

Southampton to London Pipeline Project

Deadline 2

Response to the Examining Authority's First Written
Questions Turf Hill (TH)

Application Document: 8.6.11

Planning Inspectorate Reference Number: EN070005

Revision No. 1.0

November 2019



Southampton to London
Pipeline Project



Contents

1 Response to the Examining Authority’s Written Questions – Turf Hill (TH)..... 2

2 References 21

3 Figures..... 22

TH.1.11.1: Site Plan of Colony Bog and Bagshot Heath SSSI..... 22

1 Response to the Examining Authority's Written Questions – Turf Hill (TH)

Table 1.1: Applicant response to Question

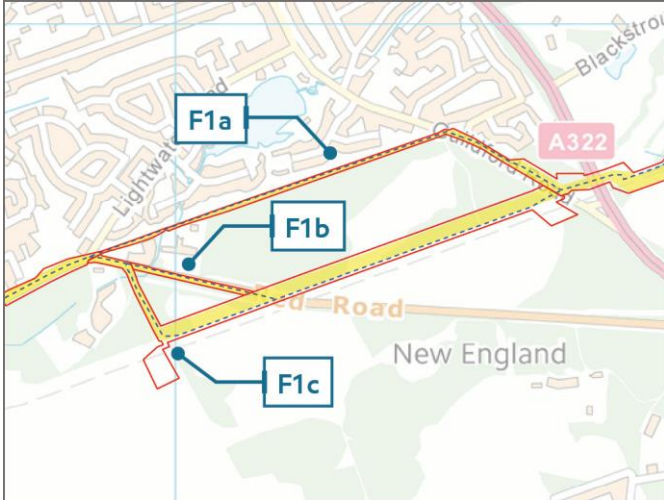
ExQ1	Question:	Applicant response to Question:
TH.1.1	Confirm the total number of trees to be removed during the construction of the proposed pipeline route at Turf Hill.	<p>1.1 The Applicant is not expecting to remove all trees within the Order Limits. The Applicant cannot yet confirm the number of trees that would need to be removed because the detailed construction planning necessary to determine the precise location of the replacement pipeline is not required to support the application for development consent. This is normally undertaken prior to construction and as part of the detailed design work on the eventual alignment of the pipeline. If the Applicant is granted development consent the pipeline could be installed anywhere within the limits of deviation. This flexibility is required in order to deal with unforeseen ground conditions and local features.</p> <p>1.2 The Applicant's aim is to avoid removing trees wherever practicable and, as stated in commitment G91 in ES Chapter 16 (Application Document APP-056), <i>'The contractor(s) would retain vegetation where practicable and in accordance with, as a minimum, the vegetation retention drawings'</i>. Further, article 41(2) of the draft Development Consent Order (Document Reference 3.1 (3)) would secure that <i>'In carrying out any activity authorised by paragraph (1), the undertaker must not cause unnecessary damage to any tree or shrub'</i>.</p> <p>1.3 In commitment NW22 in ES Chapter 16 the Applicant also states that <i>'Working width reduced to 15m to reduce impacts to woodland at Turf Hill over an approximate distance of 888m'</i>.</p> <p>1.4 In addition, commitment G88 in ES Chapter 16 states that <i>'Where possible, reinstatement of vegetation would generally be using the same or similar species to that removed (subject to restrictions for planting over and around pipeline easements'</i>. Further, commitment G97 in ES Chapter 16 sets out that <i>'Where woodland vegetation is lost and trees cannot be replaced due to the restrictions of pipeline easements, native shrub planting approved by Esso would be used as a replacement'</i>.</p>



ExQ1	Question:	Applicant response to Question:
TH.1.2	<p>A large number of RRs have expressed concern that the Applicant's decision to re-route the proposed pipeline in Turf Hill was done without adequate consultation and would result in the loss of a significant number of trees. Chapter 10 of the ES [APP-064] makes no reference to the effects of the loss of trees in this location.</p> <p>i) Explain how and where the landscape and visual effects of the loss of trees at Turf Hill Park have been assessed in the ES [APP-064].</p> <p>ii) If they have not been assessed, explain whether an absence of an assessment undermines the conclusions of the ES; or</p> <p>iii) If such assessment has been undertaken and</p>	<p>1.1 In answer to i), the assessment of the landscape effects of tree loss at Turf Hill is incorporated within the assessment of effects on the landscape character of 129: Thames Basin Heaths National Character Area (NCA) in paragraphs 10.5.50 to 10.5.56 of Environmental Statement (ES) Chapter 10 (Application Document APP-050).</p> <p>1.2 The effects of tree loss at Turf Hill are considered in more detail within the assessment of the landscape effects on open access land within paragraphs 10.5.103 to 10.5.104 of ES Chapter 10 (Application Document APP-050). During construction, a commitment to reduced working width at Turf Hill (NW22), as set out within Table A1 of the Code of Construction Practice (CoCP) (Document Reference 6.4 Appendix 16.1 (2)), would reduce the loss of trees. The effects on landscape character during construction have not been assessed as significant, in part because tree loss would largely be limited to a narrow strip of trees within the wider well treed area of open access land at Turf Hill, and the overall character of woodland and heathland mosaic would be maintained.</p> <p>1.3 Post construction, vegetation would be reinstated in accordance with commitment G88 which states that '<i>where possible, reinstatement of vegetation would generally be using the same or similar species to that removed (subject to restrictions for planting over and around pipeline easements)</i>.' ES Chapter 10 (Application Document APP-050) concludes that the potential magnitude of impact and significance of effect would be negligible.</p> <p>1.4 Visual effects within ES Chapter 10 (Application Document APP-050) have been assessed using Representative Viewpoints. This is a proportionate approach which is supported by the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3) (Landscape Institute and Institute of Environmental Management and Assessment, 2013). Paragraph 6.21 of GLVIA3 states '<i>It is not possible to give specific guidance on the appropriate number of viewpoints since this depends on the context, the nature of the proposal and the range and location of visual receptors. The emphasis must always be on proportionality in relation to the scale and nature of the development and its likely significant effects, and on agreement with the competent authority and consultation bodies</i>'.</p>



