditions and developing the conceptual site model we recommend that the applicant reviews information published by the BGS on the Karst hydrogeology of the Bedhampton and Havant springs at http://www.bgs.ac.uk/research/groundwater/about/karstAquifers/bedhamptonHavantSprings.html . The scoping document fails to recognise that these features may be present at the site(s) and the potential risks associated with them.

The scoping report confirms that 'a detailed review of potential sources of contamination will be completed in the preliminary risk assessment'. We agree that this will be needed.

A conceptual site model should be developed and included in the EIA document. Further information is available on the GOV.UK website. We would welcome the opportunity to discuss this with the applicant prior to developing the EIA.

As the site is in the SPZ1 for Portsmouth Water's Bedhampton and Havant Springs and Lovedean public water supplies, we would expect the developer to consult Portsmouth Water and seek confirmation that they are satisfied with the proposals.

Flood Risk

The proposed cable route through Portsmouth passes along sections of the North Portsea coastal defence scheme, which is being delivered by the East Solent Coastal Partnership (ESCP).

The EIA Scoping Report identifies that the proposed works will pass by phase 1 of this scheme (planning application 14/01387/FUL in Table 3.7) but does not identify the future

Cont/d..

phases of the scheme. The future phases of the scheme can be seen at http://www.escp.org.uk/coastal-schemes/portsmouth/protecting-future-north-portsea-island.

The EIA Scoping Report should be updated to include the future phases and, if they have not already been, the ESCP should be consulted.

Fisheries and Biodiversity

We note from the report that the cable route may cross an 'unnamed watercourse' north of the B2150. We believe this water course to be the North Purbrook Stream, classified as a statutory watercourse. This watercourse is a known eel migratory route and is likely to have a resident fish population.

Currently the Scoping Report does not include potential effects on fish (including eels). The noise and vibration from HDD drilling activities in close proximity to a watercourse has the potential for adverse impact on these fish species as well as other aquatic ecology such as water voles and otters. Therefore this needs to be included in the EIA scoping report.

There are other watercourses close to the cable route including Soake Farm, the Wallington and Hermitage statutory main rivers. It is unclear from the maps provided whether these watercourses and their ecology could be impacted by the proposed cable route. Clarification needs to be given on how close the proposed route is to these watercourses whether the cable route will impact ecology of these rivers also.

Should you have any further queries please do not hesitate to contact me on the number below.

Yours faithfully

Mrs Charlotte Lines
Senior Planning Advisor

Direct dial 02084745838
Direct e-mail PlanningSSD@environment-agency.gov.uk

cc WSP

End

HSE
Health and Safety Executive

CEMHD Policy - Land Use Planning
NSIP Consultations
Building 1.2, Redgrave Court
Merton Road, Bootle
Merseyside, L20 7HS

Your ref: EN020022
Our ref: 4.2.1.6519
HSE email: NSIP.applications@hse.gov.uk

Richard White
The Planning Inspectorate
Bristol
BS1 6PN
By e-mail

27/11/2018

Dear Richard

PROPOSED AQUIND Interconnector - EIA scoping consultation (the project)
PROPOSAL BY AQUIND LTD (the applicant)
INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 (as amended) – Regulations 10 and 11

Thank you for your letter of 31st October 2018 regarding the information to be provided in an environmental statement relating to the above project. HSE does not comment on EIA Scoping Reports but the following information is likely to be useful to the applicant.

HSE's land use planning advice

Will the proposed development fall within any of HSE's consultation distances?

The proposed project/development will pass over Major Accident Hazard Pipeline(s) but does not fall within the consultation distances of any current Major Hazard Installations.

Despite passing over Major Accident Hazard Pipeline(s) the project in its current form does not meet HSE Land Use Planning criteria that would lead to an Advise Against response.

However, if prior to the granting of a development consent order for this proposed development, Hazardous Substances Consent is granted for a Major Hazard Installation or there is notification of a Major Accident Hazard Pipeline within or in the vicinity of the development, HSE reserves the right to revise our advice.

Hazardous Substance Consent

The presence of hazardous substances on, over or under land at or above set threshold quantities (Controlled Quantities) will probably require Hazardous Substances Consent (HSC) under the Planning (Hazardous Substances) Act 1990 as amended. The substances, alone or when aggregated with others for which HSC is required, and the associated Controlled Quantities, are set out in The Planning (Hazardous Substances) Regulations 2015 as amended.

Hazardous Substances Consent would be required to store or use any of the Named Hazardous Substances or Categories of Substances at or above the controlled quantities set out in schedule 1 of these Regulations.

Further information on HSC should be sought from the relevant Hazardous Substances Authority.

Consideration of risk assessments

Regulation 5(4) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires the assessment of significant effects to include, where relevant, the expected significant effects arising from the proposed development's vulnerability to major accidents. HSE's role on NSIPs is summarised in the following Advice Note 11 An Annex on the Planning Inspectorate's website - Annex G – The Health and Safety Executive . This document includes consideration of risk assessments on page 3.

Explosives sites

HSE has no comment to make as there are no licensed explosive sites in the vicinity.

Electrical Safety

No comment from a planning perspective.

Please send any further electronic communication on this project directly to the HSE's designated e-mail account for NSIP applications. Alternatively, any hard copy correspondence should be sent to:

Mr Dave Adams (MHPD)
NSIP Consultations
1.2 Redgrave Court
Merton Road, Bootle,
Merseyside L20 7HS

Yours sincerely,

[redacted]

Dave Adams
(CEMHD4 Policy)

From:	Blake, Patrick
To:	Aquind Interconnector
Cc:	Planning SE; Ginn, Beata
Subject:	EN020022-000030 Application by AQUIND Limited (the Applicant) for an Order granting Development Consent for the AQUIND Interconnector (the Proposed Development)
Date:	27 November 2018 12:54:15

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11

Application by AQUIND Limited (the Applicant) for an Order granting Development Consent for the AQUIND Interconnector (the Proposed Development)

EN020022-000030 - Scoping consultation

Dear Marie Shoesmith

Thank you for inviting Highways England to comment on the application by AQUIND Limited (the Applicant) for an Order granting Development Consent for the AQUIND Interconnector (the Proposed Development) Scoping Consultation.

Highways England has been appointed by the Secretary of State for Transport as strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the strategic road network (SRN). The SRN is a critical national asset and as such Highways England works to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

We will therefore be concerned with proposals that have the potential to impact the safe and efficient operation of the SRN, in this case it includes the M27, A3(M) and A3.

We offer no opinion whether an EIA is required or not, this is for the appropriate planning authority, however we look forward to further engagement with the applicant to confirm the scope of the traffic and transport assessment to support proposals. This will include an assessment of the local traffic impacts of the proposed development. This will consider the peak traffic movements anticipated during the construction stage; taking account of the proposed programme of works, the size of the anticipated peak workforce, the proposed working hours and peak HGV movements expected to be generated by the works.

There remains potential for interaction with SRN assets (such as cable route required to go over/under the SRN), we welcome early dialogue with the applicant to better understand what approvals are required to enable this to be achieved.

We note the assessment will be in line with principles outlined in Planning for the Future: a guide to working with Highways England on planning matters (Highways

England, 2015). In addition we recommend that policy set in out in Department for Transport Circular 2/2013 (Strategic Road Network and the delivery of sustainable development) is also fully considered.

We strongly recommend a meeting between Highways England and the applicant as proposals are developed.

I hope this is helpful.

Your sincerely

Patrick Blake, Area 3 Spatial Planning Manager
Highways England | Bridge House | 1 Walnut Tree Close | Guildford | Surrey | GU1 4LZ
Tel: +44 (0) 300 4701043 | **Mobile**: + 44 (0) 7825 024024
Web: http://www.highways.gov.uk
GTN: 0300 470 1043

Historic England

Marie Shoesmith
The Planning Inspectorate
Major Casework Directorate,
Temple Quay House,
2 The Square,
Bristol BS1 6PN

Our ref: SE/Cable/AQUIND
Your ref: EN020022-000030

Telephone: 07798 653897

28th November 2018

Dear Ms Shoesmith,

Electricity Interconnector Cable AQUIND
Environmental Impact Scoping Opinion under Regulation 10(1) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations')

Thank you for your letter, dated 31st October 2018, regarding the Environmental Impact Assessment Scoping Report prepared for this proposed electricity interconnector project between the UK and France.

Introduction

We understand that the Secretary of State for Business, Energy and Industrial Strategy has determined that the proposed AQUIND Interconnector project should be treated as a Nationally Significant Infrastructure Project. Furthermore, we appreciate that we have been identified as a consultation body and we therefore offer the following advice regarding information which should be provided in any Environmental Statement prepared in support of this proposed project.

To provide this advice we have reviewed the advice we offered previously to the Marine Management Organisation (MMO) for the scoping report prepared by AQUIND Ltd. (Document Number: 1145377; dated: 09/02/2018). We are aware that the MMO issued a Scoping Opinion under Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) for the elements of the Project within the UK marine area in June 2018. We understand that attention to this previous scoping exercise is detailed within Appendix E of the AQUIND EIA Scoping Report (Document Ref 0.1, dated October 2018).

The proposed project

We understand that the proposed project is for the development of a new High Voltage Direct Current (HVDC) power cable transmission link to run under the sea between Pourville (France) and Eastney (Portsmouth, UK). The proposed development, as relevant to determination within the UK (including inshore and offshore marine planning areas), also comprises High Voltage Alternating Current (HVAC) underground cables, fibre optic data transmission cables and a new HVDC converter station (the "Proposed Converter Station") adjacent to the existing National Grid substation in Lovedean, Hampshire. The Proposed Converter Station will be located less than 2km from Lovedean substation and will be connected by two 400kV underground AC cable circuits.

The project is described as comprising four 320kV HVDC submarine cables which shall be installed as two bundled pairs or four single cables, but that final details for the proposed marine cables will be the responsibility of the cable manufacturer following the appointment of the Engineering, Procurement and Construction (EPC) contractors.

Consideration of the historic environment within the Scoping Report

We note in paragraph 2.1.8 (Marine Surveys) that that the following survey data has been acquired to define the submarine cable corridor, target burial depths, installation techniques and if there is requirement for cable and scour protection:

- geotechnical data comprising cone penetration testing and vibrocores (acquired June to November 2018); and
- geophysical data comprising bathymetry, side-scan sonar, sub-bottom profiling and magnetometer (acquired between November 2017 and March 2018)

The statement therefore in paragraph 2.1.9 that the surveys conducted should "enable the identification of…Marine heritage and archaeological features" is welcomed and the results of this work should directly inform any Environmental Statement (ES) produced.

In the Scoping Report provided previously (February 2018), mention was made about landfall investigations comprising boreholes using jack-up vessel, but this detail appears to be absent from this version of the Scoping Report. The detail provided about further surveys to be undertaken by the appointed EPC contractors is important (see paragraph 2.1.10) because these surveys should confirm if any bathymetric changes have occurred and to identify any unexploded ordnance (UXO) as necessary to support selection of the final cable route, should this project secure consent. In this regard, archaeological analysis and interpretation of survey data acquired post-consent is essential and should be programmed sufficiently ahead (e.g. 6 months) to inform final route selection prior to installation.

Paragraph 2.1.14 (seabed debris) explains the action to remove seabed debris that might be considered a hindrance to cable installation through use of a pre-lay grapnel run (PLGR). It is therefore a priority matters that archaeological assessment is completed prior to route clearance to ensure that any anomalies of known or possible archaeological interest are avoided in accordance with a defined mitigation strategy.

Paragraphs 2.1.27 to 2.1.39 explain possible techniques for cable installation (and burial) and we must stress the relevant attention that is to be given to ascertaining whether or

not any known or unknown historic or archaeological features exist within any identifiable impact zone. Paragraph 2.1.50 explains that Horizontal Directional Drilling (HDD) will be conducted under Langstone Harbour from Portsea Island to the mainland and we must add that all such works are to be planned with full consideration of the historic environment. Therefore any associated survey programmes required to inform HDD should be subject to archaeological interpretation and analysis in accordance with an agreed Written Scheme of Investigation (WSI), as alluded to in paragraph 14.4.2. We note, however, that while marine licence consent is not necessarily required, adequate provision within any Development Consent Order (DCO) should allow for a WSI to address this aspect of the proposed project.

We also note the explanation in paragraph 2.1.52 that workboats could deploy Remotely Operated Vehicles (ROVs) or utilise geophysical survey and positioning equipment to monitor the progress of the works. It is therefore relevant to add that such measures should also be used to support anomaly investigation to aid determination of archaeological interest in accordance with an agreed WSI.

Chapter 14 (Marine Archaeology), acknowledges advice previously submitted whereby baseline conditions are determined in reference to national desk-based sources of information (e.g. UK Hydrographic Office archives and the National Heritage List for England). We also concur that assessment procedures should be informed by the relevant published professional guidance e.g. Chartered Institute for Archaeologists (as mentioned in paragraph 14.2.4). We also appreciate the recognition in paragraph 14.2.6 regarding the high concentration of wreck (vessel or aircraft) associated with the Solent area.

The detail regarding known wreck, as set out in paragraphs 14.2.9 and 14.2.10, provides a starting point for the assessment exercise including action to corroborate available national and local historic records with geophysical data acquired for this proposed development (such as sources listed in paragraph 14.4.4). We note in paragraph 14.3.4 that specific attention is directed at the use of geophysical data to provide data to inform the ES and to provide baseline characterisation for the benthic and archaeological impact assessment. We concur, but add that geotechnical data acquisition that is sufficient to support palaeo-environmental analysis is also directly relevant to the preparation of the ES. Paragraph 14.3.4 also explains the role of mitigation measures, specifically, an archaeological WSI. However, the ES should clearly explain the processes and procedures for data analysis and interpretation that enables identification of possible impact that might be direct or indirect, negative or positive. Following this analysis, the ES should set out the full set of necessary mitigation measures, such as preparation of an archaeological WSI, should consent be obtained. It is the purpose of a WSI to steer the final design of this interconnector cable project in reference to the full suite of survey techniques that will be employed at that stage. Other appropriate mechanisms should then be explained such as the use of a Protocol for Archaeological Discoveries should any finds occur during implementation (this risk is clearly explained within paragraph 14.3.5), including any pre-lay seabed clearance operations. We add and that all relevant project documentation used by any project contractor or sub-contractor is to utilise such a protocol and implement measures such as Archaeological Exclusion Zones, as and when necessary, in consultation with Historic England and/or relevant local curator.

In reference to the advice we have already provided regarding the EIA Scoping Report for the proposed AQUIND interconnector cable (Eastney Beach, Request for EIA Scoping – UK/France HVDC Interconnector; Landfall and Cable Routing), we confirm that all options to choose a route that will not impact Fort Cumberland (either physically impact or impact it through development within its setting) are to be explored as part of this EIA exercise and reported through the ES.

Chapter 23 (Heritage and Archaeology), in paragraphs 23.2.5 to 23.2.7 describe the designated historic environment as might be encountered at the proposed cable landfall at Eastney (near Portsmouth, Hampshire). Paragraph 23.2.9 mentions Archaeological Alert Areas within Portsmouth based on known sites of archaeological interest, such as Eastney Point. Section 23.4 (Assessment Methodology) set out the general principles in reference to the proposed cable route and convertor stations, but we consider it particularly relevant to highlight as a relevant aspect of this EIA scoping exercise, the risk of encountering possibly unknown elements of the historic environment at the cable landfall location within the defined area of Fort Cumberland scheduled monument (and Grade II* listed building) or in close proximity to this scheduled monument. An appropriate assessment of risk and planning of survey work is essential given that there are surviving remains of both Fort Cumberland and the earlier Eastney Fort that exist as upstanding structures and as buried archaeological deposits, both within and immediately outside the scheduled areas. However, this chapter did not specifically describe any survey techniques other than a general "site inspection" (paragraph 23.4.7) which we consider as inadequate and we hereby recommend that any ES prepared for this proposed project acquires geophysical and geotechnical survey data at the proposed landfall location at Eastney. The commissioning of these surveys should be subject to consultation with the relevant local curatorial body (Hampshire County Archaeology/Conservation Officers).

Yours sincerely,

[redacted]

Christopher Pater
Head of Marine Planning

Inverdee House, Baxter Street,
Aberdeen, AB11 9QA, United Kingdom

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Mr Richard White
EIA and Land Rights Advisor
Major Applications & Plans
The Planning Inspectorate~F
Temple Quay House
Temple Quay
Bristol
BS1 6PN

JNCC reference: OIA 5846
PINS reference: EN020022

Date: 28 November 2018

Dear Richard

Aquind Interconnector, Aquind Ltd, EIA Scoping Report

Thank you for consulting JNCC on the above application from Aquind Ltd. which we received on 31 October 2018. The due date provided for our response was 28 November 2018.

The advice contained within this minute is provided by JNCC as part of our statutory advisory role to the UK Government and devolved administrations on issues relating to nature conservation in UK offshore waters (beyond 12 nautical miles). Natural England will be advising separately on impacts relating to nature conservation interests within the 12nm boundary.

Comments to PINS and the Operator concerning the application

JNCC would like to bring the following issues to the attention of the MMO and the operator for consideration in future applications:

General comments

Overall, it is JNCC opinion that the scoping report provides a good overview of potential impacts on relevant receptors that might derive from the proposed project. JNCC also notes that there is not a definitive method statement with regards to cable installation, as cable route surveys and data still have to be analysed, and a final cable route has not been identified pending the 2017/ 2018 survey results.

Therefore, the total footprint of the cable route is not yet known, nor is the amount of rock that might be required in areas where the cables cannot be buried/ trenched efficiently, nor the amount potentially needed at cable crossings. The EIA should clearly detail the

methodology of the cable installation in the offshore area to aid understanding of the nature and scale of impacts, as well as proposed mitigation measures where required.

Marine environmental survey

JNCC note that geophysical surveys and benthic ecology surveys were undertaken along the cable route corridor in 2017 and 2018 respectively.

JNCC reiterate the need for evidence of sensitive habitats and species present in the potential impact area of proposed cable laying operations including Annex I species and Annex II habitats (under the Offshore Marine Regulations 2007, as amended), UK BAP and OSPAR Threatened and/or Declining Habitats and Species. Where guidelines exist for the detection and quality assessment of particular habitats (e.g. Irving, 2009 for stony reef; and Gubbay, 2007 and Limpenny *et al*. 2010 for *Sabellaria spinulosa* reef) then these should be followed.

Protected sites

The scoping report states that in the offshore area the High Voltage Direct Current (HVDC) cable route will pass close to the Offshore Overfalls and Offshore Brighton Marine Conservation Zones (MCZs), 1.5 km and 8.5 km respectively: the former is partly in English inshore waters and the latter entirely offshore. The application should fully assess any potential impacts on these Marine Protected Areas (MPAs). Information on these MCZs is available via the following links:

Offshore Overfalls MCZ - http://jncc.defra.gov.uk/page-6776

Offshore Brighton MCZ - http://jncc.defra.gov.uk/page-6775

Stabilisation material

The operation potentially involves the introduction of hard substrate into a mainly sedimentary environment. Although the changes are not necessarily considered as having a significant impact in this instance, we still encourage the operator to continue working to minimise the amount of hard substrate material used. We note that the long-term effects of the introduction of substratum into naturally sandy or muddy sea beds is not fully understood at present and should be carefully considered by the regulators.

JNCC welcome detailed commentary on stabilisation operations to allow further understanding of their actual nature conservation impact. This would include:

- Location of dump sites;
- Size / grade of rock to be used;
- Tonnage / volume to be used;
- Contingency tonnage / volume to be used;
- Method of delivery to the seabed;
- Footprint of rock;

- Assessment of the impact;
- Expected fate of deposit after end of production, i.e. will it be left in situ or recovered.

Where stabilisation material cannot be avoided, we recommend using a more targeted placement method e.g. fallpipe vessel rather than using vessel-side discharge methods.

Staged applications

Whilst JNCC appreciates that not all of the detailed project design is finalised at the time of ES submission, JNCC reiterates that best practice would not be to submit applications where stabilisation / protection material requirements are incrementally increased. The worst-case scenario should be assessed in the application to enable a meaningful assessment of the whole environmental impact of the project to be undertaken.

It is understood that activities evolve over time, and that subsequent stages are often contingent on the outcome of the earlier activities. However, every effort should be made to predict the likely outcome and carry out an assessment on that basis so that all the elements have been assessed and presented in an ES.

Unexploded Ordinance (UXO)

We understand that this consultation at the moment involves a preliminary scoping report. However, we wish to reiterate, if it is found at a later date that avoiding UXO entirely is not achievable and UXO operations are to be carried out during the course of the project we would ask that the following would need to be included in a detailed assessment:

- Consideration of the types of UXO likely to be present, the number of detonations likely in a single day, and the season over which these operations are due to occur;
- An informed estimate of potential injury zones and marine mammal numbers within those zones (per species);
- Details of marine mammal monitoring methods e.g. visual detection, PAM, designated person;
- Details of the deployment of acoustic deterrent devices;
- Details of monitoring procedures e.g. mitigation vessel, mitigation zone, pre-detonation monitoring, timings and delay procedures;
- Explosive charge sequencing and post detonation searches;
- A communication protocol and a reporting protocol.

Please contact me with any questions regarding the above comments.

Yours sincerely,

Nicholas Moore

Offshore Industries Adviser

Email: nick.moore@jncc.gov.uk

Telephone: 01224 266590

LANGSTONE
HARBOUR BOARD

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harbourmaster@langstoneharbour.org.uk

Captain NA Jardine MNI
Harbour Master/Manager

CC Braby ACMA, CGMA
Treasurer to the Board

SP Kerr BA, LLM Solicitor
Clerk to the Board

My Ref LHB/NJ/18b
Yr Ref EN020022-000030
Ask for Nigel Jardine
Date 12 November 2018

Dear Ms Shoesmith

PLANNING ACT 2008 (AS AMENDED) AND THE INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 – REGULATIONS 10 & 11

APPLICATION BY AQUIND LIMITED FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE AQUIND INTERCONNECTOR

SCOPING CONSULTATION AND NOTIFICATION OF THE APPLICANT'S CONTACT DETAILS AND DUTY TO MAKE AVAILABLE INFORMATION TO THE APPLICANT IF REQUESTED

I refer to your letter dated 6 November 2018.

I confirm that the Langstone Harbour Board has no further comments at this time on the Environmental Statement relating to the Proposed Development.

Yours Sincerely,

[redacted]

Nigel Jardine
Harbour Manager
Langstone Harbour Board

Marie Shoesmith, Senior EIA and Land Rights Advisor
The Planning Inspectorate
Major Casework Directorate
Temple Quay House
2 The Square
BRISTOL BS1 6PN

Marine Management Organisation

Marine Licensing
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Ms Marie Shoesmith
Senior EIA and Land Rights Advisor,
Major Applications & Plans,
The Planning Inspectorate,
Temple Quay House,
2 the Square,
Bristol,
BS1 6PN

Your reference: EN020022-000030
Our reference: DCO/2018/00016

By email only to aquind@pins.gsi.gov.uk

28 November 2018

Dear Ms Shoesmith,

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11

Application by AQUIND Limited (the Applicant) for an Order granting Development Consent for the AQUIND Interconnector (the Proposed Development)

Thank you for your request dated 31 October 2018 for Marine Management Organisation (MMO) comments on the Aquind Interconnector EIA Scoping Report.

The MMO's role in Nationally Significant Infrastructure Projects

The MMO was established by the Marine and Coastal Access Act 2009 (the "2009 Act") to make a contribution to sustainable development in the marine area and to promote clean, healthy, safe, productive and biologically diverse oceans and seas.

The responsibilities of the MMO include the licensing of construction works, deposits and removals in English inshore and offshore waters and for Welsh and Northern Ireland offshore waters by way of a marine licence[1]. Inshore waters include any area which is submerged at mean high water spring ("MHWS") tide. They also include the waters of every estuary, river or channel where the tide flows at MHWS tide. Waters in areas which are closed permanently or intermittently by a lock or other artificial means against the regular action of the tide are included, where seawater flows into or out from the area.

In the case of Nationally Significant Infrastructure Projects ("NSIPs"), the 2008 Act enables Development Consent Order's ("DCO") for projects which affect the marine environment to include provisions which deem marine licences[2].

[1] Under Part 4 of the 2009 Act

[2] Section 149A of the 2008 Act

As a prescribed consultee under the 2008 Act, the MMO advises developers during pre-application on those aspects of a project that may have an impact on the marine area or those who use it. In addition to considering the impacts of any construction, deposit or removal within the marine area, this also includes assessing any risks to human health, other legitimate uses of the sea and any potential impacts on the marine environment from terrestrial works.

The MMO has reviewed the Scoping Report and I set out our comments below. The MMO reserves the right to make further comments on the Project throughout the pre-application process and may modify its present advice or opinion in view of any additional information that may come to our attention.

1. Marine Processes

1.1 Wave and current data collection is not proposed, and numerical modelling will be used instead to provide details on site hydrodynamics, which is a proportionate approach to adopt. It is proposed that modelling will be undertaken using a MIKE21 particle tracking module, and the MIKE21 hydrodynamic model. In addition, a bespoke SWAN wave model will be developed, with a high resolution regional nest, to produce wave data along the length of the marine cable corridor. It is stated that the SWAN wave model will be validated against existing datasets. As it is stated that sediment transport is tidally driven, and therefore currents are also of importance, modelling of currents should therefore also be validated against measured data. The desk study should identify the most suitable data.

1.2 The MMO recommends that sandbanks and seabed features should be considered as receptors, particularly where they are in the vicinity of protected areas.

1.3 The high-level approach to the environmental assessment process is described and is in line with standard practice. However, the specific approach to assessing the significance of the identified potential impacts in relation to the physical environment is not well described in the sections of the document reviewed; this may be because modelling outputs will instead feed into other chapters (e.g. benthic ecology or water quality). These linkages should be clearly laid out in the final Environmental Statement (ES) report.

1.4 The Physical Environment is scoped in to the ES in Table 4.1, and addresses the subject in a dedicated chapter. Table 6.1 identifies potential impacts as:

- Physical disturbance to seabed geology and morphology (during installation works)
- Impacts to local sediment regimes (within the vicinity of the development)
- Impacts to coastal processes (within the vicinity of the development).

This scope is adequate from a marine processes perspective.

1.6 The report has sufficiently addressed the individual comments relating to physical processes from the previous consultation with the MMO (see *MMO EIA Scoping Opinion dated 22 June 2018, reference EIA/2018/00011*).

1.8 Monitoring -The monitoring methods proposed are adequate and the envelope of potential timing appears sufficient. The MMO recommends surveys at six-monthly intervals for a period immediately after construction completion, as this will enable seasonal

variations to be identified. These surveys should assess larger scale seabed condition, including the sandwave recovery, in addition to their stated focus of establishing cable burial depths and the status of cable protection.

1.9 Mitigation- Table 6.1 of the scoping report states that any mitigation required will be identified through the EIA process, and specific measures are not explicitly described, as it to be expected at this stage. However, it is noted that there is evidence that the project design encompasses embedded mitigation, for example, the cable is being routed to avoid sandwaves and large ripples where feasible and it is stated that the route will be further refined once pre-construction surveys have been assessed.

1.10 The project is adequately described, as are the multiple designs and construction methodologies options still under consideration. Further detail regarding what method of (non-burial) cable protection will be deployed and how it was chosen will be necessary prior to installation.

2. Shellfisheries

2.1 Further to advice stated in the MMO EIA Scoping Opinion of 22 June 2018, the MMO notes that reference to *Maja squinado* (the scientific name which preceded *Maja brachydactyla*) has been edited to superfamily level, Majoidea. The MMO also notes that potential impacts to egg-bearing shellfish, such as the edible crab (*Cancer pagurus*), will be considered in the ES.

2.2 No shellfish receptors have been scoped out of the subsequent assessment.

2.3 Temporary habitat disturbance, temporary increase in suspended sediments, noise and vibration, and habitat loss have been scoped in. The MMO agrees with these conclusions and would expect to see associated temporary loss of fishing grounds to be given mitigation consideration through the EIA process.

2.4 During the scoping process, it is anticipated that interested parties will be to provide additional datasets that can be incorporated into the baseline surveys and assessments, where appropriate. The MMO acknowledges that a significant proportion of activity within the area is conducted by vessels smaller than 10 metres (*RSK Environment Ltd., 2010*), which highlights the importance of consultation with local fisherman and both Southern and Sussex Inshore Fisheries and Conservation Authorities (IFCAs) to gain data and information on this fleet.

2.5 Details of quality standards have not been provided, which is to be expected at this stage. The MMO expects these to be detailed in the ES. This is further clarified in Table E2 of the scoping report.

3 Fisheries

3.1 The Scoping Report acknowledges the comments regarding fisheries made in the MMO EIA Scoping Opinion dated 22 June 2018 and has agreed to use the recommended sources of data and published literature sources to inform the EIA, and this is welcomed.

3.2 As set out in our EIA Scoping Opinion of 22 June 2018, the MMO recommends seeking consultation with the Fisheries industry at the earliest opportunity as the greater the level of consultation the greater the opportunity to mitigate against any impact to the fishing industry. The MMO also recommends working with members of the recreational fishing community. The Solent represents an important areas for both private anglers and for charter vessels providing a platform for recreational fishers.

4 Benthic Ecology

4.1 The MMO EIA Scoping Opinion dated 22 June 2018 (paragraph 4.6.7) requested further information regarding the methods used to survey the intertidal benthos. This information has not been provided in the Scoping Report. In responding to this request (Table E1, Scoping Opinion Section 4.6.7), the Scoping Report briefly describes how the intertidal biotopes will be mapped in the ES, but not how the surveys used to infer biotopes were conducted. Without this information the MMO cannot comment on the appropriateness of the evidence base. The MMO and its advisers are happy to discuss this point in more detail if required.

4.2 The MMO recommends that additional information on the number and locations of drop-down video transects, benthic grab stations is provided, as and sediment contaminant samples stations. The latter is apparently presented in Figure 7.1. (according to Section 7.2.2 of the Scoping Report); however, this figure is not provided.

4.3 Details of quality standards have not been provided with respect to benthic ecology in Section 8 of the Scoping Report. For example, details on how benthic community samples were/will be collected (e.g. grab type, video transect length), processed onboard (e.g. sieve size), fixed (e.g. preserved in formaldehyde), and identified have not been provided.

4.4 The MMO recommends sample processing and species identification to follow a standard quality control protocol (e.g. the NMBAQC scheme[3]) and the details of the approach adopted to be stated in the ES.

4.5 The MMO recommends similar standard protocols to be followed for sediment particle size analysis.

4.6 The proposed scope of the ES is adequate with respect to impacts on benthic ecological receptors (Table 8.3). This includes the assessment of impacts due to seabed disturbance, increase in suspended sediments, resuspension of contaminated sediments, and deposition of sediment during the construction phase, and habitat loss and seabed disturbance (associated with Operational and Maintenance (O and M) activity) during the operation phase.

4.7 In our EIA Scoping Opinion of 22 June 2018, the MMO advised that possible impacts on benthic ecological receptors due to contaminant release be considered and scoped into the ES if appropriate. Impacts relating to the resuspension of contaminated sediment have now been scoped in (Table 8.3).

[3] http://www.nmbaqcs.org/

4.8 A benthic survey campaign has been undertaken along the proposed cable route to characterise subtidal and intertidal habitats and identify any protected benthic features (Section 8.4.2).

4.9 The subtidal survey used drop-down video and benthic grabs to obtain information on sediment characteristics and infaunal/epifaunal communities (Section 8.4.3). The surveys were stratified so that sampling stations were placed in representative habitats along the entire route. Sampling stations were also placed in potentially sensitive or protected habitats, such as potential Annex I habitats or near designated sites such as Special Areas of Conservation (SACs) or Marine Conservation Zones (MCZs). This approach is appropriate.

4.10 The MMO agrees that the following can be scoped out of the ES:

- The introduction of invasive non-native benthic species (Table 8.3 and Section 8.3.4),
- The impact of Electro-magnetic field (EMF) emissions from High Voltage Direct Current (HVDC) cables on the benthos (Table 8.3 and Sections 8.3.5-8.3.7),
- The impacts from heat emissions from HVDC cables on the benthos (Table 8.3 and Sections 8.3.8-8.3.9).

4.11 Section 4.9 states that mitigation measures will be identified and incorporated into the design as environmental assessments are developed and any potentially high magnitude impacts are identified. This approach is reiterated with specific regard to impacts on benthic ecology that have been scoped in (Table 8.3). This approach is appropriate at this stage.

4.12 Impacts due to EMF and heat emissions from HVDC cables (both of which have been scoped out for benthic receptors) will be mitigated by the shielding and burial of the cables (Table 8.3).

4.13 The EIA assessment methodology presented in Section 4 is appropriate and clearly justified with reference to Guidelines for Environmental Impact assessment (2004).

4.14 The data sources for subtidal benthic species and habitats (i.e. drop-down camera and benthic grab surveys, supplemented by geophysical data) are appropriate (Section 8.4.3).

4.15 The Scoping Report clarifies that cumulative impacts on benthic receptors will be scoped into the ES (Table E1, Scoping Report Section 4.6.11).

4.16 The effects of all activities on benthic features within designated sites in the vicinity of the proposed works will be assessed, and the possible implications for the sites' conservation objectives evaluated (Sections 8.4.5-8.4.7). These sections of the Scoping Report make specific reference to MCZs; however, the MMO recommends such transboundary effects to be considered for all designated sites (i.e. those listed in Table 8.1) and any other sensitive benthic receptors known to be present within the area likely to be affected by sediment resuspension, sediment deposition, and/or the release of contaminants. The Scoping Report acknowledges the requirement that such impacts must be included in the ES (Table E1, Scoping Opinion Section 4.6.13).

5 Dredge and disposal activities

5.1 It is unclear from the Scoping Report whether the material to be disposed of within the cable corridor would be at designated points along the corridor, or whether this refers to a redistribution of sediment within the same area as the dredging. If specific areas of the corridor are to be used as disposal sites, the MMO recommends that these are characterised within the ES (i.e. as a separate 'disposal site characterisation' chapter). It is possible that this may be carried out using the existing data collected in relation to sediment characterisation and hydrodynamics. If Mass Flow Excavation (MFE) is solely utilised, then no disposal sites would need designating (as the material is not being brought to the surface and re-deposited).

5.2 It is stated in paragraph 2.1.18 of the Scoping Report that *"it is anticipated that approximately 700,000 to 1,700,000 m^3 of sediment along the marine cable corridor will need to be cleared by MFE and/or dredging"*. MFE, as described in Section 2.1.19 of the scoping document, is a form of water-injection dredging, which re-suspends fine sediment from the seabed, thereby redistributing them. The alternative dredging method proposed in Section 2.1.20 of the scoping document is trailer suction hopper dredging.

5.3 If trailer suction hopper dredging is utilised, the disposal option for this sediment is yet to be confirmed, with beneficial re-use of sediment being stated as the preferred method, although there is also a likelihood for disposal within the marine cable corridor.

5.4 Section 7 of the Scoping Report states that sediment samples from the inshore UK section of the cable route were collected as part of the benthic sampling campaign, and these samples will be analysed for particle size distribution and contaminant levels (metals, organotins, PAHs, THCs, and PCBs). The MMO considers this is sufficient to characterise the sediment to be dredged, and therefore no additional sampling is required.

5.5 No topics relating to dredge and disposal activities have been scoped out of subsequent assessment. No mitigation or monitoring measures are suggested in relation to dredge and disposal activities at this stage, which is to be expected.

5.6 In Sections 7 and 8 of the Scoping Report, water quality and intertidal and benthic habitats organisms have been appropriately identified as receptors to the potential impacts associated with dredge and disposal activities, such as temporary increased suspended sediments, the resuspension of contaminated sediments, smothering and disturbance of seabed.

5.7 Details of quality standards have not been provided at this stage. It is noted that the Scoping Report makes reference to Cefas Action Levels for determining the suitability of sediment for disposal at sea, which is appreciated. It should be noted that methods of chemical analysis should be compatible with the benchmarks they are compared against (for example the metal extraction method). The MMO recommends that the chemical analysis conforms to the MMO dredge disposal laboratory guidelines[4].

[4] https://www.gov.uk/guidance/marine-licensing-sediment-analysis-and-sample-plans

Conclusion
Please note this letter comprises the MMO's initial comments in respect of the Aquind Interconnector EIA Scoping Report and is without prejudice to any future representation the MMO may make about the proposed Aquind project and associated documents.

If you require any further information please do not hesitate to contact me using the details provided below.

Yours Sincerely,

Mark Qureshi
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Reference: EN020022

Ms. Marie Shoesmith
Major Casework Directorate
The Planning Inspectorate
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2 The Square
Bristol, BS1 6PN

23rd November 2018

Dear PINS,

Aquind Interconnector – MCA Response to Scoping Request

Thank you for the opportunity to consult on the Scoping Report for an Environmental Statement for the Aquind UK – France HVDC Interconnector, running from Eastney, Portsmouth to Normandy.

The Maritime & Coastguard Agency has previously given a Scoping response to the Aquind project when applied for under the Marine Management Organisation earlier in 2018. We note that there are no major changes in the PINS application, and so our response at the Scoping stage remains largely the same.

We noted that the proposed route transits through the Dover Straits Traffic Separation Scheme (TSS) and the NAB VTS Area, East of the Isle of Wight. We requested that the developer consult with marine users in both area User Groups, which are chaired by the MCA. The developer has since done so with comments fed back by stakeholders, and we would expect there to be ongoing engagement by Aquind throughout the life of the project, with comments incorporated into the Navigation Risk Assessment to be included in the EIA.

Having considered the latest Scoping Report, we request that the following be considered:

Navigation Risk Assessment

Following the documents, we have already seen, at the EIA stage we would expect to see a detailed and current Navigation Risk Assessment (NRA) before consent can be granted. This should include appropriate risk mitigation measures and a detailed methodology, to ensure the risk remains reduced to ALARP (As Low As Reasonably Practicable). This should also include assessments on collision risk, emergency

response, marking and lighting during the works and the promulgation of Notices to Mariners.

This should further include considerations for the effects on vessel navigation and communication equipment, as well as any electromagnetic deviation on ships compasses. The MCA would be willing to accept a three degree deviation for 95% of the cable route. For the remaining 5% of the route no more than five degrees will be attained. The MCA would however expect a deviation survey post the cable being laid; this will confirm conformity with the consent condition. The developer should then provide this data to the UKHO via a hydrographic note (H102), as they may want a precautionary notation on the appropriate Admiralty Charts.

Particular attention should also be paid to cabling routes and burial depth for which a Burial Protection Index study should be completed and, subject to the traffic volumes, an anchor penetration study may be necessary. Any consented cable protection works must ensure existing and future safe navigation is not compromised, accepting a maximum of 5% reduction in surrounding depth referenced to Chart Datum.

Works within Dover Straights TSS

Noting that part of the cable route will transit through the South-Western end of the Dover TSS, we would need to see a specific Navigation Risk Assessment for the area to be laid within the Traffic Separation Scheme. This will need to include a specific methodology with regards to the cable laying operation, and must be compliant with the International Regulations for Preventing Collisions At Sea 1972 (COLREGs).

We particularly note that the current proposal seeks to lay a section of the pipe through a Separation Area. Under COLREGS Rule 10(e), this area is provisioned for vessels transiting in/out of a TSS, and for vessels in emergency distress, plus also fishing vessels. The use of trawlers and anchors also increases the risk of a cable strike before burial is complete.

Rule 10(l) allows for an exemption for a “vessel restricted in her ability to manoeuvre” (defined in Rule 3 to include a cable laying vessel) during a specific cable laying operation. However this exemption may not extend to guard vessels, unless an exemption under Rule 10(k) (vessels engaged in the maintenance of the safety of navigation) can also be sought. Full consultation with MCA Dover CNIS will be requested, so that operations can be safely managed.

The COLREGs are an internationally-accepted treaty and enshrined under UK law. Contraventions of the COLREGs may also constitute an offence and may be liable to prosecution by the MCA Enforcement Unit. Implications of these rules should also be considered for any future survey or maintenance work both prior and after completion.

Works within the NAB VTS Area

We note that the cable route transits through part of the NAB VTS area, which is managed by ABP Southampton in co-ordination with HM Queen's Harbour Master at Portsmouth.

Cable laying operations are likely to impact traffic routes into the Solent area, and so the MCA-chaired NAB VTS area User Group should be fully consulted with at an early stage. The User Group includes other local stakeholders including ferries, dredging operators, harbour authorities, fishing associations and the RYA.

Particular emphasis should also be placed on considering any impacts to local military operations out of Portsmouth.

Receiver of Wreck / Unexploded Ordnance

At the formal marine licencing stage, the MCA would also likely give the standard advisory reminding the consent holder of their obligations to report any recovered wreck material to the MCA Receiver of Wreck, and are required to take any recovered wreck to a UK port only. A significant breach of this legislation may also constitute an offence under UK law.

Finally, we note that the cable route through the English Channel will have a high probability of encountering unexploded ordnance (UXO) during laying operations. Appropriate safeguards should be put in place by the applicant for safe disposal and mitigation where needed.

Early engagement by the developer so far has been welcomed, both with the MCA and other marine stakeholders. As this project progresses we hope that the developer will continue to consult and engage with the MCA and interested maritime parties.

Yours sincerely,

Thomas Bulpit
Marine Licencing Lead
Navigation Safety Branch

Ministry of Defence

Defence Infrastructure Organisation

Major Casework Directorate
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www.mod.uk/DIO

28 November 2018

Your Reference: N020022-000030
Our reference: 10042978

Dear Sir/Madam,

AQUIND Interconnector

Application by AQUIND Limited (the applicant) for an Order granting Development Consent for the AQUIND Interconnector (the Proposed Development)- Scoping consultation

Thank you for consulting the Ministry of Defence (MOD) on the above Scoping Opinion application. I write to provide comments on what the applicant should consider in their Environmental Statement (ES) relating to the MOD's activities and assets within the vicinity of the cable route.

The applicant has prepared an Environmental Impact Assessment Scoping Report for the proposed development. The extent of maritime military practice and exercise areas within the vicinity of the proposed development has been identified. The cable route will intersect military Danger Area D037, the MOD has no concerns with the cable route passing through this danger area.

In relation to the onshore element of the proposed development, the proposed location where the cable will come ashore at Eastney and the onshore cable route to connect to the National Grid substation at Lovedean will not pass through any MOD statutory safeguarding zones protecting operational defence installations. However, it should be noted that the MOD would have concerns if the onshore cable route crosses or comes near to any MOD property or land in the area.

The onshore cable route corridor is shown as the red boundary line on the Converter Route drawing (EN020022-SR-4.1 rev1). Within the corridor red line boundary are several pieces of MOD estate including a military museum, a community centre and service family accommodation. The applicant should avoid routing the cable across or near to MOD estate; the MOD wishes to be consulted on the final onshore cable route to ensure the cable does not affect the MOD estate.

The potential for the offshore development area to contain historic disposal sites for explosive munitions has been identified and considered. In addition, the potential presence of unexploded

ordnance has also been identified as a relevant consideration with respect to the installation of the cables and geophysical surveys.

I trust this clarifies our position on this consultation. Please do not hesitate to contact me should you wish to consider these points further.

Yours sincerely

Laura Nokes
Safeguarding Officer

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Gallows Hill, Warwick
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Land and Acquisitions
Anne Holdsworth
DCO Liaison Officer
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SUBMITTED ELECTRONICALLY:
aquind@pins.gsi.gov.uk

21 November 2018

Dear Sir/Madam

EN020022 SCOPING NOTIFICATION AND CONSULTATION FOR THE PROPOSED AQUIND INTERCONNECTOR

This is a response on behalf of National Grid Electricity Transmission PLC (NGET) and National Grid Gas PLC (NGG).

I refer to your letter dated 31ST October 2018 in relation to the above proposed application and the Scoping Notification and Consultation. I would like to make the following comments:

National Grid infrastructure within / in close proximity to the order boundary

Electricity Transmission

National Grid Electricity Transmission has high voltage electricity overhead transmission lines and high voltage substations within the scoping area. The overhead lines and substation form an essential part of the electricity transmission network in England and Wales.