ExQ1	Question:	Applicant response to Question:
	not provided, submit it into the Examination.	<p>1.5 In accordance with GLVIA3, Surrey Heath Borough Council and Surrey County Council were contacted regarding the selection of proposed Representative Viewpoints. However, no comments on the selection were received from either authority and no request for a Representative Viewpoint at Turf Hill was made during the pre-application discussions.</p> <p>1.6 ES Chapter 10 (Application Document APP-050) does not therefore include a Representative Viewpoint at Turf Hill. However, based on the assessment of landscape effects outlined above, it is not considered that tree loss during construction and post construction in both years 1 and 15 would result in significant visual effects.</p> <p>1.7 In answer to ii) and iii), as outlined in i) the information is provided in the ES.</p>
TH.1.3	<p>A large number of RRs have raised concerns that the route for the Proposed Development across the area of bridleway at Turf Hill was done so at the last moment and without consultation with local residents. The Applicant states that the route changed as a result of the need to avoid sand lizard populations on the original proposed route.</p> <p>When the sand lizards became an issue, explain whether other route locations were considered</p>	<p>1.1 The Applicant does not accept that the route of the replacement pipeline through the Turf Hill area was decided at the last minute. The project followed a structured consultation and design evolution process, which informed the identification of the route. Furthermore, the presence of sand lizards was not the sole driver for this change.</p> <p>1.2 As part of the Design Refinements Consultation in January 2019 the Applicant released the outcome of the sub-option selection at Turf Hill and wrote to all affected landowners to confirm if they were on a selected or deselected sub-option. The selection was also published in the Design Refinements Consultation Brochure, on the project website and e-newsletter that people have signed up to on the project website.</p> <p>1.3 Once the Applicant completed the Design Refinements Consultation and selected the final 97km route, the Applicant sent a booklet to all properties within 50m of the Order Limits of the project. The Applicant also d its website and sent an e-newsletter to subscribers. For more detail please refer to Section 9 of the Applicant's Responses to Relevant Representations (REP1-003).</p> <p>1.4 The environmental constraints in this area of the replacement pipeline route are complex. The selected route reduces the impact of the project on the defining features of the SSSI, SPA and Special Area of Conservation (SAC) in line with the NPS EN-1 Part 5 Section 5.3 and the nature conservation objectives in the Surrey Heath adopted Management Plan for Turf Hill which states:</p>

ExQ1	Question:	Applicant response to Question:
	<p>to avoid use of the bridleway.</p> <p>N.B – There is overlap between this question and TH.1.7 you may therefore wish to provide a combined response to both questions.</p>	<p><i>‘To protect, create and maintain a diverse community structure of all the natural habitat types, but taking particular account of the heathland habitat for which the site was designated an S.S.S.I.’</i> In addition, the Management Plan for Turf Hill identifies <i>‘In compartment 7 retain mature trees whilst removing 75% of the saplings and scrub in order to encourage the development of a heathy understorey’</i>. The trees in this area are coniferous (pine) plantation woodland.</p> <p>1.5 To aid understanding of the respective route options which were presented at statutory consultation and how these relate to one another, Illustration 1.1 is an extract from the Statutory Consultation Brochure.</p> <p>Illustration 1.1 Extract from Statutory Consultation Brochure</p>  <p>1.6 The route of Options F1b and F1c is predominantly designated as primary habitat and the Applicant has sought a less impactful route between the Maultway and Guildford Road. A route to the north would pass through a heavily built up residential area. To plan a northern route through the Lightwater Area would therefore impact significantly on local residents, the route would involve additional streetworks in local roads and therefore increase traffic disruption. A route further to</p>