Overhead Lines

• VB (400kV) overhead line route	Fleet to Lovedean 2
• 4VF (400kV) overhead line route	Bolney to Lovedean 2 Bolney to Lovedean 1
• 4YC (400kV) overhead line route	Lovedean to Mann to Nursling
• 4YE (400kV) overhead line route	Botley Wood to Lovedean Fawley to Lovedean

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Substations

- Lovedean 4 400kV substation
- Lovedean 1 132kV substation

Gas Transmission Infrastructure:

National Grid Gas has no gas transmission apparatus located within or in close proximity to the scoping area.

Specific Comments – Electricity Infrastructure:

- National Grid's Overhead Line/s is protected by a Deed of Easement/Wayleave Agreement which provides full right of access to retain, maintain, repair and inspect our asset

- Statutory electrical safety clearances must be maintained at all times. Any proposed buildings must not be closer than 5.3m to the lowest conductor. National Grid recommends that no permanent structures are built directly beneath overhead lines. These distances are set out in EN 43 – 8 Technical Specification for "overhead line clearances Issue 3 (2004)

- If any changes in ground levels are proposed either beneath or in close proximity to our existing overhead lines then this would serve to reduce the safety clearances for such overhead lines. Safe clearances for existing overhead lines must be maintained in all circumstances.

- The relevant guidance in relation to working safely near to existing overhead lines is contained within the Health and Safety Executive's (www.hse.gov.uk) Guidance Note GS 6 "Avoidance of Danger from Overhead Electric Lines" and all relevant site staff should make sure that they are both aware of and understand this guidance.

- Plant, machinery, equipment, buildings or scaffolding should not encroach within 5.3 metres of any of our high voltage conductors when those conductors are under their worse conditions of maximum "sag" and "swing" and overhead line profile (maximum "sag" and "swing") drawings should be obtained using the contact details above.

- If a landscaping scheme is proposed as part of the proposal, we request that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances.

- Drilling or excavation works should not be undertaken if they have the potential to disturb or adversely affect the foundations or "pillars of support" of any existing tower. These foundations always extend beyond the base area of the existing tower and foundation ("pillar of support") drawings can be obtained using the contact details above.

- National Grid Electricity Transmission high voltage underground cables are protected by a Deed of Grant; Easement; Wayleave Agreement or the provisions of the New Roads and Street Works Act. These provisions provide National Grid full right of access to retain, maintain, repair and inspect our assets. Hence we require that no permanent / temporary

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structures are to be built over our cables or within the easement strip. Any such proposals should be discussed and agreed with National Grid prior to any works taking place.

- Ground levels above our cables must not be altered in any way. Any alterations to the depth of our cables will subsequently alter the rating of the circuit and can compromise the reliability, efficiency and safety of our electricity network and requires consultation with National Grid prior to any such changes in both level and construction being implemented.

Further Advice

National Grid requests to be consulted at the earliest stages to ensure that the most appropriate protective provisions are included within the DCO application to safeguard the integrity of our apparatus and to remove the requirement for objection. All further consultations should be sent to the following email address:
box.landandacquisitions@nationalgrid.com

We would request that the potential impact of the proposed scheme on National Grid's existing assets as set out above and including any proposed diversions is considered in any subsequent reports, including in the Environmental Statement, and as part of any subsequent application.

Where any diversion of apparatus may be required to facilitate a scheme, National Grid is unable to give any certainty with the regard to diversions until such time as adequate conceptual design studies have been undertaken by National Grid. Further information relating to this can be obtained by contacting the email address below.

Where the promoter intends to acquire land, extinguish rights, or interfere with any of National Grid apparatus protective provisions will be required in a form acceptable to it to be included within the DCO.

In order to respond at the earliest opportunity National Grid will require the following:

- Draft DCO including the Book of Reference and relevant Land Plans;
- Shape Files or CAD Files for the order limits.

I hope the above information is useful. If you require any further information please do not hesitate to contact me.

The information in this letter is provided not withstanding any discussions taking place in relation to connections with electricity or gas customer services.

Yours faithfully

[redacted]

Anne Holdsworth
DCO Liaison Officer, Land and Acquisitions

nationalgrid | AQUIND NG ASSETS PLAN 1

Legend:

- Substations Commissioned
- Circuits
  - Commissioned
  - Decommissioned Group
  - Planned and Spares
- OHL 400Kv Commissioned
- OHL 275Kv Commissioned
- OHL 132Kv & Below Commissioned
- Towers Commissioned
- Buried Cable Commissioned
- Fibre Cable Commissioned
- Pilot Cable
- Oil Pipe
- Cooling Pipe
- Cooling Station
- RAMM
- Gas Operational Boundary
- Gas Site Boundary
- Block Valve
- Compressor
- LNG Site
- Multijunction
- Minimum Offtake
- Future Minimum Offtake
- Offtake
- Pressure Reduction Installation
- Pig Trap
- Terminal
- Transferred Offtake
- Aerial Marker Post
- CP Test Post
- Transformer Rectifier
- Gas Pipe Feeder
  - Commissioned
  - Decommissioned Group
  - Planned and Spares
- CP Protected Section Range
- Pipe Line Control Point

Notes:

AQUIND NG ASSETS PLAN 1

0 0.38 0.8 Kilometers

Date: 05/11/2018
Time: 12:43:02

Page size: A3 Landscape Scale: 1: 15,000
Print by: **Holdsworth, Anne**

Date: 28 November 2018
Our ref: 263120
Your ref: EN020022 - 000030

Marie Shoesmith
The Planning Inspectorate
Temple Quay House
Temple Quay
Bristol
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Sterling House
Dix's Field
Exeter
EX1 1QA

BY EMAIL ONLY

Dear Marie

Proposal: Construction and operation of AQUIND electricity interconnector between France and UK

Location: Lovedean at the converter station to Eastney, along the marine cable corridor from the MHWS mark within the UK out to the UK/France EEZ boundary line.

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in your consultation dated 31 October 2018. Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Case law[1] and guidance[2] has stressed the need for a full set of environmental information to be available for consideration prior to a decision being taken on whether or not to grant planning permission. This letter provides Natural England's advice on the scope of the Environmental Impact Assessment (EIA) for this development.

The formal response below will be divided into three parts:

1. Marine Response

Constitutes the marine inshore HVDC cable route (including fibre optic data transmission cables) between UK landfall at Eastney to the full extent of the 12nm Natural England remit.

2. Onshore Response

Constitutes the area upwards of Mean Low Water Spring (MLWS) including; HVAC cable route from National Grid substation at Lovedean to the AQUIND converter station (<2km). AQUIND Converter Station and access road. HVDC cable route (including fibre optic data transmission cables) from the AQUIND converter station to the UK landfall at Eastney (approximately20km).

3. Other Relevant Matters

[1] Harrison, J in R. v. Cornwall County Council ex parte Hardy (2001)
[2] *Note on Environmental Impact Assessment Directive for Local Planning* Authorities Office of the Deputy Prime Minister (April 2004) available from http://webarchive.nationalarchives.gov.uk/+/http://www.communities.gov.uk/planningandbuilding/planning/sustainabilityenvironmental/environmentalimpactassessment/noteenvironmental/

1. Marine Response

1.1 Designated Sites

Solent Maritime Special Area of Conservation (SAC)
Chichester and Langstone Harbours Special Protection Area (SPA)
Chichester and Langstone Harbours Wetland of International Importance under the Ramsar Convention (Ramsar site)
Chichester Harbour Site of Special Scientific Interest (SSSI)
Langstone Harbour Site of Special Scientific Interest (SSSI)
Portsmouth Harbour Special Protection Area (SPA)
Portsmouth Harbour Wetland of International Importance under the Ramsar Convention (Ramsar site)
Portsmouth Harbour Site of Special Scientific Interest (SSSI)
Offshore Overfalls Marine Conservation Zone (MCZ)
Utopia Marine Conservation Zone (MCZ)
Offshore Brighton Marine Conservation Zone (MCZ)
Kingmere Marine Conservation Zone (MCZ)
Solent and Dorset Coast potential Special Protection Area (pSPA)
Bembridge proposed Marine Conservation Zone (pMCZ)
East Meridian Proposed Marine Conservation Zone (pMCZ)
Norris to Ryde proposed Marine Conservation Zone (pMCZ)
Selsey Bill and the Hounds proposed Marine Conservation Zone (pMCZ)

1.2 Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

EIA Screening

The information supplied by the applicant confirms that the project will take place within or adjacent to the designated sites listed above. Whilst subsea cables are not a form of development specifically listed in Annex I or II of the EIA Directive, due to the length of the proposed cable and its route crossing internationally and nationally designated nature conservation sites, Natural England advises that an EIA should be undertaken to allow full consideration of the proposal's impacts as identified within the submitted scoping report.

EIA Scoping

We believe that the EIA scoping report submitted to the Planning Inspectorate provides a detailed outline of the various impacts that might occur, both directly and indirectly, from the proposed works. The EIA will now need to examine these pathways in further detail and quantify the magnitude of each impact. The methodology, duration and proposed timings of the works should also be fully detailed within the Environmental Statement (ES) as this will allow Natural England to determine the scale of the impacts and suggest conditions, where appropriate.

1.3 Ecological aspects of the Environmental Statement

Natural England advises that the potential impact of the proposal upon features of nature conservation interest and opportunities for habitat creation/enhancement should be included within this assessment in accordance with appropriate guidance on such matters. Guidelines for Ecological Impact Assessment (EcIA) have been developed by the Institute of Ecology and Environmental Management (IEEM) and are available on their website. EcIA is the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components. EcIA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal.

The ES should thoroughly assess the potential for the proposal to affect the designated sites listed above. Furthermore, the ES should also thoroughly assess the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, published under the requirements of S41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities to conserve and enhance biodiversity. Further information on Habitats and Species of Principal Importance is available via the following link: http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandsp eciesimportance.aspx

Government Circular 06/2005 states that Biodiversity Action Plan (BAP) species and habitats 'are capable of being a material consideration…in the making of planning decisions'. Natural England therefore advises that survey, impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant Local BAP.

The EIA should include details of:

- Any historical data for the sites affected by the proposal (e.g. from previous surveys);
- Additional surveys carried out as part of this proposal;
- The habitats and species present;
- The status of these habitats and species (e.g. whether BAP priority habitat);
- The direct and indirect effects of the development upon those habitats and species;
- Full details of any mitigation or compensation that might be required.

The development should avoid adversely impacting the most important wildlife areas within the area of the project, and should if possible provide opportunities for overall wildlife gain.

The record centre for the relevant Local Authorities should be able to provide the relevant information on the location and type of BAP habitat for the area under consideration.

1.4 Specific comments on Potential Impacts

We have assessed the scoping report under the knowledge that the proposed cable route is currently indicative and will be refined in the later stages of the application. Natural England has commented in respect to designated sites and species out to 12nm under our remit. The Joint Nature Conservation Committee (JNCC) is the statutory adviser for sites beyond 12nm.

This is a complex proposal which will result in a number of different impacts. Natural England supports the consideration of the following impacts which have been **scoped in** for further assessment (as summarised in Appendix C - Table C1 of the scoping report):

Physical environment:

- Physical disturbance to seabed geology and morphology
- Impacts to local sediment regimes and coastal processes
- Impacts to coastal processes

Marine Water and Sediment Quality:

- Impacts on water quality
- Temporary increase in suspended sediment concentrations during construction (and decommissioning)
- Impacts from the resuspension of contaminated sediment during construction (and decommissioning)

Intertidal and Benthic Ecology:

- Seabed disturbance (construction and decommissioning)
- Deposition of sediment (construction and decommissioning)
- Increase in suspended sediments (construction and decommissioning)
- Impacts from the resuspension contaminated sediment (construction and decommissioning)
- Habitat loss (operation)
- Seabed disturbance due to O&M activity

Fish and Shellfish:

- Temporary habitat disturbance (construction and decommissioning)
- Temporary increase in suspended sediments (construction and decommissioning)
- Noise and Vibration (construction and decommissioning)
- Electro-magnetic field effects
- Habitat loss (operation)

Intertidal and Marine Ornithology:

- Disturbance and displacement from installation plant and support vessels
- Indirect effects as a consequence of prey disturbance and/or habitat loss

Marine Mammals:

- Increased anthropogenic noise from geophysical survey and positioning equipment which emits sound e.g. sonars, sub-bottom profilers, USBL positioning systems and transponder beacons

We note the following points:

- Paragraph 11.3.16 on page 143: The list of SPA features is incomplete. For the full list please visit our Designated Sites View website[3].

- Appendix E - Table E1: We welcome the decision to scope in potential impacts arising from UXO removal and safe disposal and note that in-situ detonations will be carried out in accordance with JNCC guidelines. We also note that 'The EPS Risk Assessment for future UXO survey works and any assessment and licence application for further investigative works on UXO removal will be undertaken separately to the DCO application'. Natural England has developed new draft advice re UXOs which can be found in Annex 1. Acoustic Deterrent Devices (ADDS) must be used and certain UXOs may require an EPS licence for injury depending upon the expected impacts.

- Habitat loss from (operation) has been listed as a potential impact for the receptors; intertidal and benthic ecology and fish and shellfish. The loss from the initial construction phase would be regarded as a one off event in comparison to any habitat loss impacts from the operation phase. On this basis, Natural England recommends that habitat loss during the construction phase should be scoped in for the appropriate receptors.

Natural England has noted that the following impacts have been **scoped out** of further assessment:

Marine Physical Environment:

- Impacts on air quality

3 https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9011011&SiteName=chichester&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=#SiteInfo

Marine Water and Sediment Quality:

- Temporary increase in suspended sediment concentrations and impacts associated with resuspension of contaminated sediment during operation and maintenance

Intertidal and Benthic Ecology:

- Impacts from EMF emissions (operation)
- Introduction of invasive non-native species
- Impacts from heat emissions (operation)

Fish and Shellfish: None

Intertidal and Marine Ornithology:

- Exposure to surface hydrocarbons or chemicals due to accidental spills
- Barrier effects
- Collision risk

Marine Mammals:

- Collision with vessels
- Increased vessel noise
- Increased anthropogenic noise from geotechnical investigations, seabed preparation, route clearance, cable lay and burial
- Presence of EMF

Landscape / Seascape Character:

- Effects on landscape and seascape character and features associated with the landfall during construction, operation and decommissioning

We note the following points:

- Impacts from heat emissions upon intertidal and benthic ecology have been scoped out due to cable burial depth and dissipation within the sediment. However, Natural England's Advice on Operations for the Solent Maritime SAC[4] identifies a number of intertidal and subtidal features that are sensitive to temperature increase from power cable operation. On this basis, Natural England recommends that impacts from heat emissions are scoped in for further assessment.

1.5 Marine and Coastal Access Act 2009

The works, as set out in the information supplied by the applicant, are near to the designated Marine Conservation Zones and proposed Marine Conservation Zones as listed above.

Natural England understands that the current proposed cable route will not travel through any of these MCZs and welcomes the planned assessment for potential impacts on their geomorphological features and benthic communities.

1.6 The Conservation of Habitats and Species Regulations 2017

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017, an appropriate assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a

[4] https://designatedsites.naturalengland.org.uk/Marine/FAPMatrix.aspx?SiteCode=UK0030059&SiteName=solent&SiteNameDisplay=Solent+Maritime+SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site.

Natural England considers that this proposal is not directly connected with or necessary to the conservation management of the site and therefore requires a Habitats Regulations Assessment to determine whether there will be a likely significant effect on the European sites. Given the limited information available at this stage on the final design and potential construction/operational impacts, Natural England is of the view that, at present, it cannot be excluded, on the basis of the objective information supplied by the applicant, that the application will have a likely significant effect on the internationally designated sites listed above.

This is because there is a risk that it will affect the following features of the designated site(s):

- Benthic habitats
- Breeding and non-breeding birds

In reference to the proposed structure of the environmental statement shown in Appendix D of the EIA scoping report, we recommend the inclusion of a separate section of the Environmental Statement to address impacts upon European and Ramsar sites entitled 'Information for Habitats Regulations Assessment' as this will help the Planning Inspectorate to determine whether the proposal is likely to have a significant effect on the European sites and to undertake an appropriate assessment if required.

1.7 Wildlife and Countryside Act 1981 (as amended)

We can confirm that the proposed works are located within the vicinity of the above SSSIs. Further information on these SSSIs and their special interest features can be found at:
https://designatedsites.naturalengland.org.uk/SiteSearch.aspx

The Environmental Statement should include a full assessment of the direct and indirect effects of the proposal on the features of special interest within these sites and should identify such mitigation measures as may be required in order to avoid, minimise or reduce any adverse significant effects.

1.8 Biodiversity Action Plan (BAP) habitats and species

In addition to impacts on the designated sites listed above, the EIA will need to consider the potential impacts upon habitats or species listed within the UK and Hampshire Biodiversity Action Plans and suggest suitable mitigation should a negative impact arise. For example, construction work could increase suspended sediment concentrations and this could result in smothering effects on beds of native oysters (*Ostrea edulis*) within the Solent.

2. Onshore Response

2.1 Ecology

We note the information included in the scoping report with regard to the assessment of designated and non-designated sites, protected species, priority habitats and species, and wider biodiversity. Natural England does not hold locally specific information relating to protected species, local or national biodiversity priority habitats and species, local sites (biodiversity and geodiversity) and local landscape character. These remain material considerations in the determination of this forthcoming planning application. It is noted that further information has been obtained from the Hampshire Biodiversity Information Centre. In some instances, further surveys may be necessary through an ecological appraisal to be agreed by a Hampshire County Council (HCC) ecologist.

2.2 Designated sites

We note that the study area boundary includes internationally designated sites within 10km and nationally designated sites within 2km. Natural England agrees with the stages of Ecological Impact Assessment and recommends that a source-pathway-receptor approach is applied to inform this process. Consideration should be given to both direct and indirect impacts upon designated features and supporting habitats.

We note that, in addition to the SPA and Ramsar sites, a number of fields exist across the proposed cable route suitable to support roosting, loafing and foraging SPA birds during high-tide. These sites, and additional sites in the vicinity of the landfall area, are identified within the Solent Waders and Brent Goose Strategy (SWBGS). This strategy aims to protect the network of non-designated terrestrial wader and brent goose sites that support the Solent Special Protection Areas (SPA) from land take and indirect effects associated with new development. We note that these sites will be examined in the EIA.

We note that works are currently planned for the summer months to avoid impacts to these sites. This approach is supported. During detailed design, if there is potential for temporary and permanent land take and disturbance during construction, we advise that detailed consideration is given to mitigation measures. For your information, Natural England and the SWBGS Steering Group has prepared Guidance on Mitigation and Offsetting Requirements should developments have potential direct and indirect effects on this supporting habitat. This guidance is available on the SWBGS website[5]. Natural England would be happy to advise further on mitigation and offsetting requirements through our Discretionary Advice Service as the detailed design progresses.

We support the approach that, for the purposes of the Habitats Regulations Assessment, these areas of functionally-linked land, together with other habitats that provide a supporting role, are assessed in a manner consistent with designated supporting habitat.

2.3 Protected species

The onshore elements of this proposal in particular may also have an impact upon species which are protected by the Wildlife and Countryside Act 1981 (as amended) or the Conservation of Habitats and Species Regulations 2017. If any protected species are present within the application area, the Environmental Statement (ES) should include details of:

- The species concerned;
- The population level at the site affected by the proposal;
- The direct and indirect effects of the development upon that species;
- Full details of any mitigation or compensation that might be required;
- Whether the impact is acceptable and/or licensable.

The scoping report sets out the protected species ecological surveys being undertaken as part of the EIA. The area in the vicinity of the Converter Station is sensitive with respect to bats (including Bechstein's bats) and hazel dormouse. There is also potential for impacts to the terrestrial habitat of great crested newts. We note that detailed consideration of these issues will be included in the EIA with mitigation strategies, as appropriate.

2.4 Area of landfall - Vegetated Shingle at Eastney Beach – Portsmouth City Council

Eastney Beach forms an extensive area of coastal vegetated shingle, which is designated at county level for its semi-natural coastal habitats and supporting species. Detailed consideration of this priority habitat is required. It is noted that design options for this site are being considered to avoid

[5] https://solentwbgs.wordpress.com/page-2/

impacts on this sensitive habitat such as directional drilling. We support the approach for directional drilling at this location. However, it is noted that there is the potential for impacts at the landfall location and we recommend that detailed consideration is given to mitigation measures as well as enhancement measures in the EIA. Natural England would welcome further consultation as the detailed design progresses.

For your information, Portsmouth City Council has adopted the Eastney Beach Habitat Restoration and Management Plan Supplementary Planning Document (2014). This document sets out restoration and management prescriptions for the vegetated shingle. We recommend that detailed consideration is given to supporting these measures to secure biodiversity enhancements and ensure net biodiversity gain.

2.5 Cable Route – King's Pond Meadows and Denmead Meadows, East Hampshire

One of the options for the proposed route of the cable is through King's Pond Meadows and Denmead Meadows, which are of nature conservation value due to the numbers and rich diversity of plant species present. It is understood that the applicant is exploring design options that would seek to avoid direct impacts to this area, either through directional drill methods or alternative routes. Natural England advises that this route is avoided where possible. If this is not possible, Natural England strongly recommends that direction drill methods are adopted to avoid impacts to these meadows.

If there is potential for impacts on these nature conservation areas, Natural England strongly advises that detailed consideration is given to potential mitigation measures and measures to ensure significant enhancements. Natural England would welcome further consultation as the detailed design progresses to ensure impacts are avoided and significant enhancements are secured.

2.6 Cable route - Milton Common Local Nature Reserve

It is noted that one of the options for the cable route is through Milton Common Local Nature Reserve. Detailed consideration of the ecological sensitivities of this area is required. Any potential impacts should be identified and mitigation measures proposed. Please note that Milton Common is the only site in Hampshire where there are records of Large Thorn moth. As such, detailed consideration of this issue is required in the EIA to ensure there are no impacts, for example from the cutting of woodland and scrub.

We strongly recommend that the proposed enhancements not only ensure there are no residual effects, but secures significant net biodiversity gain for this nature conversation sites.

2.7 Biodiversity Mitigation, Compensation and Enhancement

Natural England supports the proposal that in order to secure appropriate biodiversity mitigation and enhancements, the Environmental Statement will be supported by a Biodiversity Mitigation and Enhancement Plan (BMEP). The BMEP should include measures for mitigating impacts on protected species and habitats and include biodiversity compensation measures for any residual biodiversity losses that cannot be fully mitigated on site. This might include the provision of offsite replacement habitats, or an agreed financial contribution for biodiversity enhancements elsewhere calculated using a Biodiversity Compensation Framework, Environment Bank, or similar mechanism.