ExQ1	Question:	Applicant response to Question:
		<p>the south of the existing pipeline would have a greater impact on the Thames Basin Heath SPA and priority habitats. In addition, a southern route would also require additional street works in Red Road, a heavily trafficked commuter route between Frimley Green, Lightwater and the strategic road network of the M3. Therefore, when reviewing route options, the Applicant did not consider a route to the south of the existing pipeline. During the early corridor and route selection feasibility work, the Applicant adopted guiding principles to identify potential corridors and routes for the proposed replacement pipeline. This early work included consideration of potential alternatives to the north and the south of the selected route, however these alternatives did not meet the guiding principles and were de-selected on that basis.</p> <p>1.7 The final route selected and proposed in the application has been endorsed by Natural England (NE) as confirmed by its additional submission (Additional Submission AS-030) . NE is also in agreement that this application should be able to continue without harm to any key designations or species. Whilst significant weight has been given to the presence of protected species, this is proportionate and in accordance with relevant policy.</p> <p>1.8 A Statement of Common Ground (SoCG) has been signed between the Applicant and Natural England in October 2019. This was submitted to the examination as part of the Applicant's Deadline 1 submission (REP1-005). The SoCG confirms that Natural England is satisfied with all aspects of the project that fall within its remit.</p>
TH.1.4	<p>i) Explain whether trenchless techniques were considered for construction of the Proposed Development at Turf Hill.</p> <p>ii) Explain why they were discounted.</p>	<p>1.1 In response to (i) and (ii), trenchless techniques were not considered for installation of the replacement pipeline at Turf Hill.</p> <p>1.2 In response to (iii), in this location the trenchless construction technique would require construction equipment access at either end of the trenchless section and there would have to be some additional tree loss in order to create the access for the trenchless construction equipment. The trenchless construction technique that could be utilised for the length of the Turf Hill area of the route would be horizontal directional drilling. This technique requires a stringing area that is straight or of a constant radius of curvature. Clearing space for such stringing areas in Turf Hill would take away the project's ability to navigate working areas around select trees. This is possible</p>

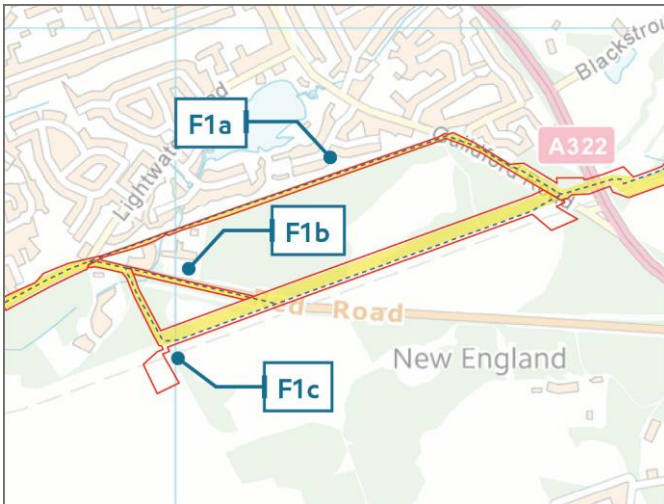
ExQ1	Question:	Applicant response to Question:
	iii) Consider trenchless techniques for the said area given the effect of tree loss.	<p>when narrow open cut trench installation techniques are used. Given that the likely extent of tree loss is similar to the amount of tree loss that would result from the proposed narrow working technique, the Applicant sees no appreciable benefit in utilising trenchless construction techniques through Turf Hill, particularly as this would also remove the flexibility to navigate around and therefore preserve specific trees.</p> <p>1.3 However, the Applicant does not anticipate a large amount of tree loss since the Applicant has committed to employing narrow working techniques to install the pipeline through this area through commitment NW22 of the Register of Environmental Actions and Commitments (REAC) in Environmental Statement (ES) Chapter 16 (Application Document APP-056): <i>'working width reduced to 15m to reduce impacts to woodland at Turf Hill over an approximate distance of 888m'</i>. This commitment would be secured via DCO Requirement 5.</p>
TH.1.5	Paragraph 13.3.10 of the Planning Statement [APP-132] states that the proposed route utilises a track along the southern edge of the housing area in Coleville Gardens and Herons Court to "avoid particularly sensitive protected habitat alongside the existing pipeline" with the route refinement shown in Illustration 13.3. Paragraph 13.7.11 and Appendix 7.10 of the Consultation Report [APP-	<p>1.1 Paragraphs 2.19.7-2.19.10 of NPS EN-4 set out the approach to be taken in route selection for NSIPs that are oil and gas pipelines. The Applicant has followed this approach. Specific mention is made of the importance of consultation regarding relevant environmentally sensitive areas with the relevant conservation body. Route selection is discussed in detail within the ES Chapter 4 (Design Evolution) (Application Document APP-044).</p> <p>1.2 Turf Hill is a unit within the nationally designated Colony Bog and Bagshot Heath Site of Special Scientific Interest (SSSI), which in turn forms part of the internationally designated Thames Basin Heaths Special Protection Area (SPA). (Figure 9.15 in Habitats Regulations Assessment Report, Qualifying Habitats (Application Document APP-130 and APP-131)). It provides habitat for a number of protected species, notably the European protected sand lizards and ground nesting birds.</p> <p>1.3 The project has met with specialists from Natural England, the Surrey Heath Greenspace Officer and Surrey Amphibian and Reptile Group (SARG) regarding the sand lizards and ground nesting birds. Meetings and the discussion points are detailed below:</p> <ul style="list-style-type: none"> meeting with Natural England relating to reptiles held on 20 September 2018



ExQ1	Question:	Applicant response to Question:
	<p>038] also provide an outline of how the proposed route was chosen.</p> <p>Explain why alternatives to these routes were rejected.</p>	<ul style="list-style-type: none"> ➤ discussion points – Project introduction, possible construction impacts on sand lizards, possible mitigation measures, great crested newt survey strategy; • meeting with Surrey Heath Greenspace Officer held on 26 September 2018 ➤ discussion points – site visit walk over proposed routes and sub-options, impacts on heath land habitats, reptiles and trees, reinstatement and potential for enhancement; and • meeting with Natural England relating to reptiles: Colony Bog and Bagshot Heath SSSI, and Bourley and Long Valley SSSIs, held on 18 and 19 October 2018 ➤ discussion points – site visit with reptile specialist – reptile ecology within SSSIs and possible mitigation measures. <p>1.4 The environmental constraints in this area of the replacement pipeline route are complex. The selected route reduces the impact of the project on the defining features of the SSSI, SPA and SAC (Special Area of Conservation) in line with the NPS EN-1 Part 5 Section 3 and the nature conservation objectives in the Surrey Heath adopted Management Plan for Turf Hill which states: <i>'To protect, create and maintain a diverse community structure of all the natural habitat types, but taking particular account of the heathland habitat for which the site was designated an S.S.S.I.'</i> In addition, the Management Plan for Turf Hill identifies <i>'In compartment 7 retain mature trees whilst removing 75% of the saplings and scrub in order to encourage the development of a heathy understorey'</i>. The trees in this area are coniferous (pine) plantation woodland.</p> <p>1.5 The Applicant has confirmed that the open heathland area along the existing pipeline (F1b and F1c) is a primary habitat for the protected species including ground nesting birds and sand lizards (one of the rarest UK reptiles), while the wooded edge of Turf Hill (F1a) is sub-optimal habitat. This is evidenced at ES Appendix 7.8 - Bird Factual Report, Table 3.1: Statutory and Non-Statutory Designated Sites within 1km of the Order Limits which have Notable Bird Species as a qualifying feature of notified interest (Application Document APP-090). The habitat within Turf Hill with high reptile potential is shown within the ES Appendix 7.11 - Reptile Factual Report, Figure</p>



ExQ1	Question:	Applicant response to Question:
		<p>A7.11.2 Sheet 2 of 3 (Application Document APP-092). This plan also shows the location of the SARG records.</p> <p>1.6 The route of F1b and F1c is predominantly designated as primary habitat and the Applicant has sought a less impactful route between the Maultway and Guildford Road. A route further to the south of the existing pipeline would have greater impact on the Thames Basin Heath SPA and priority habitats. In addition, a southern route would also require additional street works in Red Road a heavily trafficked commuter route between Frimley Green, Lightwater and the strategic road network of the M3. Therefore, when reviewing route options, the Applicant did not consider a route to the south of the existing pipeline.</p> <p>1.7 The proposed route reduces the potential for damage to habitat used by protected species, i.e. adders, sand lizards and SPA birds, although some trees along the bridleway to the rear of Colville Gardens and Heronscourt which may have bat potential would need to be removed. The alternative option F1c is within optimal sand lizard habitat and this is considered to be of greater ecological importance. The proposed route does not impact on European Dry Heath and Northern Atlantic Wet Heath. The wet heath is particularly difficult to reinstate post construction.</p> <p>1.8 The proposed route avoids disturbing nesting SPA birds. In open heath, the established mitigation option is to construct outside the nesting season in the first summer within the construction window, and to work between October and January in the second winter. However, the sand lizard hibernation period is August to March and any disruption to their hibernation results in a high risk of mortality.</p> <p>1.9 The Applicant has had to balance the impact on the very sensitive designated sites and protected species on the one hand, with the impact of removing some trees with potential for bat habitat and the impact of construction on local residents. The constructability and the ecological impacts have been carefully balanced, and this has guided the routing of the proposed replacement pipeline and lead to the selection of the F1a/F1b hybrid route.</p> <p>1.10 At the first statutory consultation, the Applicant consulted on three sub-options in the Turf Hill area, which reflected the complexity of the conflicting constraints. These were:</p>

ExQ1	Question:	Applicant response to Question:
		<ul style="list-style-type: none"> the F1a sub-option crossed Red Road (B311) at the junction with Lightwater Road and followed an existing track to Guildford Road; the F1b sub-option followed Red Road and re-joined the existing pipeline route and followed it to Guildford Road; and the F1c sub-option followed the existing MOD track to re-join the existing pipeline route and followed it to Guildford Road. <p>1.11 The illustration below is an extract from the Preferred Route Consultation brochure - page 44 - published in September 2018 (Appendix 5.1 of the Consultation Report (<u>Additional Submission AS-012</u>)). No primacy was given to any of the sub-options over any other. Thus, despite more closely following the existing pipeline, sub-options F1b or F1c were not presented as being preferred or favoured over F1a. In other areas the Applicant stated a preference, for example, at Chobham Common, for sub-option F2a over F2b – see page 45 of the consultation brochure.</p> <p>Illustration 1.1 Extract from Statutory Consultation Brochure</p> 