In the recent 25 Year Environment Plan, the Government has committed to making sure the existing requirements for net gain for biodiversity in national planning policy are strengthened and the current trend of biodiversity loss is halted. This approach is likely to be supported by the forthcoming planning policy guidance. Currently most developments still result in biodiversity loss. Natural

England therefore advises that each development reverse this trend and deliver net gains in biodiversity.

Natural England strongly recommends that this proposal achieves a net gain for biodiversity and we advise that a biodiversity metric may be helpful. Where residual biodiversity losses are considered unavoidable, Natural England recommends that further advice on these aspects is sought through our Discretionary Advice Service (DAS). Further information on the DAS service and how to apply can be found here:
https://www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-proposals

2.8 Landscape and Visual Effects

The converter station site is adjacent to and within the setting of the South Downs National Park, which is also designated as an International Dark Skies Reserve. Natural England's particular interest is in people visiting / enjoying / experiencing the countryside and especially natural beauty / special qualities of the designated landscapes. This might include people using open access land, Natural Trails, the England Coast Path, promoted routes and other rights of way, as well as publicly accessible countryside and wildlife sites.

Consideration should be given to the direct and indirect effects upon this designated landscape and in particular the effect upon its purpose for designation within the environmental impact assessment, as well as the content of the relevant management plan for South Downs National Park. Detailed consideration of sequential effects should also be included and Natural England would also recommend the inclusion of long distance views from within the National Park where people are affected, such as Old Winchester Hill.

We advise that full consideration is given to the location and design of the proposed convertor station to minimise potential landscape and visual effects on designated landscapes. The EIA should outline the alternative options considered.

We note that the local landscape character areas will be mapped at a scale appropriate to the development site as well as any relevant management plans or strategies pertaining to the area. The EIA should include assessments of visual effects on the surrounding area and landscape together with any physical effects of the development, such as changes in topography. The European Landscape Convention places a duty on Local Planning Authorities to consider the impacts of landscape when exercising their functions.

In order to foster high quality development that respects, maintains, or enhances, local landscape character and distinctiveness, Natural England encourages all new development to consider the character and distinctiveness of the area, with the siting and design of the proposed development reflecting local design characteristics and, wherever possible, using local materials. The Environmental Impact Assessment process should detail the measures to be taken to ensure the building design will be of a high standard, as well as detail of layout alternatives together with justification of the selected option in terms of landscape impact and benefit.

2.9 Ancient Woodland and Veteran Trees

The ES should thoroughly assess the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, published under the requirements of S41 of the Natural Environment and Rural Communities (NERC) Act 2006. The S41 list includes six priority woodland habitats, which will often be ancient woodland, with all ancient semi-natural woodland in the South East falling into one or more of the six types.

Information about ancient woodland can be found in Natural England's standing advice http://www.naturalengland.org.uk/Images/standing-advice-ancient-woodland_tcm6-32633.pdf.

Ancient woodland is an irreplaceable resource of great importance for its wildlife, its history and the contribution it makes to our diverse landscapes.

Natural England strongly advises that the location and design of the cable route, convertor station and access roads avoid direct impacts to ancient woodland and veteran trees and ensures that there is no increase in fragmentation of this habitat.

Natural England strongly encourage the application to include enhancement measures, where practicable, to enhance the ecological network and connectivity between these valuable habitats, for example through new woodland planting.

2.10 Noise and vibration

Natural England advises that potential noise and vibration impacts on ecologically sensitive receptors are included within the EIA. Potential impacts on designated sites and supporting habitat should be considered.

2.11 Agricultural Land

Natural England notes the agricultural land assessment that will be undertaken within the EIA.

2.12 Air Quality

Natural England notes that air quality assessment that will be undertaken as part of the EIA.

3. Other Relevant Matters

3.1 Cumulative and in-combination effects

A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

The ES should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment, (subject to available information):

a. existing completed projects;
b. approved but uncompleted projects;
c. ongoing activities;
d. plans or projects for which an application has been made and which are under consideration by the consenting authorities; and
e. plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.

Natural England would advise that the cumulative impacts section should also consider impacts on ecologically sensitive receptors such as designated sites, non-designated sites, priority habitats and species, protected species etc. In relation to point e, Natural England advises that the Environmental Statement should also consider known forthcoming planning applications in close proximity to the development application, where there is potential impacts on key ecological interests.

For example, a scoping report has been submitted for the redevelopment of the Fraser Range site at Eastney, Portsmouth and the Coastal Defence schemes that are being progressed for Portsea Island. Cumulative impacts on sensitive receptors such as designated sites and priority habitats should be considered.

The landscape and visual assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. In this context Natural England advises that the cumulative impact assessment should include other proposals currently at scoping stage. Due to the overlapping timescale of their progress through the planning system, cumulative impact of the proposed development with those proposals currently at scoping stage would be likely to be a material consideration at the time of determination of the planning application.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us. For any queries relating to the specific advice in this letter only please contact Richard Morgan on 0208 026 7715 for the marine response or Rachel Jones on 07717 808691 for the onshore response. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

Yours sincerely

[redacted]

Dr Richard Morgan
Marine Lead Adviser
Dorset, Hampshire and Isle of Wight Team

[redacted]

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Dorset, Hampshire and Isle of Wight Team

Annex 1

NOAA Thresholds, UXOs and Marine Mammals – NE draft advice on requirement for EPS licence

Natural England's previous advice around acoustic disturbance has been based on published research by Southall et al., 2007. However, new NOAA (National Ocean and Atmospheric Administration) thresholds were published in 2016 (National Marine Fisheries Service, 2016) superseding the Southall thresholds (Southall et al, 2007). Therefore they represent the most comprehensive and up to date scientific knowledge available to the UK SNCBs in helping to assess the impact of anthropogenic underwater sound on marine mammals. Currently, Natural England advise that NOAA thresholds should now be used in all assessments of underwater noise.

One area where this has made a difference in underwater noise impact assessments in the UK is with regards to unexploded ordinance (UXO) disposal. Both the Southall and NOAA thresholds use a dual criteria to assess underwater sound, using an unweighted peak pressure and a weighted threshold to account for the hearing frequencies of different species. Whilst it is usually accepted that the weighted threshold is best for assessing impacts on different species (which are sensitive to different frequencies), given the nature of an underwater explosion and the shock wave it generates, an explosion can cause hearing damage to an animal no matter their peak hearing frequency. Therefore the more precautionary of the two values should be used (generally the unweighted peak pressure). The change to the NOAA thresholds has meant that the Permanent Threshold Shift (hearing injury) zone from UXOs has increased in size from up to 1 km (based on the Southall thresholds), to up to 15 km for the largest, albeit rare, UXOs based on the NOAA thresholds.

The result of this much greater zone of potential injury is that mitigation needs to be put in place to displace animals for significant distances from the location of the UXO. Use of acoustic deterrent devices (ADDs) is likely to be an important part of this mitigation. The literature concerning ADDs suggests that while 100% exclusion for harbour porpoises can be achieved up to approximately 1 km from the ADD, beyond this distance, while significant reductions in harbour porpoise abundance is recorded up to 12 km, 100% exclusion cannot be guaranteed (e.g. Brandt et al., 2012; Brandt et al., 2013; Dähne et al., 2017). Brandt et al., 2012 conclude that "*these results also highlight that its application will not guarantee the safety of all animals, as not all individuals will react with avoidance reactions."* The evidence for other species is limited, but a McGarry et al. report (2017) suggests that minke whales react strongly to ADDs, with all tracked whales (n = 15) moving away from an ADD when it was activated 1 km away from the animals. Previous experiments activating the ADD 500 m away from focal animals resulted in such strong reactions, the animals could no longer be followed post deployment of the ADD. There is no literature concerning effects of ADDs on UK dolphin species. Therefore in the absence of data across all species, and the apparent stronger reaction by minke whales, NE suggest that harbour porpoise are used as a proxy for all EPS species until more information becomes available.

All cetaceans in the UK are European Protected Species (EPS), this means that individual animals are protected throughout their range from death, injury and disturbance. Given the above conclusion, it is Natural England's view that based on harbour porpoise as a proxy, 100% cetacean exclusion from the PTS injury zone cannot be guaranteed by the use of a single ADD, the risk of auditory injury cannot be considered as negligible, and an EPS licence for injury *must* be sought from the MMO.

It should be noted that discussions are ongoing between industry, regulators and SNCBs on the most appropriate suite of mitigation measures for UXO clearance (including the possible use of bubble curtains). Mitigation will depend on the size of UXOs likely to be encountered and the practicality of deployment of the mitigation measure, amongst other factors. SNCBs will provide advice on this on a case by case basis whilst seeking to ensure consistency in approach, meanwhile, the above advice with respect to the need for EPS licence will remain as standard.

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Ms Marie Shoesmith
Senior EIA and Land Rights Advisor
The Planning Inspectorate
Temple Quay House
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Bristol BS1 6PN

Your Ref: EN020022-000030
Our Ref: 48947

28 November 2018

Dear Ms Shoesmith,

Nationally Significant Infrastructure Project
Re: Scoping Consultation
Application by AQUIND Limited.

Thank you for your consultation regarding the above development. Public Health England (PHE) welcomes the opportunity to comment on your proposals and Environmental Impact Assessment Scoping Report at this stage of the project.

PHE has considered the submitted documentation and can confirm that we are satisfied with the approach taken in preparing the Environmental Impact Assessment (EIA) and the conclusions drawn.

We understand that the promoter will wish to avoid unnecessary duplication and that many issues including air quality, emissions to water, waste, contaminated land etc. will be covered elsewhere in the Environmental Statement (ES). PHE however believes the summation of relevant issues into a specific section of the report provides a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk assessments, proposed mitigation measures, conclusions and residual impacts, relating to human health. Compliance with the requirements of National Policy Statements and relevant guidance and standards should also be highlighted.

Human Health and Well-being

Section 28 of the EIA scoping report (Human Health), scopes out some of the wider determinants of health. PHE is of the opinion that there is insufficient justification for the following scoped out determinates:

1) **Physical activity/exercise** – the scheme is likely to impact on public rights of way and access (PRoW) cycle routes or other means of promoting active travel and physical activity.

2) **Housing**: the scoping report identifies the impact of large numbers of construction workers on health care services and education, but an assessment is required for the impact on local rented accommodation demand and affordability.

3) **Access to healthcare**: the scoping report identifies the impact of large numbers of construction workers on health care services but is not included within table 28.7 or 28.8.

4) **Mental health** – the scoping report makes no reference to potential effects on mental health. Mental well-being is fundamental to achieving a healthy, resilient and thriving population. It underpins healthy lifestyles, physical health, educational attainment, employment and productivity, relationships, community safety and cohesion and quality of life. A scheme of this scale and nature has impacts on the over-arching protective factors, which are:
    a. Enhancing control
    b. Increasing resilience and community assets
    c. Facilitating participation and promoting inclusion.

Please note that any baseline population health data should have reference to the Public Health Outcomes Framework.

For reference, the attached appendix outlines generic areas that should be addressed by all promoters when preparing ES for inclusion with an NSIP submission. We are happy to assist and discuss proposals further in the light of this advice.

Yours sincerely

Environmental Hazards & Emergencies Dept
On behalf of Public Health England
Nsipconsultations@phe.gov.uk
Please mark any correspondence for the attention of National Infrastructure Planning Administration.

Appendix: PHE recommendations regarding the scoping document

General approach

The EIA should give consideration to best practice guidance such as the Government's Good Practice Guide for EIA[1]. It is important that the EIA identifies and assesses the potential public health impacts of the activities at, and emissions from, the installation. Assessment should consider the development, operational, and decommissioning phases.

It is not PHE's role to undertake these assessments on behalf of promoters as this would conflict with PHE's role as an impartial and independent body.

Consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice. Ideally, EIA should start at the stage of site and process selection, so that the environmental merits of practicable alternatives can be properly considered. Where this is undertaken, the main alternatives considered should be outlined in the ES[2].

The following text covers a range of issues that PHE would expect to be addressed by the promoter. However this list is not exhaustive and the onus is on the promoter to ensure that the relevant public health issues are identified and addressed. PHE's advice and recommendations carry no statutory weight and constitute non-binding guidance.

Receptors

The ES should clearly identify the development's location and the location and distance from the development of off-site human receptors that may be affected by emissions from, or activities at, the development. Off-site human receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land. Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.

Impacts arising from construction and decommissioning

Any assessment of impacts arising from emissions due to construction and decommissioning should consider potential impacts on all receptors and describe monitoring and mitigation during these phases. Construction and decommissioning will be associated with vehicle movements and cumulative impacts should be accounted for.

---

[1] Environmental Impact Assessment: A guide to good practice and procedures - A consultation paper; 2006; Department for Communities and Local Government. Available from: http://webarchive.nationalarchives.gov.uk/20100410180038/http:/communities.gov.uk/planningandbuilding/planning/sustainabilityenvironmental/environmentalimpactassessment/

[2] DCLG guidance, 1999 http://www.communities.gov.uk/documents/planningandbuilding/pdf/155958.pdf

We would expect the promoter to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place to mitigate any potential impact on health from emissions (point source, fugitive and traffic-related). An effective Construction Environmental Management Plan (CEMP) (and Decommissioning Environmental Management Plan (DEMP)) will help provide reassurance that activities are well managed. The promoter should ensure that there are robust mechanisms in place to respond to any complaints of traffic-related pollution, during construction, operation, and decommissioning of the facility.

Emissions to air and water

Significant impacts are unlikely to arise from installations which employ Best Available Techniques (BAT) and which meet regulatory requirements concerning emission limits and design parameters. However, PHE has a number of comments regarding emissions in order that the EIA provides a comprehensive assessment of potential impacts.

When considering a baseline (of existing environmental quality) and in the assessment and future monitoring of impacts these:

- should include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary
- should encompass all pollutants which may be emitted by the installation in combination with all pollutants arising from associated development and transport, ideally these should be considered in a single holistic assessment
- should consider the construction, operational, and decommissioning phases
- should consider the typical operational emissions and emissions from start-up, shut-down, abnormal operation and accidents when assessing potential impacts and include an assessment of worst-case impacts
- should fully account for fugitive emissions
- should include appropriate estimates of background levels
- should identify cumulative and incremental impacts (i.e. assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include consideration of non-road impacts (i.e. rail, sea, and air)
- should include consideration of local authority, Environment Agency, Defra national network, and any other local site-specific sources of monitoring data
- should compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as UK Air Quality Standards and Objectives and Environmental Assessment Levels)
    - If no standard or guideline value exists, the predicted exposure to humans should be estimated and compared to an appropriate health-based value (a Tolerable Daily Intake or equivalent). Further guidance is provided in Annex 1
    - This should consider all applicable routes of exposure e.g. include consideration of aspects such as the deposition of chemicals emitted to air and their uptake via ingestion
- should identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities) in the area(s) which

may be affected by emissions, this should include consideration of any new receptors arising from future development

Whilst screening of impacts using qualitative methodologies is common practice (e.g. for impacts arising from fugitive emissions such as dust), where it is possible to undertake a quantitative assessment of impacts then this should be undertaken. PHE's view is that the EIA should appraise and describe the measures that will be used to control both point source and fugitive emissions and demonstrate that standards, guideline values or health-based values will not be exceeded due to emissions from the installation, as described above. This should include consideration of any emitted pollutants for which there are no set emission limits. When assessing the potential impact of a proposed installation on environmental quality, predicted environmental concentrations should be compared to the permitted concentrations in the affected media; this should include both standards for short and long-term exposure.

Additional points specific to emissions to air
When considering a baseline (of existing air quality) and in the assessment and future monitoring of impacts these:

- should include consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMAs)
- should include modelling using appropriate meteorological data (i.e. come from the nearest suitable meteorological station and include a range of years and worst case conditions)
- should include modelling taking into account local topography

Additional points specific to emissions to water
When considering a baseline (of existing water quality) and in the assessment and future monitoring of impacts these:

- should include assessment of potential impacts on human health and not focus solely on ecological impacts
- should identify and consider all routes by which emissions may lead to population exposure (e.g. surface watercourses; recreational waters; sewers; geological routes etc.)
- should assess the potential off-site effects of emissions to groundwater (e.g. on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure
- should include consideration of potential impacts on recreational users (e.g. from fishing, canoeing etc.) alongside assessment of potential exposure via drinking water

Land quality
We would expect the promoter to provide details of any hazardous contamination present on site (including ground gas) as part of the site condition report. Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, once operational, to give rise to issues. Public health impacts associated with ground contamination and/or the

migration of material off-site should be assessed[3] and the potential impact on nearby receptors and control and mitigation measures should be outlined.
Relevant areas outlined in the Government's Good Practice Guide for EIA include:

- effects associated with ground contamination that may already exist
- effects associated with the potential for polluting substances that are used (during construction / operation) to cause new ground contamination issues on a site, for example introducing / changing the source of contamination
- impacts associated with re-use of soils and waste soils, for example, re-use of site-sourced materials on-site or offsite, disposal of site-sourced materials offsite, importation of materials to the site, etc.

Waste

The EIA should demonstrate compliance with the waste hierarchy (e.g. with respect to re-use, recycling or recovery and disposal).
For wastes arising from the installation the EIA should consider:

- the implications and wider environmental and public health impacts of different waste disposal options
- disposal route(s) and transport method(s) and how potential impacts on public health will be mitigated

Other aspects

Within the EIA PHE would expect to see information about how the promoter would respond to accidents with potential off-site emissions e.g. flooding or fires, spills, leaks or releases off-site. Assessment of accidents should: identify all potential hazards in relation to construction, operation and decommissioning; include an assessment of the risks posed; and identify risk management measures and contingency actions that will be employed in the event of an accident in order to mitigate off-site effects.

The EIA should include consideration of the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations 2009: both in terms of their applicability to the installation itself, and the installation's potential to impact on, or be impacted by, any nearby installations themselves subject to the these Regulations.

There is evidence that, in some cases, perception of risk may have a greater impact on health than the hazard itself. A 2009 report[4], jointly published by Liverpool John Moores University and the HPA, examined health risk perception and environmental problems using a number of case studies. As a point to consider, the report suggested: "Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard. This is true even when the physical health risks may be

[3] Following the approach outlined in the section above dealing with emissions to air and water i.e. comparing predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as Soil Guideline Values)

[4] Available from: http://www.cph.org.uk/wp-content/uploads/2012/08/health-risk-perception-and-environmental-problems--summary-report.pdf

negligible.” PHE supports the inclusion of this information within EIAs as good practice.

Electromagnetic fields (EMF)

This statement is intended to support planning proposals involving electrical installations such as substations and connecting underground cables or overhead lines. PHE advice on the health effects of power frequency electric and magnetic fields is available in the following link:

https://www.gov.uk/government/collections/electromagnetic-fields#low-frequency-electric-and-magnetic-fields

There is a potential health impact associated with the electric and magnetic fields around substations, and power lines and cables. The field strength tends to reduce with distance from such equipment.

The following information provides a framework for considering the health impact associated with the electric and magnetic fields produced by the proposed development, including the direct and indirect effects of the electric and magnetic fields as indicated above.

Policy Measures for the Electricity Industry

The Department of Energy and Climate Change has published a voluntary code of practice which sets out key principles for complying with the ICNIRP guidelines:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37447/1256-code-practice-emf-public-exp-guidelines.pdf

Companion codes of practice dealing with optimum phasing of high voltage power lines and aspects of the guidelines that relate to indirect effects are also available:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48309/1255-code-practice-optimum-phasing-power-lines.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224766/powerlines_vcop_microshocks.pdf

Exposure Guidelines

PHE recommends the adoption in the UK of the EMF exposure guidelines published by the International Commission on Non-ionizing Radiation Protection (ICNIRP). Formal advice to this effect was published by one of PHE’s predecessor organisations (NRPB) in 2004 based on an accompanying comprehensive review of the scientific evidence:-

http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Absd1502/

Updates to the ICNIRP guidelines for static fields have been issued in 2009 and for low frequency fields in 2010. However, Government policy is that the ICNIRP guidelines are implemented in line with the terms of the 1999 EU Council Recommendation on limiting exposure of the general public (1999/519/EC):

http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publichealth/Healthprotection/DH_4089500

Static magnetic fields

For static magnetic fields, the ICNIRP guidelines published in 2009 recommend that acute exposure of the general public should not exceed 400 mT (millitesla), for any part of the body, although the previously recommended value of 40 mT is the value used in the Council Recommendation. However, because of potential indirect adverse effects, ICNIRP recognises that practical policies need to be implemented to prevent inadvertent harmful exposure of people with implanted electronic medical devices and implants containing ferromagnetic materials, and injuries due to flying ferromagnetic objects, and these considerations can lead to much lower restrictions, such as 0.5 mT.

Power frequency electric and magnetic fields

At 50 Hz, the known direct effects include those of induced currents in the body on the central nervous system (CNS) and indirect effects include the risk of painful spark discharge on contact with metal objects exposed to the field. The ICNIRP guidelines published in 1998 give reference levels for public exposure to 50 Hz electric and magnetic fields, and these are respectively 5 kV m^{-1} (kilovolts per metre) and 100 μT (microtesla). The reference level for magnetic fields changes to 200 μT in the revised (ICNIRP 2010) guidelines because of new basic restrictions based on induced electric fields inside the body, rather than induced current density. If people are not exposed to field strengths above these levels, direct effects on the CNS should be avoided and indirect effects such as the risk of painful spark discharge will be small. The reference levels are not in themselves limits but provide guidance for assessing compliance with the basic restrictions and reducing the risk of indirect effects.

Long term effects

There is concern about the possible effects of long-term exposure to electromagnetic fields, including possible carcinogenic effects at levels much lower than those given in the ICNIRP guidelines. In the NRPB advice issued in 2004, it was concluded that the studies that suggest health effects, including those concerning childhood leukaemia, could not be used to derive quantitative guidance on restricting exposure. However, the results of these studies represented uncertainty in the underlying evidence base, and taken together with people's concerns, provided a basis for providing an additional recommendation for Government to consider the need for

further precautionary measures, particularly with respect to the exposure of children to power frequency magnetic fields.

The Stakeholder Advisory Group on ELF EMFs (SAGE)

SAGE was set up to explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs), and to make practical recommendations to Government:

http://www.emfs.info/policy/sage/

SAGE issued its First Interim Assessment in 2007, making several recommendations concerning high voltage power lines. Government supported the implantation of low cost options such as optimal phasing to reduce exposure; however it did not support not support the option of creating corridors around power lines on health grounds, which was considered to be a disproportionate measure given the evidence base on the potential long term health risks arising from exposure. The Government response to SAGE's First Interim Assessment is available here:

http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107124

The Government also supported calls for providing more information on power frequency electric and magnetic fields, which is available on the PHE web pages (see first link above).

Ionising radiation

Particular considerations apply when an application involves the possibility of exposure to ionising radiation. In such cases it is important that the basic principles of radiation protection recommended by the International Commission on Radiological Protection[5] (ICRP) are followed. PHE provides advice on the application of these recommendations in the UK. The ICRP recommendations are implemented in the Euratom Basic Safety Standards[6] (BSS) and these form the basis for UK legislation, including the Ionising Radiation Regulations 1999, the Radioactive Substances Act 1993, and the Environmental Permitting Regulations 2016.

PHE expects promoters to carry out the necessary radiological impact assessments to demonstrate compliance with UK legislation and the principles of radiation protection. This should be set out clearly in a separate section or report and should not require any further analysis by PHE. In particular, the important principles of

[5] These recommendations are given in publications of the ICRP notably publications 90 and 103 see the website at http://www.icrp.org/

[6] Council Directive 96/29/EURATOM laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation.

justification, optimisation and radiation dose limitation should be addressed. In addition compliance with the Euratom BSS and UK legislation should be clear.

When considering the radiological impact of routine discharges of radionuclides to the environment PHE would expect to see a full radiation dose assessment considering both individual and collective (population) doses for the public and, where necessary, workers. For individual doses, consideration should be given to those members of the public who are likely to receive the highest exposures (referred to as the representative person, which is equivalent to the previous term, critical group). Different age groups should be considered as appropriate and should normally include adults, 1 year old and 10 year old children. In particular situations doses to the fetus should also be calculated[7]. The estimated doses to the representative person should be compared to the appropriate radiation dose criteria (dose constraints and dose limits), taking account of other releases of radionuclides from nearby locations as appropriate. Collective doses should also be considered for the UK, European and world populations where appropriate. The methods for assessing individual and collective radiation doses should follow the guidance given in 'Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012 [8].It is important that the methods used in any radiological dose assessment are clear and that key parameter values and assumptions are given (for example, the location of the representative persons, habit data and models used in the assessment).

Any radiological impact assessment should also consider the possibility of short-term planned releases and the potential for accidental releases of radionuclides to the environment. This can be done by referring to compliance with the Ionising Radiation Regulations and other relevant legislation and guidance.

The radiological impact of any solid waste storage and disposal should also be addressed in the assessment to ensure that this complies with UK practice and legislation; information should be provided on the category of waste involved (e.g. very low level waste, VLLW). It is also important that the radiological impact associated with the decommissioning of the site is addressed. Of relevance here is PHE advice on radiological criteria and assessments for land-based solid waste disposal facilities[9]. PHE advises that assessments of radiological impact during the operational phase should be performed in the same way as for any site authorised to discharge radioactive waste. PHE also advises that assessments of radiological impact during the post operational phase of the facility should consider long timescales (possibly in excess of 10,000 years) that are appropriate to the long-lived nature of the radionuclides in the waste, some of which may have half-lives of millions of years. The radiological assessment should consider exposure of

[7] HPA (2008) Guidance on the application of dose coefficients for the embryo, fetus and breastfed infant in dose assessments for members of the public. Doc HPA, RCE-5, 1-78, available at https://www.gov.uk/government/publications/embryo-fetus-and-breastfed-infant-application-of-dose-coefficients

[8] The Environment Agency (EA), Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency, Health Protection Agency and the Food Standards Agency (FSA). Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/296390/geho1202bklh-e-e.pdf

[9] HPA RCE-8, Radiological Protection Objectives for the Land-based Disposal of Solid Radioactive Wastes, February 2009

members of hypothetical representative groups for a number of scenarios including the expected migration of radionuclides from the facility, and inadvertent intrusion into the facility once institutional control has ceased. For scenarios where the probability of occurrence can be estimated, both doses and health risks should be presented, where the health risk is the product of the probability that the scenario occurs, the dose if the scenario occurs and the health risk corresponding to unit dose. For inadvertent intrusion, the dose if the intrusion occurs should be presented. It is recommended that the post-closure phase be considered as a series of timescales, with the approach changing from more quantitative to more qualitative as times further in the future are considered. The level of detail and sophistication in the modelling should also reflect the level of hazard presented by the waste. The uncertainty due to the long timescales means that the concept of collective dose has very limited use, although estimates of collective dose from the 'expected' migration scenario can be used to compare the relatively early impacts from some disposal options if required.

Human health risk assessment (chemical pollutants)

The points below are cross-cutting and should be considered when undertaking a human health risk assessment:

- The promoter should consider including Chemical Abstract Service (CAS) numbers alongside chemical names, where referenced in the ES
- Where available, the most recent United Kingdom standards for the appropriate media (e.g. air, water, and/or soil) and health-based guideline values should be used when quantifying the risk to human health from chemical pollutants. Where UK standards or guideline values are not available, those recommended by the European Union or World Health Organisation can be used
- When assessing the human health risk of a chemical emitted from a facility or operation, the background exposure to the chemical from other sources should be taken into account
- When quantitatively assessing the health risk of genotoxic and carcinogenic chemical pollutants PHE does not favour the use of mathematical models to extrapolate from high dose levels used in animal carcinogenicity studies to well below the observed region of a dose-response relationship. When only animal data are available, we recommend that the 'Margin of Exposure' (MOE) approach[10] is used

[10] Benford D et al. 2010. Application of the margin of exposure approach to substances in food that are genotoxic and carcinogenic. Food Chem Toxicol 48 Suppl 1: S2-24

ACQUIND Interconnector – proposed development by ACQUIND Limited

Royal Mail Group Limited comments on information to be provided in applicant's Environmental Statement

Introduction

Reference the letter from PINS to Royal Mail dated 25 September 2018 requesting Royal Mail's comments on the information that should be provided in ACQUIND Limited's Environmental Statement.

Royal Mail's consultants BNP Paribas Real Estate have reviewed the applicant's Scoping Report dated 31 October 2018, scrutinising the proposed development and its potential impacts.

Royal Mail– relevant information

Under section 35 of the Postal Services Act 2011 (the "Act"), Royal Mail has been designated by Ofcom (the independent communications regulator) as a provider of the Universal Postal Service.

Royal Mail is the only such provider in the United Kingdom. Its services are regulated by the Communications Industry Regulator, Ofcom.

In respect of its postal services functions, section 29 of the Act provides that Ofcom's primary regulatory duty is to secure the provision of the Universal Postal Service. Ofcom discharges this duty by imposing regulatory conditions on Royal Mail, requiring it to provide the Universal Postal Service.

By sections 30 and 31 of the Act (read with sections 32 and 33) there is a set of minimum standards for Universal Service Providers, which Ofcom must secure. The conditions imposed by Ofcom reflect those standards. There is, in effect, a statutory obligation on Royal Mail to provide at least one collection from letterboxes and post offices six days a week and one delivery of letters to all 29 million homes and businesses in the UK six days a week (five days a week for parcels). Royal Mail must also provide a range of "end to end" services meeting users' needs, e.g. First Class, Second Class, Special Delivery by 1 pm, International and Redirections services.

Royal Mail is under some of the highest specification performance obligations for quality of service in Europe. Its performance of the Universal Service Provider obligations is in the public interest and should not be affected detrimentally by any statutorily authorised project.

Royal Mail's postal sorting and delivery operations rely heavily on road communications. Royal Mail's ability to provide efficient mail collection, sorting and delivery to the public is sensitive to changes in the capacity of the highway network.

Royal Mail is a major road user nationally. Disruption to the highway network and traffic delays can have direct consequences on Royal Mail's operations, its ability to meet the Universal Service Obligation and comply with the regulatory regime for postal services thereby presenting a significant risk to Royal Mail's business.

Potential impacts of the scheme on Royal Mail

Royal Mail has two operational facilities close to the proposed cable route as defined by the red line boundary plan contained within the Scoping Report:

PORTSMOUTH Delivery Office	VOYAGER PARK SOUTH PORTSMOUTH PO3 5GG	0.7 Miles
WATERLOOVILLE Delivery Office	WATERBERRY DRIVE WATERLOOVILLE PO7 7TP	0.8 Miles

In exercising its statutory duties, Royal Mail vehicles use all of the roads that the proposed cable route will cross or be constructed adjacent to on a daily basis. Any additional congestion on these roads during the construction phase has the potential to significantly disrupt Royal Mail operations.

Royal Mail therefore wishes to ensure the protection of its future ability to provide an efficient mail sorting and delivery service to the public in accordance with its statutory obligations which may be adversely affected by the construction and operation of this proposed scheme.

Royal Mail's comments on information that should be provided in ACQUIND Limited's Environmental Statement

Royal Mail asks that ACQUIND Limited noted the above and addresses the following comments / requests:

1. Royal Mail requests that the ES includes information on the needs of major road users (such as Royal Mail) and acknowledges the requirement to ensure that major road users are not disrupted though full consultation at the appropriate time in the DCO and development process.

2. The ES should include detailed information on the construction traffic mitigation measures that are proposed to be implemented, including a draft Construction Traffic Management Plan (CTMP).

3. Royal Mail requests that it is fully pre-consulted by ACQUIND Limited on any proposed road closures / diversions/ alternative access arrangements, hours of working and the content of the CTMP. The ES should acknowledge the need for this consultation with Royal Mail and other relevant local businesses / occupiers.

Royal Mail is able to supply the applicant with information on its road usage / trips if required.

Should PINS or ACQUIND Limted have any queries in relation to the above then in the first instance please contact Holly Trotman *(holly.trotman@royalmail.com)* of Royal Mail's Legal Services Team or Daniel Parry-Jones *(daniel.parry-jones@bnpparibas.com)* of BNP Paribas Real Estate.

From:	Brooks, Stuart
To:	Aquind Interconnector
Subject:	RE: EN020022 – AQUIND Interconnector – EIA Scoping Notification and Consultation
Date:	19 November 2018 12:12:51

Dear Richard,

I confirm that Southampton City Council has no objection.

Kind Regards,

Stuart Brooks
Senior Planning Officer
Infrastructure Planning and Development Service
Southampton City Council
Tel (General Number): 023 8083 2603
@SouthamptonCC facebook.com/SotonCC stay connected

From: Aquind Interconnector [mailto:aquind@pins.gsi.gov.uk]
Sent: 31 October 2018 10:15
Subject: EN020022 – AQUIND Interconnector – EIA Scoping Notification and Consultation

FAO Head of Planning

Dear Sir/Madam

Please see the attached correspondence regarding the proposed AQUIND Interconnector.

Please note the deadline for the consultation is 28 November 2018, which is a statutory deadline that cannot be extended.

Kind Regards

Richard White

EIA and Land Rights Advisor
Major Applications & Plans

The Planning Inspectorate, Temple Quay House, Temple Quay, Bristol, BS1 6PN
Direct line: 0303 444 5593
Helpline: 0303 444 5000
Email: Richard.White@pins.gsi.gov.uk

Web: infrastructure.planninginspectorate.gov.uk (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: @PINSgov

From:	Smith Claire L.
To:	Aquind Interconnector
Subject:	Response:Planning Consultation AQUIND France Interconnector, Broadway Lane, Waterlooville, Denmead, PO8 0SL
Date:	28 November 2018 11:40:58
Attachments:	28.11.2018 PLAN-025499.pdf GIS-1.pdf GIS-2.pdf GIS-3.pdf GIS-4.pdf GIS-5.pdf GIS-6.pdf

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Dear Sirs,

Please find attached Southern Water's response regarding the above planning consultation at the above application site.

If you require further areas showing infrastructure please contact us directly

Kind Regards

Claire Smith
Technical Co-ordinator

Southern Water

T.01962 716182
www.southernwater.co.uk

Department of Planning and
Development
East Hampshire District Council
Council Offices
Petersfield
Hampshire
GU31 4EX

Developer Services
Southern Water
Sparrowgrove House
Sparrowgrove
Otterbourne
Hampshire
SO21 2SW

Tel: 0330 303 0119
Email: developerservices@southernwater.co.uk

Your Ref
EN020022
Our Ref
PLAN-025499
Date
28/11/2018

Dear Sirs,

Proposal: Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017(the EIA Regulations) – Regulations 10 and 11.
Site: AQUIND France Interconnector, Broadway Lane, Waterlooville, Denmead, PO8 0SL.
EN020022

Thank you for your letter of 31/10/2018.

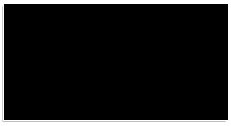
Further to your scoping document for the above site I have the following observations to make in respect of the proposed development:

-Southern Water's current sewerage/water records show that there is a multiple infrastructure within the proposed development site. No development, excavation, mounding or tree planting should be located within standoff distance from public sewers and all existing infrastructure should be protected during the course of construction works.
-Due to changes in legislation that came in to force on 1st October 2011 regarding the future ownership of sewers, it is possible that a sewer/s now deemed to be public could be crossing the above property.

Please refer to the below link for standoff distance:
https://www.southernwater.co.uk/media/default/PDFs/stand-off-distances.pdf

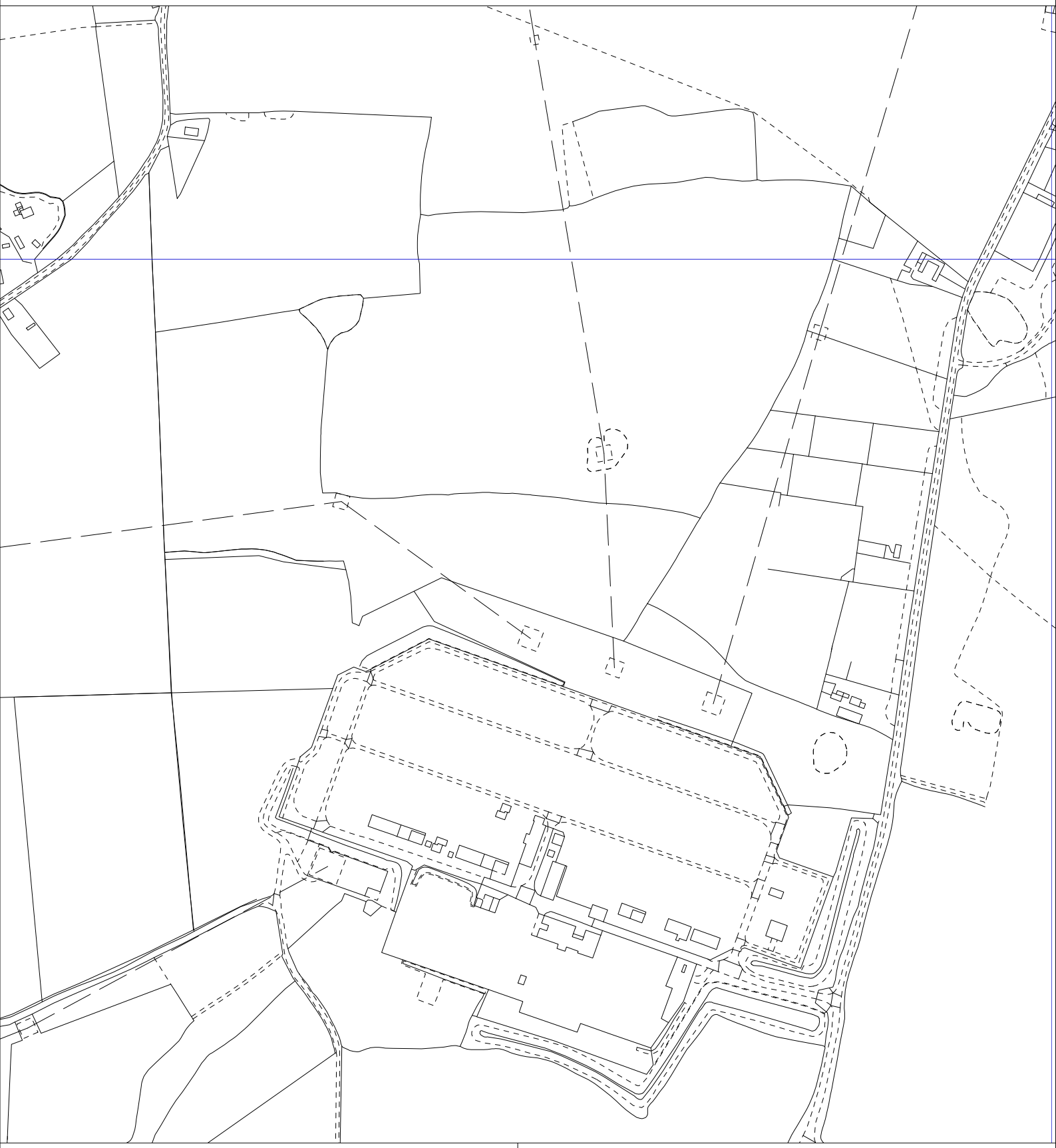
If you require any further information please do not hesitate to contact our office on the above telephone number.

Yours sincerely



Claire Smith
Developer Services

SOUTHERN WATER

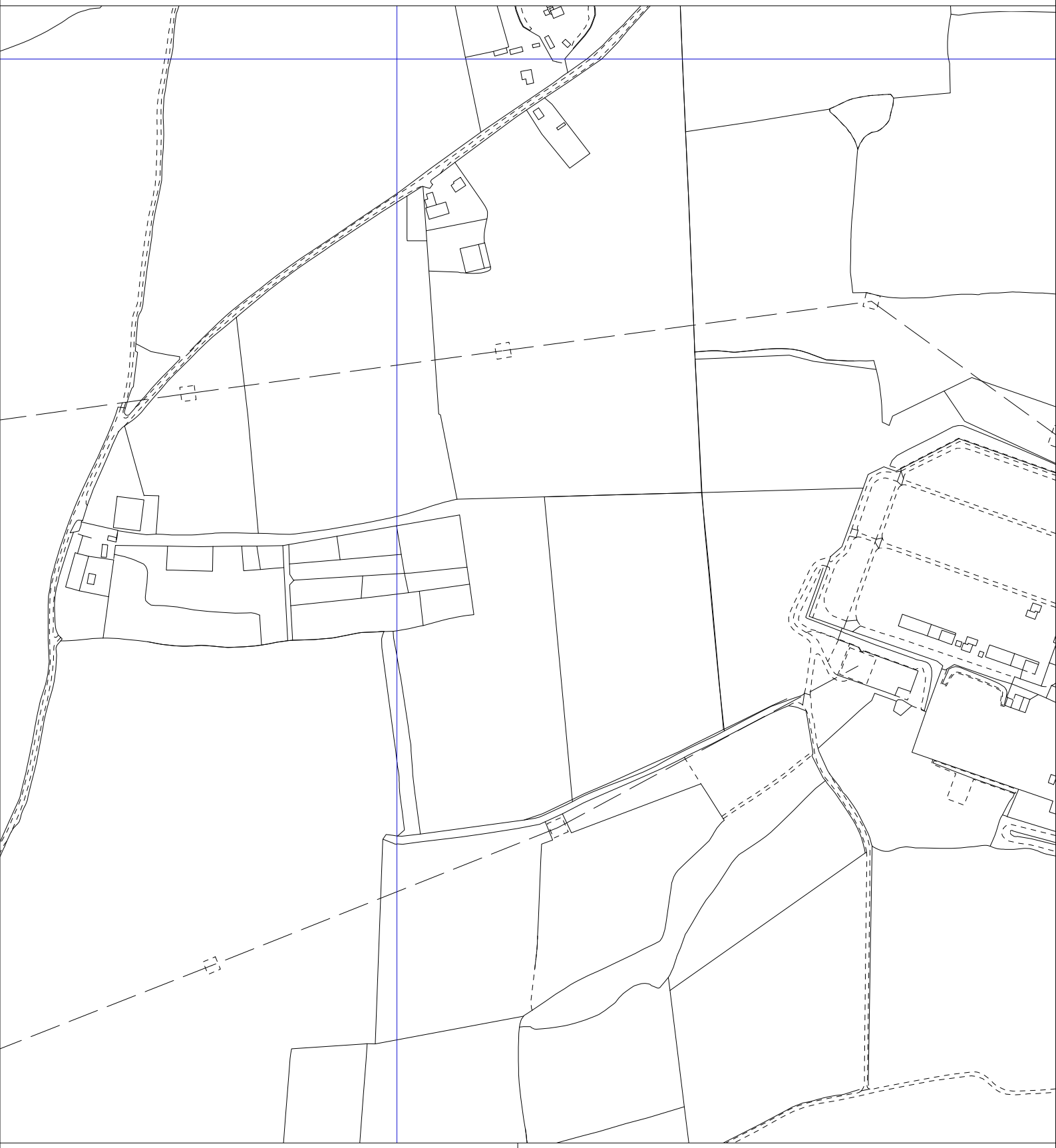


The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

Southern Water

O.S. REF: SU6713NE	Scale: 1:4247	Printed By: jayarar	Date: 27-11-2018
Screen Print		Southern Water MapGuide Browser	
WARNING: BAC pipes are constructed of Bonded Asbestos Cement		Requested By:	
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