ExQ1	Question:	Applicant response to Question:
		<p>1.12 The consultation respondents from the Preferred Route Consultation in September/October 2018 raised the following themes:</p> <ul style="list-style-type: none"> • F1a would lead to the removal of trees; • F1a followed a well-used footpath that, at the westerly end near Red Road, is very narrow; • F1b used Red Road, which is very busy and would likely have significant traffic impacts; • F1c would affect sensitive wet heathland habitats and protected species including reptiles and amphibians; • F1c would route through a Biodiversity Opportunity Area where habitats can be created; • F1c would have less visual impact on local residents and from Red Road; and • All options would impact Public Rights of Way in Turf Hill. <p>1.13 Issues raised by consultees in relation to the proposed sub-options at Turf Hill are set out in The Consultation Report, Chapter 5 paragraph 5.20.2 pages 180-182 (Additional Submission AS-013).</p> <p>1.14 The Applicant continued its environmental research during the statutory consultation period and received information from the Surrey Amphibian Research Group (SARG) that there is primary habitat for sand lizards along the F1b and F1c sub-options. This is reported in the Environmental Statement (ES) in Appendix 7.11 Reptile Factual Report (Application Document APP-092). This was new information and contributed to the route selection in this area.</p> <p>1.15 The Applicant applied a set of guiding principles throughout each stage of the project and has continued to apply them when refining the route. These principles were clearly set out in the consultation information, on the project website www.slpproject.co.uk and repeated in the ES Chapter 4 paragraph 4.4.10 (Application Document APP-044). These principles are expressed as follows:</p> <p>1.16 Any route was considered as having an advantage over other feasible alternatives if it:</p>



ExQ1	Question:	Applicant response to Question:
		<ul style="list-style-type: none"> • would benefit from existing equipment (infrastructure) and relationships with landowners; • would be likely to have better environmental outcomes versus the other options considered, especially relating to internationally and nationally important features along the final route; • would provide social and economic outcomes of greater benefit compared to the other corridors; • would pass through less complex or built-up areas (where possible); • would achieve compliance with relevant National Policy Statements; and • could be installed in a timely and realistic manner at reasonable cost. <p>1.17 Following the outcome of the statutory consultation, the Applicant considered carefully the issues identified and raised at consultation. Through a multi-disciplinary process, an assessment was made of the various options. As part of the consideration of the options concern was raised about the western part of route F1a given the narrowness of the track and other constraints in that area and it was determined that the route should start along F1b, which had also been the subject of consultation, joining back onto F1a by utilising an existing track. Building within a road is considered to be complex and the project was keen to minimise work in Red Road as traffic impacts were raised in consultation feedback.</p> <p>1.18 In balancing all the issues to determine the final selected route, significant weight was attached to the second guiding principle as option F1a would be likely to have better environmental outcomes versus the other options considered, especially relating to internationally and nationally important features along the final route. This was specifically in regard to the seasonal constraints around the ground nesting birds and the location of the primary habitat of the sand lizards. Other environmental issues such as construction noise and tree loss were considered, but these did not outweigh the weight given to the internationally protected species and their primary habitat. In weighing environmental matters, the view was taken that the highest form of environmental mitigation is avoidance. As there is an alternative viable route that avoids the protected species</p>



ExQ1	Question:	Applicant response to Question:
		<p>and their primary habitat, it is appropriate to select the alternative route when all other criteria are balanced.</p> <p>1.19 The final route selected and proposed in the application has been accepted by Natural England as confirmed by their Formal Response to the application. They are also in agreement that this application should be able to continue without harm to any key designations or species. See Natural England's submission dated 26 July 2019 (Additional Submission AS-030). Whilst significant weight has been given to the presence of these protected species, this is proportionate and in accordance with relevant policy.</p>
TH.1.6	<p>Paragraphs 7.3.127 to 7.3.131 of the ES [APP-047] address rare reptiles and specifically the sand lizard. Desk studies indicate that the sand lizard is present at Chobham Common SSSI/National Nature Reserve (NNR) and Colony Bog and Bagshot Heath SSSI, specifically Unit 5 of the SSSI known as Turf Hill. It is stated that the route passes through the Turf Hill unit of the SSSI, although the habitats within the Order Limits are unsuitable for the species as they are</p>	<p>1.1 In answer to i), the justification for survey methodology regarding common and rare reptile species is provided in para 2.3.1 of Environmental Statement (ES) Appendix 7.11 (Application Document APP-092).</p> <p>1.2 Following a review of extensive desktop surveys, detailed habitat mapping of Turf Hill was undertaken and is provided in the Phase 1 Habitats and Botany Report (Application Documents APP-080 and APP-081), specifically Priority habitats in Figure A7.1.146 (Sheet 4 of 4) and Phase 1 Habitats in A7.1.147 (Sheet 4 of 4). Subsequent reptile habitat suitability mapping on heathland sites (including of Turf Hill) was also undertaken and is recorded in ES Appendix 7.11 (Application Document APP-092). This information shows that suitable habitat for rare reptiles is not present within the Order Limits for the selected route option at Turf Hill. It is for this reason that no field surveys were undertaken in respect of rare reptiles.</p> <p>1.3 The Statement of Common Ground between the Applicant and Natural England (REP1-005) states '<i>That the scope and methods of the ecological surveys are appropriate</i>'.</p> <p>1.4 In answer to ii), as Turf Hill is already well surveyed for reptiles and its habitats were surveyed in detail, it is very unlikely that field surveys would have provided additional information that would have affected the conclusions of the assessment at this location.</p>



ExQ1	Question:	Applicant response to Question:
	<p>dominated by plantation Scots pine.</p> <p>i) Clarify why no field surveys were undertaken in respect of rare reptiles, when surveys were undertaken of common reptiles.</p> <p>ii) Explain whether field surveys would have helped to establish how far the species extended.</p>	
TH.1.7	<p>Paragraph 7.5.196 of the ES [APP-047] states that “vegetation clearance would be required in advance of construction works...to facilitate the movement of construction plant and to displace wildlife from the working area (e.g. reptiles)”.</p> <p>Explain why it would not be possible to relocate sand lizards in the vicinity of Turf Hill to another location.</p>	<p>1.1 The Applicant does not contend that it would not be possible to relocate sand lizards in the vicinity of Turf Hill to another location and this did not form an integral part of the balancing exercise undertaken by the Applicant in alighting upon the chosen route. Rather, the Applicant took the view that, in weighing environmental matters as part of the route selection process, the highest form of environmental mitigation would be to avoid a route which impacted directly upon optimal habitat for sand lizard.</p> <p>1.2 As there is an alternative viable route that avoids these protected species and their primary habitat, it was appropriate to select the alternative route (the F1a / F1b hybrid) when all other criteria were considered. Further details regarding the planning balance exercise which was undertaken by the Applicant and how this informed route selection, is set out at Chapter 9 (Turf Hill) of the Applicant's Responses to Relevant Representations (REP1-003).</p> <p>1.3 It is also relevant to note that, the Applicant does not believe that the use of vegetation clearance (habitat manipulation) to displace sand lizards in areas of hibernation and breeding habitat would be unacceptable to Natural England and this has been highlighted in the Draft Rare Reptiles EPS Licence Application. Therefore in order to relocate sand lizards, large areas of fencing in spring</p>



ExQ1	Question:	Applicant response to Question:
	N.B – There is overlap between this question and TH.1.3 you may therefore wish to provide a combined response to both questions.	<p>and summer across the publicly open area of Turf Hill would be necessary to trap and translocate individual sand lizards if Option F1c were to be pursued. This would not only be problematic for local people using the area for recreation but would also be inconsistent with the safeguarding necessary to protect the qualifying bird species of the Thames Basin Heaths SPA which are present in the same area.</p> <p>1.4 Accordingly, the Applicant considers that there is a clear and valid justification for the selection of the route proposed in the application.</p>
TH.1.8	<p>Numerous RRs relating to the Turf Hill area of Lightwater refer to advice in a report from NE that resulted in the need to re-route the Proposed Development due to the presence of sand lizards.</p> <p>The Applicant and NE are required to provide a copy of any advice from NE which led to the identification of proposed route, being a combination of options F1a and F1b, as outlined in Appendix 7.10 of the Consultation Report [APP-038].</p>	<p>1.1 Although a number of relevant representations refer to a report, this represents a misunderstanding of the position. There is no one single report but a series of engagement between the Applicant, Natural England and local authority officers which informed the identification of the proposed route at Turf Hill.</p> <p>1.2 A series of meetings, including site visits, between Jacobs ecologists, acting on behalf of the Applicant, and Natural England, led to the proposed route as detailed in the application for development consent. The Statement of Common Ground (SoCG) between the Applicant and Natural England (REP1-005) contains details of these meetings, and the following text summarises matters discussed.</p> <p>1.3 A site meeting at Turf Hill, attended by Jacobs ecologists on behalf of the Applicant, Natural England and Surrey Wildlife Trust, was held on 24 July 2018. A general view on the avoidance of sensitive and valuable biodiversity resources was agreed. The northern route alignment (i.e. F1a, the proposed route) was walked. It was agreed by all that trees were the main constraint on this route (rather than heathland). The Natural England representative stated that the northern alignment would be unlikely to adversely affect the Site of Special Scientific Interest (SSSI) or Special Protection Area (SPA) birds. Conversely, the central route option through Turf Hill (Option F1c) would require scrub removal along paths which would encourage people into the heaths, damaging the habitat and disturbing SPA bird species.</p> <p>1.4 A subsequent site meeting at Turf Hill, attended by Jacobs ecologists on behalf of the Applicant and the Greenspace Officer for Surrey Heath Borough Council (SHBC), was held on 26</p>