SOUTHERN WATER

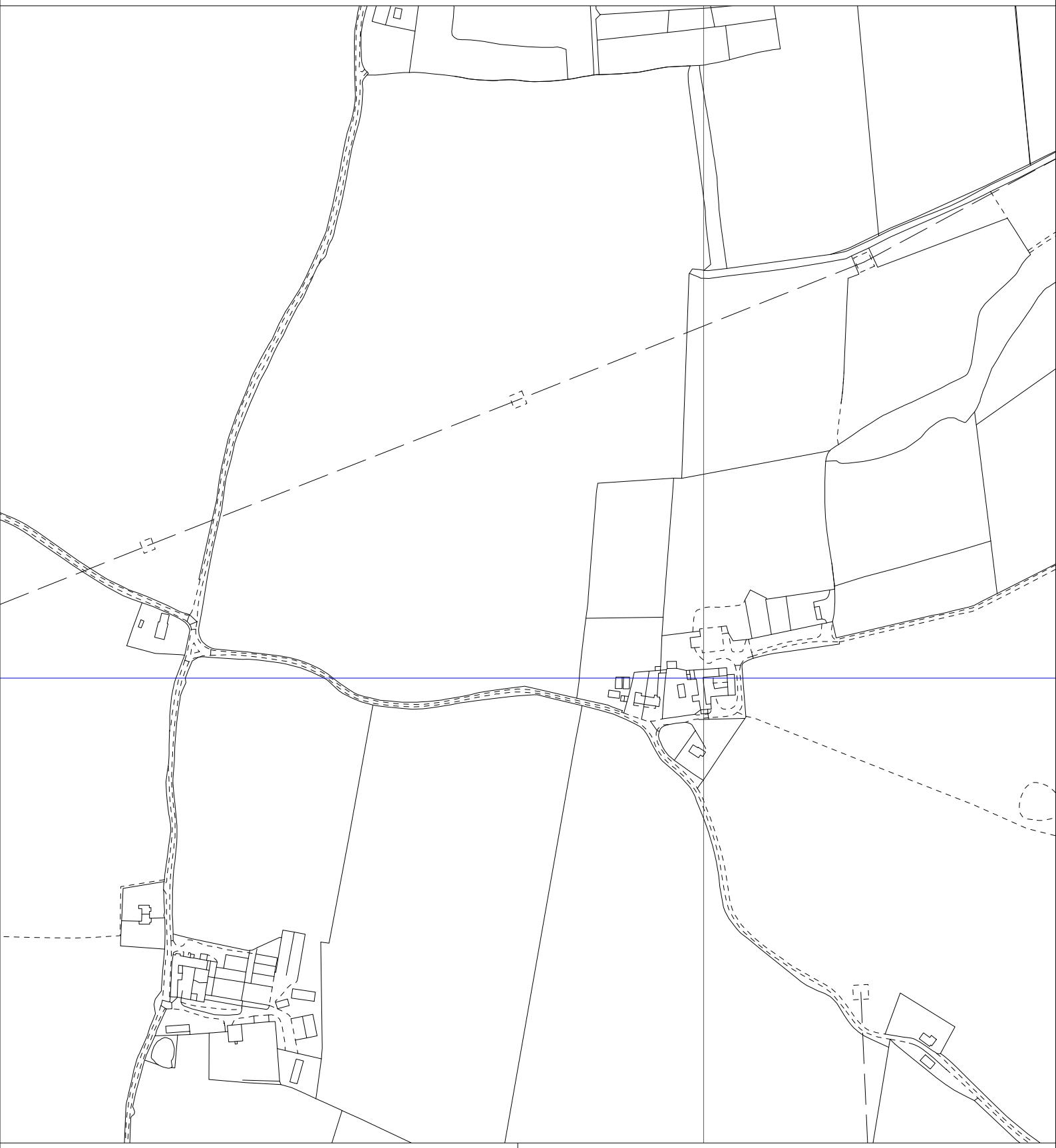


The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

Southern Water

O.S. REF: SU6713NW	Scale: 1:4247	Printed By: jayarar	Date: 27-11-2018
Screen Print		Southern Water MapGuide Browser	
WARNING: BAC pipes are constructed of Bonded Asbestos Cement		Requested By:	
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

SOUTHERN WATER

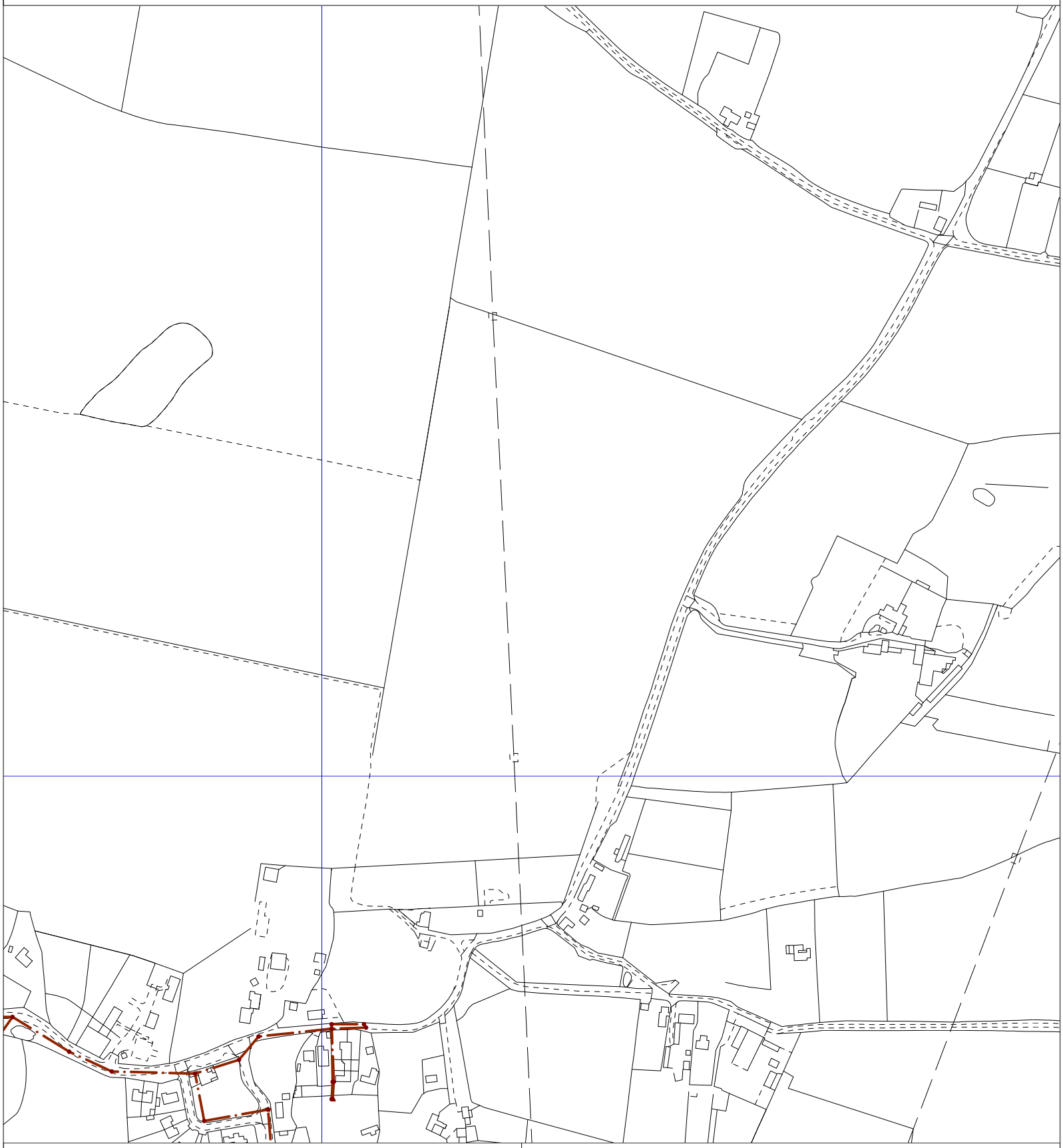


The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

Southern Water

O.S. REF: SU6613SE	Scale: 1:4247	Printed By: jayarar	Date: 27-11-2018
Screen Print		Southern Water MapGuide Browser	
WARNING: BAC pipes are constructed of Bonded Asbestos Cement		Requested By:	
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

SOUTHERN WATER

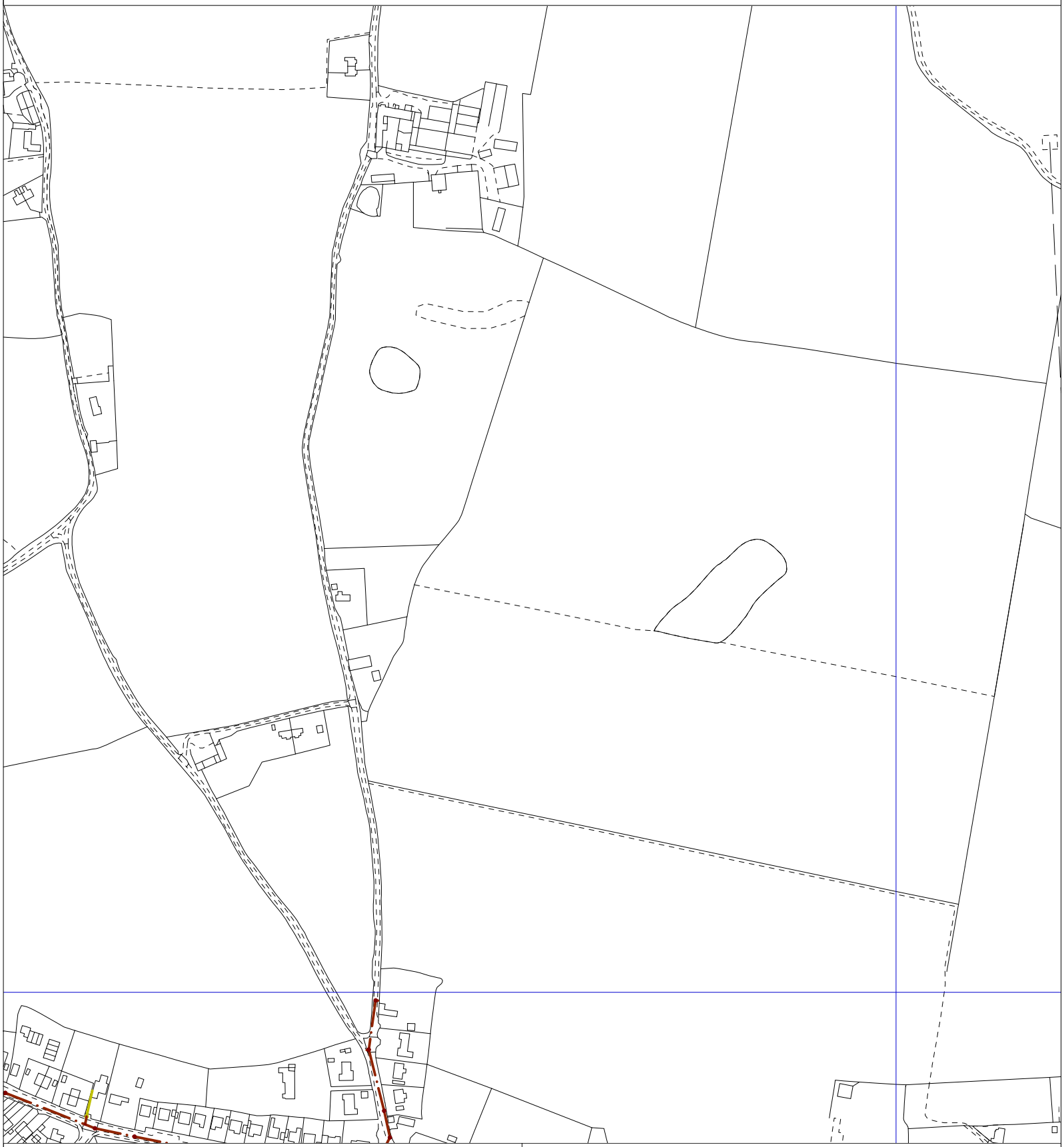


The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

Southern Water

O.S. REF: SU6712SW	Scale: 1:4354	Printed By: jayarar	Date: 27-11-2018
Screen Print		Southern Water MapGuide Browser	
WARNING: BAC pipes are constructed of Bonded Asbestos Cement		Requested By:	
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

SOUTHERN WATER

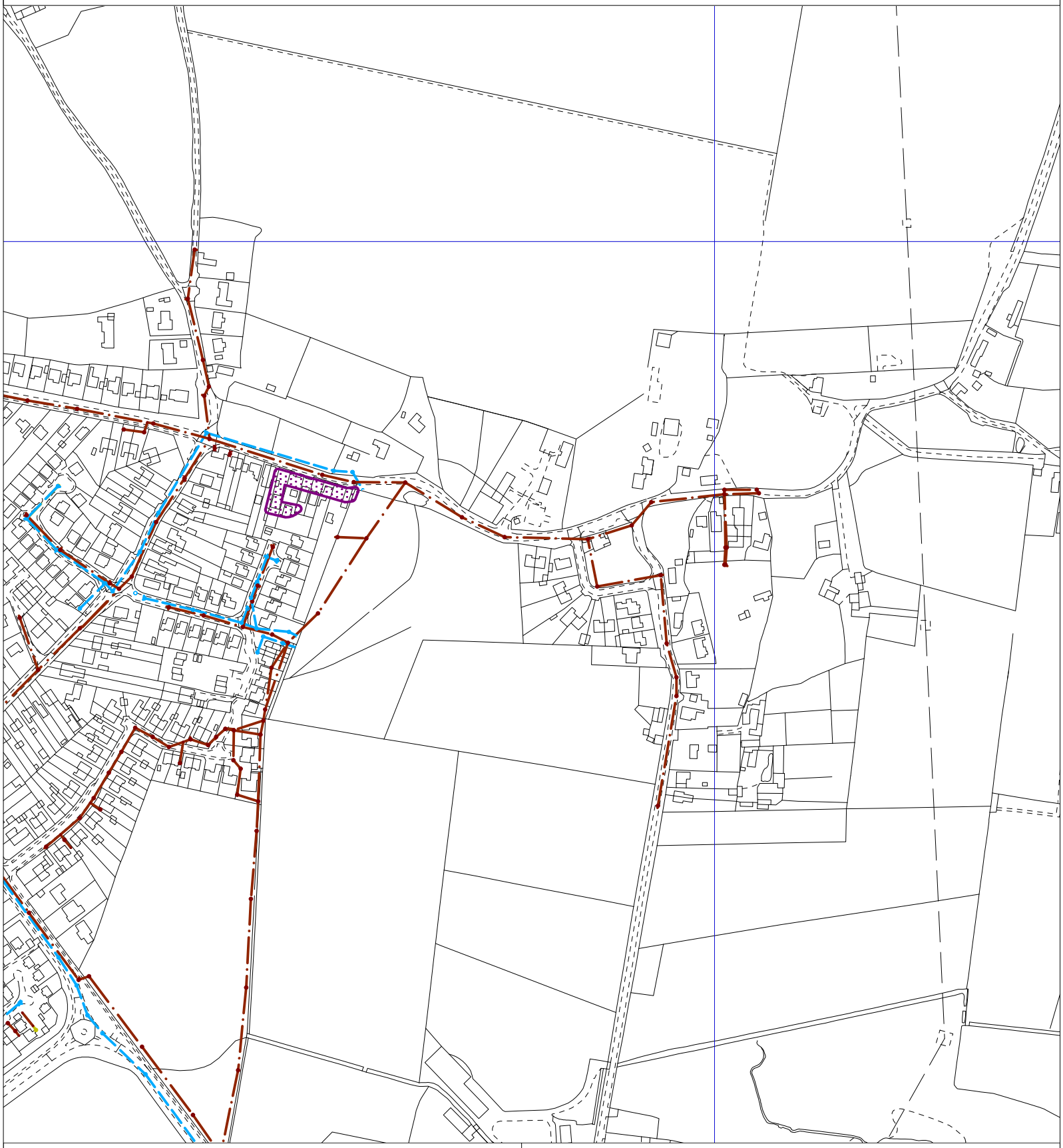


The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

Southern Water

O.S. REF: SU6612SE	Scale: 1:4354	Printed By: jayarar	Date: 27-11-2018
Screen Print		Southern Water MapGuide Browser	
WARNING: BAC pipes are constructed of Bonded Asbestos Cement		Requested By:	
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

SOUTHERN WATER



The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site.

Southern Water

O.S. REF: SU6611NE	Scale: 1:4354	Printed By: jayarar	Date: 27-11-2018
Screen Print		Southern Water MapGuide Browser	
WARNING: BAC pipes are constructed of Bonded Asbestos Cement		Requested By:	
WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement			

N

From:	Stephen Vanstone
To:	Aquind Interconnector
Cc:	Thomas Arculus; James Rygate; Russell Dunham; Martin Thomas; Trevor Harris
Subject:	RE: EN020022 – AQUIND Interconnector – EIA Scoping Notification and Consultation
Date:	27 November 2018 10:24:17
Attachments:	AQUI - Statutory consultation letter.pdf

Good morning Richard/Marie,

Trinity House is content with the Scoping Report and have no further comments at this stage.

Trinity House met with the project team on 2 October 2018 and look forward to engaging throughout this process on matters concerning marine navigation safety.

Kind regards,

Steve Vanstone
Navigation Services Officer
Trinity House

From: Aquind Interconnector [mailto:aquind@pins.gsi.gov.uk]
Sent: 31 October 2018 10:05
To: Navigation <Navigation.Directorate@thls.org>
Cc: Thomas Arculus <Thomas.Arculus@thls.org>
Subject: EN020022 – AQUIND Interconnector – EIA Scoping Notification and Consultation

Dear Sir/Madam

Please see the attached correspondence regarding the proposed AQUIND Interconnector.

Please note the deadline for the consultation is 28 November 2018, which is a statutory deadline that cannot be extended.

Kind Regards

Richard White

EIA and Land Rights Advisor
Major Applications & Plans

The Planning Inspectorate, Temple Quay House, Temple Quay, Bristol, BS1 6PN
Direct line: 0303 444 5593
Helpline: 0303 444 5000
Email: Richard.White@pins.gsi.gov.uk

Web: infrastructure.planninginspectorate.gov.uk (National Infrastructure Planning)
Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: @PINSgov

From:	SCornwell@winchester.gov.uk
To:	Aquind Interconnector
Subject:	FW: EN020022 – AQUIND Interconnector – EIA Scoping Notification and Consultation
Date:	15 November 2018 16:34:25
Attachments:	image001.png Aquind Scoping Report.docx

Dear Sir,

This project was the subject of an earlier scoping request from Aquind directed to the four relevant local planning authorities within whose boundaries the proposed development would take place. This scoping report dated February 2018 was widely consulted upon by WCC. A formal response was sent to Aquind dated 4 May 2018.

In a letter dated 19 June 2018 Aqunid sought a Direction from the Secretary of State whether the proposal should be classified as a Nationally Strategic Infrastructure Project. In a response dated 30 July 2018 the Secretary of State decided to exercise his powers and direct that this project should come under the umbrella of the Planning Act 2008 and treated as an application for which a development consent order is required.

Following the standard procedure, Aquind have submitted to you a further Scoping report dated October 2018 and you have now initiated a consultation exercise commencing on 31 October 2018 with interested bodies. The deadline for responses is 28 November 2018.

I have reviewed the Scoping report dated October 2018 with the earlier version dated February 2018. Whilst there do appear to be some minor revisions, the fundamental content remains unchanged. Accordingly, it is proposed to submit to you the original scoping response sent by WCC in May 2018. A copy is attached to this email.

Regards

Steve Cornwell

Senior Planning Officer

Development Management
City Offices, Colebrook Street
Winchester, SO23 9LJ

Telephone Direct Dial: 01962 848585
www.winchester.gov.uk

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Development Management

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website www.winchester.gov.uk

WSP
Chloe Patel
6 Devonshire Square
London
EC2M 4YE

Our Ref: 18/00494/SCOPE
Your Ref:
Enq to: Nick Parker
Direct Dial: 01962 848573
Email: nparker@winchester.gov.uk

4th May 2018

Please quote 18/00494/SCOPE on all correspondence

Dear Sir/Madam,

Environmental impact assessment scoping report for Development of a new underground High Voltage Direct Current power cable transmission link between Normandie (France) and the South Coast, including fibre optic data transmission cables and the erection of converter stations. at Land South Of Lovedean Electricity Sub Station Broadway Lane Lovedean Waterlooville Hampshire

Further to your formal request I hereby enclose the Scoping Opinion that will inform the Environmental Statement. The Scoping Opinion has now been formally adopted by the Council.

If you have any further queries please contact the case officer, whose details are at the top of this letter.

Yours faithfully

Julie Pinnock BA (Hons) MTP MRTPI
Head of Development Management

Enc.

SCOPING OPINION – Development of a new underground High Voltage Direct Current power cable transmission link between Normandie (France) and the South Coast, including fibre optic data transmission cables and the erection of converter stations.

TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS 2017

WINCHESTER CITY COUNCIL'S FORMAL SCOPING OPINION ON THE SCOPING REPORT SUBMITTED BY WSP ON BEHALF OF WSP

THIS SCOPING OPINION SETS OUT WHAT INFORMATION SHOULD BE INCLUDED IN AN ENVIRONMENTAL STATEMENT TO BE SUBMITTED WITH THE PLANNING APPLICATION FOR Development of a new underground High Voltage Direct Current power cable transmission link between Normandie (France) and the South Coast, including fibre optic data transmission cables and the erection of converter stations.

Appendix A – Winchester City Council's Scoping Opinion

1. Introduction

Note: *The Council has complied with the request to provide a scoping opinion on a without prejudice basis and in so doing does not necessarily accept or imply that the development described above accords with the policies of the Development Plan.*

SCHEDULE 1

2 Location of Development

2.1 In accordance with the regulations, the request for the scoping opinion is accompanied by a plan which identifies the land to which the scoping opinion relates. This is included within the applicant's scoping report at Figure 2.

2.2 The applicant has yet to determine the precise location of the UK converter station and has presented 2 options at this stage. The site the subject of this scoping opinion would be located to the north east of the village of Denmead within the administrative boundary of Winchester City Council. This site is known as Option B for the purposes of this report. Option A relates to a site located to the north west of the village of Lovedean within the administrative boundary of East Hampshire District Council. Both sites lie adjacent to the existing National Grid Lovedean electricity substation. The proposed cable route will travel through the administrative boundary of Winchester City Council, East Hampshire District Council, Havant Borough Council and Portsmouth City Council. The cable route will reach its proposed landfall location at Eastney, a district in the south-east of the Portsmouth.

2.3 Option B is situated on agricultural land approximately 200m west of Lovedean electricity substation and would span across six small fields divided by hedgerows and used for horse grazing and off road vehicles. Land falls from approximately 90 to 80m AOD. A new access route would connect the proposed substation with Broadway Lane to the east and either run to the north or south of the existing substation. The Council's Scoping Opinion covers this site.