ExQ1	Question:	Applicant response to Question:
		<p>September 2018. The proposed route around the northern boundary of the SSSI (Option F1a) was walked. It was agreed that, compared to the option that went through the centre of Turf Hill (Option F1c), the selected route option (F1a and F1b combined)) reduced damage and disturbance to the heathland. Based on the Applicant's desktop studies and initial phase 1 habitat survey, this heathland habitat was identified to support sand lizard.</p> <p>1.5 In addition, during the September meeting, the Surrey Heath Borough Council officer acknowledged that there would likely be an impact to trees along F1a and F1b combined, but felling of these trees would reduce a major source of seed that contributes to the encroachment of scrub onto the heath (to the detriment of the habitat and thus sand lizard). Concerns on potential impacts to wet heath habitats in relation to the option through the centre of Turf Hill were also raised.</p> <p>1.6 On 18/19 October 2018, a Natural England sand lizard specialist and Jacobs ecologist on behalf of the Applicant undertook a detailed habitat mapping exercise in Turf Hill. The results are provided in Figure A7.11.2 Sheet 2 of 3 in Environmental Statement (Volume D) Appendix 7.11 (Application Document APP-092), showing 'red' for the entirety of the central route option through Turf Hill (F1c), which indicate high potential to support important populations of reptiles. This was not recorded along the northern route (F1a).</p> <p>1.7 The design changes at Turf Hill were discussed at a meeting on 29 January 2019. Natural England <i>'fully supported the design change'</i> and were <i>'pleased that the route avoids...Turf Hill'</i>.</p> <p>1.8 A comprehensive review of the route selection at Turf Hill is also provided in the Responses to Relevant Representations document (REP1-003), specifically paragraphs 9.3.25 to 9.3.35. In summary, the final route selected and proposed in the application has been accepted by Natural England as confirmed by their formal response to the application (Additional Submission AS-030). They are also in agreement that this application should be able to continue without harm to any key designations or species, as evidenced within the SoCG (REP1-005). Whilst significant weight has been given to the presence of these protected species, this is proportionate and in accordance with relevant national policy.</p>



ExQ1	Question:	Applicant response to Question:
TH.1.9	<p>In Chapter 7 of the ES [APP-047] there is a reference in Table 7.6 to meetings on 18-19 October 2018 with NE to discuss, among other sites, the Colony Bog and Bagshot Heath SSSI and Turf Hill.</p> <p>Explain why there is no reference to this further advice in the additional submission [AS- 030] provided to the Examination, dated 26 July 2019.</p>	<p>1.1 Additional submission AS-030 was made by Natural England. The Applicant therefore defers to Natural England regarding the content of this submission.</p> <p>1.2 However, the Statement of Common Ground between the Applicant and Natural England (REP1-005) lists the site meetings undertaken on 18 and 19 October 2018 in Section 2.1 - Pre-application Engagement and Consultation.</p>
TH.1.11	<p>Figure A7.1.145 [APP-081] is a site plan of the Colony Bog and Bagshot Heath SSSI.</p> <p>Reproduce the Figure showing the boundaries of the subsites, and in particular the Turf Hill subsite, more clearly.</p>	<p>1.1 Figure A7.1.145 in the Phase 1 Habitats and Botany Report (Application Document APP-081) shows an overall map of Colony Bog and Bagshot Heath SSSI. The Turf Hill subsite is labelled. Subsequent figures provide zoomed in detail of Turf Hill, with its subsite boundary: Figure A7.1.146 Sheet 4 of 4 and Figure A7.1.147 Sheet 4 of 4. However, in answer to the question, the Applicant has produced a site plan of Colony Bog and Bagshot Heath SSSI showing the boundaries of the subsites (Figure TH.1.11.1).</p>



ExQ1	Question:	Applicant response to Question:
TH.1.12	<p>Numerous RRs have mentioned the presence of bats in the trees that would need to be removed to enable the route in the Turf Hill/Lightwater area.</p> <p>i) Given the late change in the route, explain whether any bat surveys were undertaken for this area.</p> <p>ii) If so, provide a copy or signpost where in the application documentation that this information can be found.</p>	<p>1.1 In answer to i), the Applicant does not agree that this was a late change in the route. Please refer to section 9 of the Applicant's themed response to the Relevant Representations on Turf Hill (REP1-003) regarding how the route in this area was consulted upon.</p> <p>1.2 As stated in paragraph 2.3.3 in Environmental Statement (ES) Appendix 7.7 (Application Document APP-087), all trees within 10m of the Order Limits were subject to preliminary ground level tree roost assessments, where land access permitted.</p> <p>1.3 In answer to ii), the results of the bat survey of trees in the Turf Hill/Lightwater area are shown in Figure A7.7.2, Sheet 25 of 35 of ES Appendix 7.7 (Application Document APP-089).</p>
TH.1.13	<p>Numerous RRs relating to the Turf Hill area of Lightwater refer to an existing flooding problem in the area and the possibility of flooding occurring as a result of the removal of trees along the bridleway to the rear of Coleville Gardens and Herons Court.</p>	<p>1.1 In answer to i), the available flood risk information for the Turf Hill area of Lightwater shows that the properties along Coleville Gardens and Herons Court are not at risk of flooding from fluvial sources and are located with the Environment Agency's Flood Zone 1.</p> <p>1.2 The Risk of Flooding for Surface Water mapping shows that Coleville Gardens is at risk of flooding from surface water. This mapping shows flood risk associated with a watercourse that flows from the south via a culvert beneath Red Road towards the western end of Coleville Gardens. The watercourse is joined by another watercourse that flows towards Coleville Gardens from the northwest and beneath Lightwater Road. After the confluence of these watercourses, the single watercourse flows into the small lake located to the north of Coleville Gardens and Herons Court. This flood risk mapping does not indicate that any of this flood risk is as a result of runoff from the</p>