2.4 Option A is agricultural land in a generally open, rural landscape situated approximately 400m to the south of Lovedean electrical substation and approximately 300m west of Boundary Lane. Option A lies to the south of Lovedean substation within an arable field. Gradients slope gently north south from approximately 80 to 70m AOD. The south west corner of the site would lie to the north of a deciduous copse whilst the eastern edge of the site would run adjacent to Broadway Farm. An access road would connect the proposed converter station to Broadway Lane.

2.5 The South Downs National Park (SDNP) borders Lovedean substation and the proposed converter station, its border set back to the north and west and within 50m to the east. The Hambledon Conservation Area lies within the SDNP to the northwest of the substation while Catherington Conservation Area lies to the north east. A number of Listed Buildings predominately Grade II lie within Lovedean, Denmead, Hambledon and along the narrow lanes mainly to the east of the substation, with the closest being at Denmead Farm, off Edneys Lane.

2.6 The proposed converter substation is bordered by pockets of woodland including Ancient Woodland. The SDNP has been given the status of an International Dark Skies Reserve.

2.7 The National Character Area Profiles (NCAPs), as defined on the National Character

Areas Map of England (Natural England) indicates that proposed converter station land lies within NCA 125 The South Downs. The NCA describes the landscape as one of contrasts, the downland creating a sense of openness whilst enclosure and remoteness is evident within woodlands and close to urban areas.

2.8 At a County level the proposed converter station options lie within LCA 7H South East Hampshire Downs (Hampshire County Integrated Character Assessment, 2012 refer). The landscape is "a large scale downland" and predominate "landscape type, typical with expansive, rolling arable landscapes and extensive wooded visual horizons".

2.9 Site Option B falls LCA 17 Hambledon Down, Winchester Landscape Character Assessment, 2004 (WCCLCA). It is agreed that although the options lie within different administrative areas, their key characteristics are similar. Characteristics of relevance to both preferred options and their immediate surroundings, and drawn from the above landscape character assessments and the description as set out in the Scoping Report at para 8.1.7.

2.10 The Scoping report acknowledges that whilst the preferred options do not fall within the SDNP, consideration needs to be given to the special qualities of the South Downs which is the "diverse, inspirational landscapes and breath taking views". Equally due regard should be given to the following points referred to within the South Downs Integrated Landscape Character Assessment, 2011: *"the strong rural , secluded character of the landscape which may be threatened by expansion of settlements which abut its southern edge,* and *the views southwards across downlands from the secondary hills at Windmill Down, Broadhalfpenny Down and Home Down "approximately 2.5km to the north".*

3 Description of the Proposed Development

3.1 In order to facilitate the HVAC cable connection between the existing National Grid Lovedean substation and the new HVDC power converter station, there will be a requirement to extend the existing outdoor electrical infrastructure which exists within the National Grid substation. All works to extend the outdoor electrical infrastructure will take place within the National Grid fence compound. Agreement will be sought with the LPAs with respect to the proposed scopes and assessment methodologies given the applicant's scoping report

3.2 A new HVDC converter station (hereafter referred to as the 'proposed converter station') is proposed adjacent to the existing National Grid substation in Lovedean, Hampshire. The proposed converter station will be less than 2km from Lovedean substation and will be connected by two 400kV underground cable circuits running through fields. Currently two site options are under consideration: Option A and Option B, both of which are located within the indicative site boundary. The closest village to the locations for the proposed converter station is Lovedean, approximately 1.3km to the south-east. There are some residential properties, including a small cluster of approximately five properties on Broadway Lane, approximately 0.3km to the east of the proposed converter station. Roads surrounding the proposed converter station include Broadway Lane to the east and Old Mill Lane to the west.

3.3 A typical layout for a converter station is illustrated in the Scoping report at **Inset 2.2**. The proposed converter station will be situated within a security fenced area of between 200m x 200m and 300m x 300m. The exact configuration will depend on the technology provider selected to supply HVDC converter station equipment. The buildings will typically be constructed of steel frame and cladding.

3.4 An engineering optioneering process is ongoing to determine the most environmentally considerate option for location of the proposed converter station. Two site options, Option A and Option B are under consideration, both of which are located within the indicative site boundary as shown in the applicant's report at **Figure 1.1**.

3.5 Landscaping will be implemented around the perimeter of the site to help integrate the proposed converter station into the surrounding environment. Given the topography of the area, grading of the land will also be required to level the construction platform.

3.6 A new permanent access road will be established from the existing road network at Broadway Lane or Old Mill Lane. Access via Broadway Lane, near where Broadway Lane intersects with Day Lane, is the preferred mode of access. This road will be used heavily throughout construction; however it will continue to be required for maintenance staff to access site. Access by maintenance staff will be limited to light vehicles. Occasional use by heavy vehicles will only be required for a major equipment failure, for example if the replacement of a transformer is needed at the proposed converter station.

3.7 The outdoor equipment which forms part of the proposed converter station will be similar to equipment that is found within typical electrical substations, such as National Grid's Lovedean substation. In addition, equipment is required to convertthe power between AC and DC or vice versa. The equipment to convert power is a system of electronic valves housed within the proposed converter station buildings and has associated infrastructure for cooling and control.

3.8 With reference to proposed layout given in the Scoping report at **Inset 2.2**, the electronic valves are housed within two converter hall buildings (1), each of which typically will measure 70m in length, 50m in width and 22m in height, but a lower building occupying a greater area may be considered if it proves technologically possible. An adjoining control building (2) will also be established however this will be at a reduced height. Depending on the detailed design, the building may be extended to include other equipment such as the AC reactors (12), and DC cable terminations (6); this is to prevent exposure to saline pollution. The lighting masts (height approximately 20m) 400kV switchyard (7), transformers (3) and filters (13) will be located outdoors. The converter station building may be located side by side or in a row. The Scoping report indicates that the exact shape of the land plot occupied by the converter station will be finalised at the detailed design stage.

3.9 The detailed design of the proposed converter station will be undertaken by an appointed Engineer, Procure, Construct (EPC) Contractor taking account of technical specification and site specific requirements. The Scoping report indicates that the detailed design would be approved through reserved matters applications.

3.10 The Council agrees that development does not constitute either Schedule 1 or Schedule 2 Development as set out in the Environmental Impact Assessment (EIA) but due to the environmental and human sensitivities in the area, the applicant is voluntarily proposing to submit an Environmental Statement with a subsequent planning application.

SCHEDULE 2

4 Introduction

4.1 This schedule outlines the terms of reference for the Environmental Statement. This schedule should be read in conjunction with; Town and Country Planning (Environmental Impact Assessment) Regulations 2017. Guidance on EIA: Scoping. European Commission, June 2001. Available on website: http://europa.eu.int/comm/environment/eia/eia-studies-and-reports/study1.htm

5 Content of Environmental Statement

5.1 An environmental statement to be submitted with a planning application for the proposed development on this site should include;

- A description of the development
- An outline of the main alternatives
- Information describing the site and environment
- Information describing the likely and significant effects of the development on the environment and measures envisaged to avoid, reduce and, if possible, remedy the main effects the development is likely to have on the environment.

5.2 Baseline studies should be used to help both describe the existing site and environment and also provide baseline information against which effects of the proposed development are assessed. Schedule 3 provides further details on the scope of environmental information required. The *terms of reference* for the Environmental Statement are outlined below:

5.3 A Description of the Development

This should include a description of the proposed quantum and mix of uses, the design philosophy of the development (including proposed landscaping and open space/recreation land), the proposed phasing and the proposed access and transport arrangements (cycle and vehicles). It should also include a description of proposed water supply and drainage, proposed waste disposal (including solid waste and liquid effluent), proposed energy provision, the numbers to be employed and where they are expected to come from, and a description of the general type and source of materials.

5.4 An Outline of the Main Alternatives

This should include an assessment of the different ways in which the developer can feasibly meet the project's objectives e.g. by carrying out a different type of action; or choosing an alternative location; or adopting a different technology or design for the project. The "No Project" alternative must also be considered as the baseline against which the environmental effects of the project should be considered.

5.5 Information Describing the Site and Environment

This should include a description of the physical features including: population, flora and fauna (in particular protected species and habitats), soil, water (aquifers, watercourses and any existing discharges), air, architectural and historic heritage, archaeological sites and features, landscape and topography, recreational uses. The study should pay attention to the presence and long-term retention of natural and semi-natural features within the proposal. Such features should include: standing water; streams and watercourses; trees and hedgerows and geological and archaeological features or remains.

This should also include a description of the policy framework including; all the relevant statutory designations, international designations, national and local designations including the Site of Nature Conservation Interest (SINC) and reference to relevant national policies and to regional and local plans and policies (including approved or emerging development plans) and any relevant supplementary planning guidance.

5.6 Information Describing the Likely and Significant Effects of the Development on the Environment and measures to avoid reduce and mitigate adverse effects

In the assessment of effects consideration should be given to all aspects of the environment and the different sources of impact likely to occur as a result of the proposed development. The different aspects of the environment, which should be considered, include:

Human beings, buildings and other manmade features including archaeology
Flora, fauna and geology
Land
Water
Air and Climate/Climate Change

5.7 The broad sources of impact of the proposed development that should be considered include:

Physical change in the locality

- Change in land use, landscape or topography
- Clearance of existing land, vegetation and buildings
- Creation of new land uses
- Construction works
- New road traffic during construction and operation
- New or diverted transmission lines or pipelines
- Changes to the ground conditions including hydrology of watercourses and aquifers
- Abstraction or transfers of water
- Changes affecting drainage or runoff
- Transport of personnel or materials for construction or operation
- Influx of people to an area
- Loss of native species or genetic diversity

Consumption of natural resources

- Land
- Water
- Aggregates
- Forests and timber
- Energy including electricity and fuels and the use of renewable energy

Production of waste

- Municipal waste
- Sewage sludge
- Construction or demolition waste
- Facilities for treatment or disposal of solid wastes or liquid effluents

Release of pollutants in the air

- Emissions from combustion of fossil fuels
- Emissions from construction activities
- Dust or odours from handling of materials including construction materials, sewage and waste

Production of noise, light and heat energy

- From construction or operation
- From construction or operational traffic
- From lighting or cooling systems

Risk of contamination of land or water.

- From the discharge of sewage or other effluents to water or the land. (whether treated or untreated)
- The risk of long term build up of pollutants in the environment from these sources.

Risk of accidents during construction or operation of the project

- From events beyond the limits of normal environmental protection e.g. failure of pollution control systems.
- The risk of the project being affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslip, etc).

Social & Economic change

- Population changes in the area including changes in population size, age, structure, social groups, increased demands on local facilities or services,
- The economic impact of the development including effect on employment, house prices and demand. Effects of creating a sustainable community including environmental, social and economic benefits

The potential for cumulative effects and off-site

- The potential for the project to set a precedent for later developments and taking into account other existing or planned projects with similar effects.

6 Other Factors:

6.1 In the assessment of likely and significant effects of the development on the environment the following factors should also be considered:

- Nature of the impacts (e.g. direct, indirect, secondary, cumulative, short, medium, long-term, permanent and temporary, positive and negative).
- Extent of the impacts (geographical area, size of the affected population/habitat/species).
- Magnitude and complexity of the impact.
- Probability of the impact.
- Duration, frequency and reversibility of the impact
- Mitigation incorporated into the project design to reduce, avoid or offset significant adverse impacts. This should include on-site renewable energy production in line with development plan and national policy requirements and compliance with the Code for Sustainable Homes; BREEAM standards etc.

6.2 It is suggested that this environmental information (description of the site and likely and significant effects) be presented in the form of a series of technical studies. The titles of the individual studies are at the discretion of the developer/consultants but should ensure that the guidance given in this scoping opinion is followed. A common approach to the preparation of the technical studies is required, which should commence with a description of the site and environment derived from baseline studies.

6.3 An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the information should be given. A description of the forecasting methods used to assess the effects on the environment should also be included. Where mitigation measures are proposed a description should be given in the relevant technical paper of any proposed monitoring of the success of the measures.

6.4 The technical studies should be undertaken by appropriately qualified and experienced consultants.

6.5 A non-technical summary of the information should also be prepared and submitted with the Environmental Statement.

SCHEDULE 3

Appendix A – Scoping Report

Scoping of the Environmental Statement

The proposed scope for the Environmental Statement, as set out in 3.8 of the Scoping Report, is considered to be acceptable by the Local Planning Authority subject to the following comments.

Planning policy

The Scoping Report identifies the relevant national and local planning policy and guidance framework against which a subsequent planning application will be considered. There should be analysis of the proposal against the relevant planning policies demonstrating how the proposal is policy compliant. The South Downs National Park Authority is progressing its Local Plan and will submit the 'Submission' version of the Local Plan by the end of April 2018.

It is noted that the proposal lies within the Denmead Neighbourhood Plan Area (DNP) and this carries the same weight as adopted local plans. This should be reflected in the policy assessment of the proposed development.

The DNP includes a vision and series of objectives and these should be considered. Policy 1 and 2 are specifically relevant as these include references to development and sites allocated for development. Whilst it is noted large scale developments are listed in the screening report, given the proximity of the allocations in the DNP it is suggested that these are also referred to.

Whilst Option B is within open countryside where Policy MTRA4 of LPP1 is relevant the screening report appears to have appropriately referred to various designations and constraints and other specialists will be able to comment on these matters.

The route however passes through the designated gap betweeen Denmead and Waterlooville and therefore Policy CP18 of LPP1 is relevant. The route also passes through a minerals safeguarding area so this will also need to be assessed, against the policies and proposals of the Hants Minerals and Waste Local Plan. Part of the site also lies within 5.6 km of the Solent SPA. .

Para 8.1.13 – should also refer to proposals with Denmead Neighbourhood Plan

Para 11.1 should also refer to Denmead with its population (6,700 2011 census) and dwellings 2,800.

Para 11.1.8 refers to the settlement of Anmore being one of the settlements closest to the site/route. It is suggested that this listed is expanded to include Denmead which also encompasses Anmore.

Page 163 should also refer to the Traveller DPD - pre-submission January 2017 and Denmead Neighbourhood Plan 2015

A number of the development management policies in LP2 are applicable particularly with regard to the siting and appearance of the proposed building itself - DM1; DM10; DM15; DM16; DM17; DM18; DM19; DM20; DM22; DM23.

Additional documents of relevance are those produced and published collaboratively by PUSH – green infrastructure; water management; air quality etc.

Cumulative effects

The Assessment of Cumulative Effects (3.11) are noted. A further site that has not been included in the scope and should, relates to the Major Development Area at Land West of Waterlooville. This site is under construction and relates to a total of 3,500 dwellings and additional infrastructure. The combined effects of this large development should be taken into account when assessing the cumulative effects of consented development in the local area.

In addition to the schemes identified in Tables 3.4 and 3.6 and the development at land to the West of Waterlooville, the following existing developments should be included in the assessment of cumulative impact and form part of the baseline study.

- The existing Lovedean Electricity substation.
- The existing solar farm at Day Lane.

A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

The ES should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment, (subject to available information):
a. existing completed projects;
b. approved but uncompleted projects;
c. ongoing activities;
d. plans or projects for which an application has been made and which are under consideration by the consenting authorities; and
e. plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.

Natural England would advise that the cumulative impacts section should also consider impacts on ecologically sensitive receptors such as designated sites, non-designated priority habitats and species, protected species etc. In relation to point e, Natural England would advise that the Environmental Statement should also consider known forthcoming planning applications in close proximity to the development application, where there is potential impacts on key ecological interests.

For example, a scoping report has been submitted for the redevelopment of the Fraser Range site at Eastney, Portsmouth and a Coastal Defence scheme is being progressed

for the Southsea frontage. All of these developments will potentially impact on the vegetated shingle in this area and further examination of this issue is necessary.

The landscape and visual assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. In this context Natural England advises that the cumulative impact assessment should include other proposals currently at Scoping stage. Due to the overlapping timescale of their progress through the planning system, cumulative impact of the proposed development with those proposals currently at Scoping stage would be likely to be a material consideration at the time of determination of the planning application.

Design

It is understood that a hybrid application is proposed with details of the design of the converter building 'reserved' for detailed consideration at a later stage, but that details of scale will be included in the initial application. The absence of details of design make a full assessment of the impact on the landscape more difficult even where indications of scale are provided. It also makes an assessment of how the building/infrastructure would sit within the site and how any material arising from the development would be used to create new screening landform's difficult to assess (as referred to at 8.3.15 of the report). The absence of landscaping details and other mitigation proposals also has the potential to undermine the Landscape and Visual Impact Assessment.

Consideration of alternatives

In accordance with Schedule 4 of the EIA Regulations, it is rightly stated that the ES will contain reference to alternatives. Reference is made at (3.10.2) to a summary being provided in the ES of reasons for the selection of the final development design and a description of design alternatives. This is welcome but it rather underplays the need for fully evidenced reasoning for site selection and reasonable alternative sites. It is understood that the Lovedean substation offers a technically available connection option in terms of a strategic location in the south of England, but the option sites as presented comprise generally open countryside on elevated ground in close proximity to the South Downs National Park and within a Groundwater Source Protection Zone.

Evidence should be submitted demonstrating what alternative sites for the converter have been considered that may have a less sensitive impact on the environment, particularly landscape and visual impacts. This issue is particularly important in relation to the setting of the South Downs National Park.

It is understood a position close to the substation is required so as to reduce the length of AC cables between the converter and the substation (due to efficiency and trench requirements of DC cables), however, similar systems at Daedalus (Fareham) and the FAB Link at east Devon comprise much greater lengths of AC cables (approximately 5km in the case of the FAB Link) and that raises the question of whether alternatives further south of Lovedean may be more suitable and should be explored in accordance with Schedule 4 of the EIA Regulations.

Traffic and Transport

Chapter 5 of the EIA scoping covers transport matters. Key routes to the proposed site have been identified, although further details regarding the routes will need to be provided together with details of construction traffic.

The cable routing is shown and outlined in paragraph 5.1.6 this will need to be discussed with the Highway Authority in more detail. Information regards cable laying proposals, carriageway widths required and appropriateness of routes should be provided to support any application. Consideration must also be given to committed development in the area and measures taken to ensure service information and highway layout is up to date.

As outlined in section 5 of the EIA a Transport Assessment/Statement will be required to support the application. The EIA sets out appropriately the areas in which the Transport Assessment should consider and engagement with the Highway Authority to inform this assessment is welcomed.

In addition it is acknowledged by the SDNP the potential traffic routes will rely on local rural roads. Therefore impacts on residents, recreational users and tranquillity will need to be assessed.

Air Quality

Agree with scope as contained within chapter 6 of the EIA scoping report.

Noise and Vibration

Natural England advises that potential noise and vibration impacts on ecologically sensitive receptors and should be included within the EIA.

The noise and vibration assessment must include any anticipated vibration impacts on groundwater i.e. increased turbidity, on Portsmouth Water's supply. Vibrations caused during development must form part of this assessment to understand potential risks associated with turbidity. Mitigation of vibration causing increased turbidity is challenging therefore it is best dealt with during the design phase.

Landscape and visual impacts

The Scoping Report correctly identifies the national, county level and local landscape character assessments and the main receptors are agreed. A detailed baseline needs to be carried out as part of the LVIA. This should be robust enough to enable it to guide constraints and opportunities for the site and steer the design and appropriate mitigation/enhancement approaches. The SDNPA recommend that the baseline study responds to the site's location close to the National Park boundary and clearly explores, using evidence, how the site contributes to the setting of the National Park, both in visual and landscape character terms. The inclusion of the South Downs Integrated Landscape Character Assessment (2011) is supported as part of the baseline evidence. Additionally, the following evidence should also be considered in order to inform the baseline assessment:

- Historic Evidence - maps, historic landscape characterisation (Hampshire Historic Landscape Characterisation 2013)
- South Downs National Park Viewshed Characterisation and Analysis (2015)
- South Downs National Park Tranquillity Study (2017)
- South Downs Green Infrastructure Framework

Table 8.1 of the Scoping report sets out the issues to be scoped in / out of the LVIA. It proposes to scope out visual receptors beyond 3km of the site boundary, and this should be scoped in. It is noted work is still ongoing to determine the Zone of

Theoretical Visibility (ZTV) and this should be used to inform receptor points that are beyond 3km but which may be sensitive to change. It is noted (8.3.5) that it is intended to include three sites beyond the 3km zone (Old Winchester Hill Downs, Windmill Hill and Port Down Hill), however, there may be other locations that should be incorporated in the LVIA rather than being scoped out by a more arbitrary 3km zone. Winchester Hill is a Scheduled Ancient Monument with the South Downs Way National Trail crossing it, so should be assessed in that context.

With regards to landscape receptors, these should be considered in terms of both landscape character areas as well as local elements of the landscape to be used to define receptors, e.g. hedgerow features and ancient woodland. This should also include perceptual qualities such as tranquillity and dark night skies.

The LVIA should not be limited to assessment of the building in isolation, but should, as identified (Para 8.2.3), include all associated elements (eg lighting columns, perimeter fencing, access roads, signage). As mentioned above, there is a conflict here with the suitability of an outline application to suitably assess detailed elements such as fencing, roads, parking areas associated infrastructure and landscaping proposals against any generalised reference to it in the LVIA.

The SDNPA recommend that the baseline study responds to the site's location close to the South Downs National Park boundary and clearly explores, using evidence, how the site contributes to the setting of the National Park, both in visual and landscape character terms. This will be a fundamental element of the Baseline Studies as it will help to determine the significance of any effects upon the National Park and its Purposes.

The development site is adjacent to and within the setting of the South Downs National Park, which is also designated as an International Dark Skies Reserve. Natural England’s particular interest is in people visiting / enjoying / experiencing the countryside and especially natural beauty / special qualities of the designated landscapes. This might include people using open access land, Natural Trails, the England Coast Path, promoted routes and other rights of way, as well as publicly accessible countryside and wildlife sites.

Consideration should be given to the direct and indirect effects upon this designated landscape and in particular the effect upon its purpose for designation within the environmental impact assessment, as well as the content of the relevant management plan for South Downs National Park. Detailed consideration of sequential effects should also be included and Natural England would also recommend the inclusion of long distance views from within the National Park where people are affected, such as Old Winchester Hill.

Natural England would wish to see details of local landscape character areas mapped at a scale appropriate to the development site as well as any relevant management plans or strategies pertaining to the area. The EIA should include assessments of visual effects on the surrounding area and landscape together with any physical effects of the development, such as changes in topography. The European Landscape Convention places a duty on Local Planning Authorities to consider the impacts of landscape when exercising their functions.

Natural England supports the publication *Guidelines for Landscape and Visual Impact Assessment*, produced by the Landscape Institute and the Institute of Environmental Assessment and Management in 2013 (3rd edition). The methodology set out in this document is almost universally used for landscape and visual impact assessment.

In order to foster high quality development that respects, maintains, or enhances, local landscape character and distinctiveness, Natural England encourages all new development to consider the character and distinctiveness of the area, with the siting and design of the proposed development reflecting local design characteristics and, wherever possible, using local materials. The Environmental Impact Assessment process should detail the measures to be taken to ensure the building design will be of a high standard, as well as detail of layout alternatives together with justification of the selected option in terms of landscape impact and benefit.

The method used to assess the likely significance of effects needs to be set out within the LVIA.

Lighting

As is acknowledged in the Scoping Report, the South Downs National Park is a designated International Dark Skies Reserve- only the second in England and 12th in the world. Further information can be found at:
https://www.southdowns.gov.uk/enjoy/dark-night-skies/

Reference is made to consideration of visual lighting impacts within the Landscape and Visual chapter of the submitted scoping report. However, the SDNPA recommend that a lighting assessment is also scoped in to consider potential environmental pollution impacts.

Lighting impacts should be assessed in accordance with best practise guidelines from the Institute of Lighting Professionals and should consider the operational phase of development. Consideration should also be given to temporary effects during construction for example, light pollution from floodlighting of construction site. The lighting assessment should detail the baseline conditions, and consider the cumulative impact from any existing/approved developments as identified above.

Landscape Mitigation

The design and siting of the building should be landscape led. The need for landscape mitigation implies the development will have a visual impact on the surrounding area. Any mitigation is ultimately informed by a detailed assessment of the specific impacts of a development which should be designed and sited to limit any adverse visual impacts. Given the outline nature of the application there are concerns that the proposal will lack a genuine visual impact assessment to inform a landscape led siting and design process.

Any landscape mitigation proposals must be informed by an Ecologist to ensure the landscaping has mutual benefits to enhance biodiversity and improves wildlife

connectivity and networks and foraging corridors. Mitigation must also be informed by the LVIA.

Heritage and Archaeology

Heritage

The report has sufficiently identified the above ground designated heritage assets and their settings which would be affected by the proposals. However, there is the potential that the proposals could impact a number of non-designated heritage assets (buildings or structures) within the vicinity of the proposed route of the pipeline in the Winchester District. It is therefore advised that the potential impact of the proposals upon the significance of these assets should also be assessed as per the guidance outlined under paragraph 135 of the NPPF.

The assessment should clearly demonstrate that the extent of the proposed study area is of the appropriate size to ensure that all heritage assets likely to be affected by this development have been included and can be properly assessed. An arbitrary radial search is unlikely to accurately reflect the impact of the development on heritage assets in the wider area and a more tailored approach would be required, in particular with regards to assessing impacts to setting.

With regard to designated heritage assets, there needs to be an understanding of what makes these assets 'special, Significance can be harmed or lost through alteration or destruction of the heritage asset, or through development within its setting, so it needs to be demonstrated how these proposals would impact on significance.

The assessment should also take account of the potential impact which associated development activities (such as construction, servicing, and maintenance) might have upon perceptions, understanding, and appreciation of any heritage assets in the area. The assessment should also consider the likelihood of alterations to drainage and ground water patterns that might lead to in-situ decomposition or destruction of below ground archaeological remains and deposits, and can also lead to subsidence of buildings and monuments.

Archaeology

The County Archaeologist comments that the site is in an area of good archaeological interest with evidence of a Bronze Age cemetery and a round barrow in the immediate area together with isolated Iron Age and medieval finds recorded in the vicinity. The EIA Scoping Opinion report (Aquind, Feb 12018) confirms that Heritage and Archaeology will form part of an Environmental Statement which will be prepared for this proposed scheme. Chapter 9 of the Scoping Opinion Report considers Heritage and Archaeology issues, assessing likely issues (both temporary and permanent) relating to different aspects of the proposed scheme. The majority of the proposed underground cable route would lie within existing roads but sections will lie within fields as does the proposed sub-station sites. The EIA assessment methodology proposes that an archaeological desk-based assessment is undertaken (and I understand that this is currently underway). However no further archaeological site surveys or site investigations are proposed as part of the EIA assessment. Proposed mitigation measures are set out in

para. 9.3.8 to 9.3.10 of the scoping report. This includes differing levels of targeted archaeological watching brief for the cable route – this is considered likely to be appropriate for the majority of the proposed cable route.

The Scoping Opinion report then indicates that appropriate mitigation measures are to be agreed for areas where particularly sensitive assets have been identified or where the ground impacts will be more severe [para. 9.3.9 & 9.3.10]). However, as the EIA assessment comprises solely archaeological desk-based assessment + a site walkover, the identification of currently unknown sensitive assets which may be present within the development area is likely to be limited.

The EIA assessment stage should include further site surveys (such as geophysical survey) and site investigations (trial trenching) for those areas of the cable route which lie outside of the existing road network and for the proposed site of the sub-station. This will enable appropriate mitigation measures to be set out in an Environmental Statement.

Ecology

Designated sites

Natural England note that the study area boundary includes internationally designated sites within 10km and nationally designated sites within 2km. While Portsmouth Harbour SSSI falls just outside of this 2km boundary, potential impacts upon overwintering birds will still be assessed as part of the Portsmouth Harbour SPA and Ramsar site which have been screened-in in table 10.2.

Natural England agrees with the stages of Ecological Impact Assessment outlined in paragraph 10.3.4 and recommends that a source-pathway-receptor approach is applied to inform this process. Consideration should be given to both direct and indirect impacts upon designated features and supporting habitats. To assist with the assessment of this project, we recommend that a separate chapter providing specific information to support a Habitats Regulations Assessment is included within the Environmental Statement.

Natural England note in paragraph 10.2.22 that in addition to the SPA and Ramsar sites, a number of suitable fields exist across the proposed cable route suitable to support roosting, loafing and foraging during high-tide. These sites, and additional sites in the vicinity of the landfall area, are identified within the Solent Wader and Brent Goose Strategy (SWBGS). This strategy aims to protect the network of non-designated terrestrial wader and brent goose sites that support the Solent Special Protection Areas (SPA) from land take and indirect effects associated with new development and forthcoming guidance on mitigation and offsetting requirements is being prepared. The terrestrial wader and brent goose sites are located on land that falls outside of the Solent SPAs boundaries. However, as this land is frequently used by SPA species (including qualifying features and assemblage species), it supports the functionality and integrity of the designated sites for these features.

Detailed consideration of these sites within the EIA is required with respect to land take and disturbance and we recommend that you seek further information from the Hampshire Biodiversity Information Centre and other appropriate bodies to supplement surveys. It is noted that detailed wintering bird surveys have been undertaken for the

survey area of the landfall and cable route. Natural England would be happy to advise further on mitigation and offsetting requirements through our Discretionary Advice Service as the detailed design progresses.

For the purposes of the Habitats Regulations Assessment, Natural England advises that these areas of functionally-linked land, together with other habitats that provide a supporting role, are assessed in a manner consistent with designated supporting habitat.

Protected species
The scoping report sets out the protected species ecological surveys being undertaken as part of the EIA. The area in the vicinity of the Converter Station is sensitive with respect to Bechstein's bats and hazel dormouse. Detailed consideration of these issues within the EIA is required with mitigation strategies, as appropriate.

Species information should include a data search from the Hampshire Biodiversity Information Centre. Potential impacts of species to consider should include direct habitat loss, habitat fragmentation, population isolation, disturbance (light, noise, visual), and hydrological impacts. Whilst some direct impacts on the site ecology may be outside of the SDNPA's remit to comment upon, there may be relevant considerations such as impacts upon migration or foraging routes which would need to be understood and assessed. In particular, the scoping report states that ancient woodlands surrounding the Lovedean substation and associated hedgerows are suitable to support roosting, foraging and commuting bat species. As part of any landscape mitigation there may be opportunities for relevant habitat enhancement/creation.

In terms of habitat impacts within the National Park, Catherington Down SSSI (calcareous grassland) is within 2Km of the site and also adjacent to one of the potential traffic routes. Although the scoping report includes this within Table 10.3 (Nationally Designated Sites), it does not appear to be included within the Scope of Assessment (Section 10.2).

Cable route - Denmead Meadows, East Hampshire
One of the options for the proposed route of the cable is through Denmead Meadows, which has been identified for its nature conservation value. The field is currently designated at county level due to the numbers and rich diversity of plant species present and last year it was submitted to Natural England for consideration for designation as a Site of Special Scientific Interest. This process is on-going and detailed consideration of this site will be required. It is understood that the applicant is exploring design options that would seek to avoid direct impacts to this area, either through directional drill methods or alternative routes. Natural England would welcome further consultation as the detailed design progresses to ensure impacts are avoided and enhancements secured.

Biodiversity Mitigation, Compensation and Enhancement
In order to secure appropriate biodiversity mitigation and enhancements Natural England recommends that the Environmental Statement is supported by a Biodiversity Mitigation and Enhancement Plan (BMEP). The BMEP should include measures for

mitigating impacts on protected species and habitats and include biodiversity compensation measures for any residual biodiversity losses that cannot be fully mitigated on site. This might include the provision of offsite replacement habitats, or an agreed financial contribution for biodiversity enhancements elsewhere calculated using a Biodiversity Compensation Framework, Environment Bank, or similar mechanism.

In the recent 25 Year Environment Plan, the Government has committed to making sure the existing requirements for net gain for biodiversity in national planning policy are strengthened and the current trend of biodiversity loss is halted. This approach is likely to be supported by the forthcoming planning policy guidance. Currently most developments still result in biodiversity loss. Natural England therefore advises that each development reverse this trend and deliver net gains in biodiversity.

Natural England strongly recommends that this proposal achieves a net gain for biodiversity and we advise that a biodiversity metric is used that would be relevant to each local authority. This approach would ensure that your authority will have met its duties under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 which states that 'Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

Where residual biodiversity losses are considered unavoidable, Natural England recommends that further advice on these aspects is sought through our Discretionary Advice Service (DAS). Further information on the DAS service and how to apply can be found here:
https://www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-

Arboriculture

An Arboricultural Implications Assessment would identify the impact of the development on existing trees and Crabdens Copse and identify suitable protection/mitigation. The ES should assess the implications for the cable routes between the converter station and Lovedean Substation in view of the trees that surround the Substation. Direct drilling should be used as opposed to works that may result in loss of any hedgerow/trees. A collaborative approach to tree protection during works is encouraged between parties.

Socio-economics

Agree with scope as set out in the EIA scoping report

Water Resources and Flood Risk

Groundwater
The Water Resources (chapter 12) and Ground Conditions (chapter 13) have been 'scoped in' to the EIA. This is because the two potential sites for the converter station, together with a section of cable, are located within the groundwater Source Protection Zone 1 (SPZ1) for Portsmouth Water's Bedhampton and Havant springs and Lovedean public water supplies. These supply drinking water to over 250,000 homes. As such, careful consideration must be given to the acceptability of any activity which has the

potential to impact groundwater quality in this area. We expect development and investigation proposals in the areas of greatest risk to be supported by detailed and site specific assessment to demonstrate that the risks to groundwater are acceptable. We expect such assessments to be included in the EIA.

In addition to the sites being located in SPZ1 they are also in an area where solution (karstic) features are prolific. Not only must the developer consider the geotechnical issues associated with these, they must also consider the increased risk to groundwater quality that they represent. Evidence available to us shows that pollutants entering these features can reach the springs rapidly with little opportunity for monitoring, attenuation or to be intercepted. We are also aware of concerns by Portsmouth Water regarding disturbance to the chalk (from, for example the installation of boreholes or piles) and the potential to cause turbidity and impact drinking water supplies. This must be considered in detail in the EIA (further detail below).

Section 3.10 of the report says that the EIA will discuss the main alternatives to the scheme. Two sites (options A and B) have been identified for the convertor stations. We would like to understand if these need to be located next to the existing National Grid Substation or if there are alternative and suitable locations which would move them outside of the SPZ1 and away from the area where Karst features have been identified. We would like to see this explained in the EIA.

The scoping document contains very limited information on the design of the convertor station and includes no information on the potential storage or use of hazardous substances or non-hazardous pollutants in the scheme (for example fuels and chemicals used in cables or in the convertor station or transformers). The EIA should include this information, provide an assessment of risks associated with the use and storage of these substances to groundwater and discuss how the risks to groundwater can be mitigated. Given the sensitively of groundwater in this area the EIA needs to include sufficient information to demonstrate that the risks are understood and that they can be mitigated. This information is needed to assess the appropriateness of any proposal or planning application

Chapter 12 does not specifically identify the need to discuss the potential for pollution from the proposed development in the EIA. This, along with the mitigation measures needed to protect groundwater should be included in the EIA.

Section 2.7.2 of the scoping report says that ‘prior to the start of construction, respective ground/local environment inspections and surveys will be carried out to determine the nature of the soil and immediate area. This information will provide suitable data for the design and construction of temporary and permanent works as appropriate to meet the technical specification, required regulations and consent conditions.’ As discussed above, solution features are known to be present in this area. The applicant should consider carrying out surveys of these features in determining the baseline conditions. The EIA will need to consider the implications of these features and identify how risks to groundwater will be mitigated.

Chapters 12 and 13 mention that as part of the establishing baseline conditions BGS mapping has been reviewed. In establishing the baseline conditions and developing the conceptual site model we recommend that the applicant reviews information published by the BGS on the Karst hydrogeology of the Bedhampton and Havant springs at http://www.bgs.ac.uk/research/groundwater/about/karstAquifers/bedhamptonHavantSprings.html. The scoping document fails to recognise that these features may be present at the site(s) and the potential risks associated with them.

The scoping report confirms that 'a detailed review of potential sources of contamination will be completed in the preliminary risk assessment'. We agree that this will be needed. A conceptual site model should be developed and included in the EIA document. Further information is available on the GOV.UK website. We would welcome the opportunity to discuss this with the applicant prior to developing the EIA.

As the site is in the SPZ1 for Portsmouth Water's Bedhampton and Havant Springs and Lovedean public water supplies, we would expect the developer to consult Portsmouth Water and seek confirmation that they are satisfied with the proposals.

Portsmouth Water comments:
13.1.1 The study must incorporate information on solution features and cavities due to potentially rapid transit times in the catchment posing a risk to Portsmouth Water's public drinking water supply.
13.1.2 The Ground Conditions chapter is proposed to include water quality therefore due the nature of the catchment being karstic in places the 250m study area is considered too narrow and should be extended to at least 500m.
13.1.14 The proposed route passes within SPZs for the Havant & Bedhampton Springs, the study must reflect this.
13.2.1 Sites of geological interest should include solution features.
13.2.6 The Conceptual Site Model (CSM) should also look at the development phase as well as legacy contamination and how mitigation measures can be deployed to prevent pollution occurring during the pre-development, during and operational phases.
Table 13.1 – Where Secondary A Aquifers overlie Principal Aquifers this should have a receptor assessment of High due to the potential connectivity of the aquifer and the presence of solution features. Secondary A and B Aquifers should lie in Moderate Risk and it is recommended that Unproductive Strata is present in Low Risk.
13.3.15 Operational sources of contamination should consider new preferential pathways and, if relevant, Oil filled cables?

Flood Risk
The proposed cable route through Portsmouth passes along sections of the North Portsea coastal defence scheme, which is being delivered by the East Solent Coastal Partnership (ESCP).

The EIA Scoping Report identifies that the proposed works will pass by phase 1 of this scheme (planning application 14/01387/FUL in Table 3.7) but does not identify the future phases of the scheme. The future phases of the scheme can be seen at http://www.escp.org.uk/coastal-schemes/portsmouth/protecting-future-north-portsea-island.

The EIA Scoping Report should be updated to include the future phases and, if they have not already been, the ESCP should be consulted.

12.1.1 The study area should encompass ground and surface water features within at least 1000m when reviewing baseline conditions. There are potential impacts on groundwater abstractions due to solution features and rapid transit times between proposed site and drinking water sources.

The proposed cable route has solution features present. These features contribute to a karstic environment with rapid transit times therefore pollution prevention is key. Consideration of the solution features must form part of the scope of work particularly in key areas i.e. close to the Lambeth Group and Chalk boundaries and Clay with Flints and Chalk boundaries.

12.1.37 The route of the cable lies on Superficial Geology overlying Bedrock and, in places, directly on Bedrock that is classified as Principal Aquifer. This must be reflected in the study along with karstic hydrogeology and solution features.

12.2.1 Surface-borne and subsurface pollutants should be considered in the study to account for legacy contamination derived from historic land use.

Fisheries and Biodiversity
We note from the report that the cable route may cross an 'unnamed watercourse' north of the B2150. We believe this water course to be the North Purbrook Stream, classified as a statutory watercourse. This watercourse is a known eel migratory route and is likely to have a resident fish population.

Currently the Scoping Report does not include potential effects on fish (including eels). The noise and vibration from HDD drilling activities in close proximity to a watercourse has the potential for adverse impact on these fish species as well as other aquatic ecology such as water voles and otters. Therefore this needs to be included in the EIA scoping report. There are other watercourses close to the cable route including Soake Farm, the Wallington and Hermitage statutory main rivers. It is unclear from the maps provided whether these watercourses and their ecology could be impacted by the proposed cable route. Clarification needs to be given on how close the proposed route is to these watercourses whether the cable route will impact ecology of these rivers also

The proposed technical approach is considered acceptable subject to the following comments being incorporated in the ES and catchment-specific characteristics are considered including concerns over increased turbidity, solution features, contamination pathways and impacts on groundwater. Specific comments from Portsmouth Water are detailed in light of the Groundwater Source Protection Zone. Comments are referenced using the Scoping Report's nomenclature for ease of reference.

General comments on groundwater and flood risk from Portsmouth Water

Source Protection Zones (SPZ) must be identified in any future reporting to ensure the appropriate level of risk is assigned to the risk assessments and design/operations.

2.5.5 What are the proposed cooling options at the convertor station, do they involve the use of oils?
2.5.7 Details of temporary laydown areas will be required, the applicant should ensure these are low permeability and that pollution prevention measures are in place prior to use such as spill kits and incident management systems.
2.5.14 Details of Horizontal Directional Drilling (HDD) locations and methodology will be required for approval prior to commencement to understand the pollution prevention methodologies employed to mitigate potential impacts on groundwater. The potential land contamination risks must be addressed prior to commencement.
2.5.19 Construction details of the proposed joint bays should be provided for approval.
2.6.2 The specification and location of all oil filled cables, existing and proposed, should be provided to understand the potential risks posed to groundwater in the catchment.
2.7.2 Environment Surveys and Inspections must include consideration of soils, potential contamination, geology, superficial cover, bedrock, hydrogeology, solution features, source protection zones and nearby abstractions.
2.7.9 Please provide details/method statement for trenchless techniques for the installation of cable ducts.
2.7.35 All imported soils material must be clean and inert and not pose a contaminant threat to the underlying aquifer.
2.9.1 The risk assessment must consider the risks posed to groundwater associated with leaving the cable in situ at the end of the cable's 40 year design life.
Table 3.1 Hydrological Receptors – Effects of and on solution features, aquifer, water quality including turbidity must be included.
3.11.2 The assessment must be designed to understand the potential for pathway creation through impacted soils and/or long-term spill and incident management if preferential pathways are created.

3.13.3 Portsmouth Water would like to guarantee consultation via the LPA.

5.3.17 Traffic routes should be directed away from Source Protection Zones where feasible to reduce risk of collision and/or spills during construction and operation.
18.3.20 We agree with and recommend the preparation of a Construction Environmental Management Plan (CEMP).

Ground conditions/contamination

Comments in respect of ground conditions should be read in conjunction with the above section on water resources. In addition the following issues raised by Portsmouth Water are relevant:
13.1.1 The study must incorporate information on solution features and cavities due to potentially rapid transit times in the catchment posing a risk to Portsmouth Water's public drinking water supply.
13.1.2 The Ground Conditions chapter is proposed to include water quality therefore due the nature of the catchment being karstic in places the 250m study area is considered too narrow and should be extended to at least 500m.
13.1.14 The proposed route passes within SPZs for the Havant & Bedhampton Springs, the study must reflect this.
13.2.1 Sites of geological interest should include solution features.
13.2.6 The Conceptual Site Model (CSM) should also look at the development phase as well as legacy contamination and how mitigation measures can be deployed to prevent

pollution occurring during the pre-development, during and operational phases. Table 13.1 – Where Secondary A Aquifers overlie Principal Aquifers this should have a receptor assessment of High due to the potential connectivity of the aquifer and the presence of solution features. Secondary A and B Aquifers should lie in Moderate Risk and it is recommended that Unproductive Strata is present in Low Risk.
13.3.15 Operational sources of contamination should consider new preferential pathways and, if relevant, Oil filled cables.

Appropriate attention is given to addressing potential contamination issues.

- Carbon and Climate Change – adequate scope
- Human Health - Information held by the Council's Environmental Protection (Contamination) Department suggests there are numerous small pits and areas of unknown filled ground within the development area. In addition there are a couple of minor pollution incidents noted and an historic well. It is not known whether there is any made ground or contamination associated with these features. The primary source of contamination within the development area is the site of the existing electricity sub-station.

Chapter 13 recognises a potential for contaminant linkages to exist within the study area and recommends a desk based assessment and preliminary risk assessment is undertaken. This will inform the need for any intrusive ground investigation. This Service supports this approach.

The risks from contamination are unlikely to compromise the viability of the development. The need for conditions to address contamination will be assessed once information supporting any future planning application has been reviewed.

- Soils and Land Use – adequate scope
- Electric and Magnetic Fields – adequate scope
- Waste and Material Resources – adequate scope

Conclusion

The Council has reviewed the topic areas and conclude that generally they adequately address the subject areas under which the development proposals may have significant environmental effects, subject to the above comments being addressed and incorporated into the EIA.