ExQ1	Question:	Applicant response to Question:
	<p>i) Confirm whether there are known flooding problems in this area and if so, provide details.</p> <p>ii) Reference where the removal of trees in this area has been assessed in the FRA and demonstrate what the impact of their removal would be on adjoining residential properties.</p>	<p>Turf Hill open access land to the south of the properties on the southern side of Coleville Gardens and Herons Court where the Order Limits are located.</p> <p>1.3 In answer to ii), the Applicant cannot yet confirm the exact number of trees that may need to be removed. This is because the detailed construction planning necessary to determine the precise location of the replacement pipeline is not required to support the application. However, for the purposes of the application, the assessment has assumed a worst case of all trees within the Order Limits being removed (paragraph 10.5.1 of Environmental Statement Chapter 10 (Application Document APP-050)).</p> <p>1.4 The best practice guidance for assessing surface water runoff for new development is Rainfall Runoff Management for Developments (Environment Agency, 2013). The guidance sets out how to assess changes in surface water runoff rates for Flood Risk Assessments. Greenfield runoff rates are compared to post development runoff rates (based on changes in the area of impermeable ground due to a development). Calculation of runoff rates does not consider different vegetation types.</p> <p>1.5 In the case of Turf Hill, removal of trees would not change the nature of the ground surface, and the ground would remain permeable. Therefore, using the best practice approach for surface water drainage assessments, there would be no change in surface water runoff rates as a result of the removal of the trees.</p>
TH.1.14	<p>i) Confirm the environmental effects from the route change at Turf Hill have been assessed in the ES.</p> <p>ii) If they have, signpost where this assessment can be found; or</p>	<p>1.1 In answer to i), the Order Limits submitted on the plans supporting the Development Consent Order (DCO) form the basis of the assumptions assessed within the Environmental Statement (ES). Therefore, the effects of the route at Turf Hill have been assessed in the ES.</p> <p>1.2 In answer to ii), the potential impacts of the pipeline at Turf Hill are assessed for biodiversity in ES Chapter 7 Biodiversity (Application Document APP-047), in relation to Unit 5 of the Colony Bog and Bagshot Heath Site of Special Scientific Interest (SSSI) (which in turn forms part of the internationally designated Thames Basin Heaths Special Protection Area (SPA) and the Thursley, Ash, Pirbright and Chobham Special Area of Conservation (SAC)) in ES paragraphs 7.5.182 to</p>



ExQ1	Question:	Applicant response to Question:
	iii) If not, provide the assessment and indicate whether this affects the conclusions of significant effects in the ES.	<p>7.5.264, in relation to lowland heathland habitats in ES paragraphs 7.5.599 to 7.5.605, and in relation to rare reptiles in ES paragraphs 7.5.774 to 7.5.792.</p> <p>1.3 The bird and reptile interest at Turf Hill are presented in ES Appendix 7.8 Bird Factual Report (Application Document APP-090) and ES Appendix 7.11 Reptile Factual Report (Application Document APP-092).</p> <p>1.4 Potential impacts of the pipeline route at Turf Hill are assessed for landscape and visual impacts in ES Chapter 10 Landscape and Visual (Application Document APP-050) in relation to tree cover in paragraphs 10.5.50 to 10.5.56, in relation to impacts on Open Access Land in 10.5.103 to 10.5.104 and in relation to Potential Impacts on Landscape Designations arising from Pipeline Installation in Table 10.15.</p> <p>1.5 The effects of the pipeline on Turf Hill area within the Thames Basin Heaths SPA and the Thursley, Ash, Pirbright and Chobham SAC are assessed in the Habitats Regulations Assessment Report (Application Document APP-130 and APP-131), including within Appendix G, paragraphs 1.2.7 to 1.2.35.</p> <p>1.6 A further discussion of the impacts of the replacement pipeline at Turf Hill is provided in the Relevant Representation response on this issue.</p> <p>1.7 Therefore part iii) of the question is not applicable.</p>



2 References

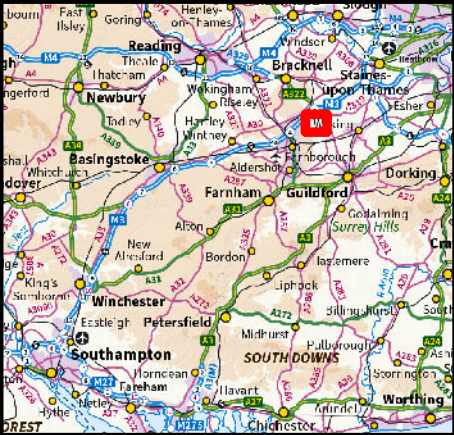
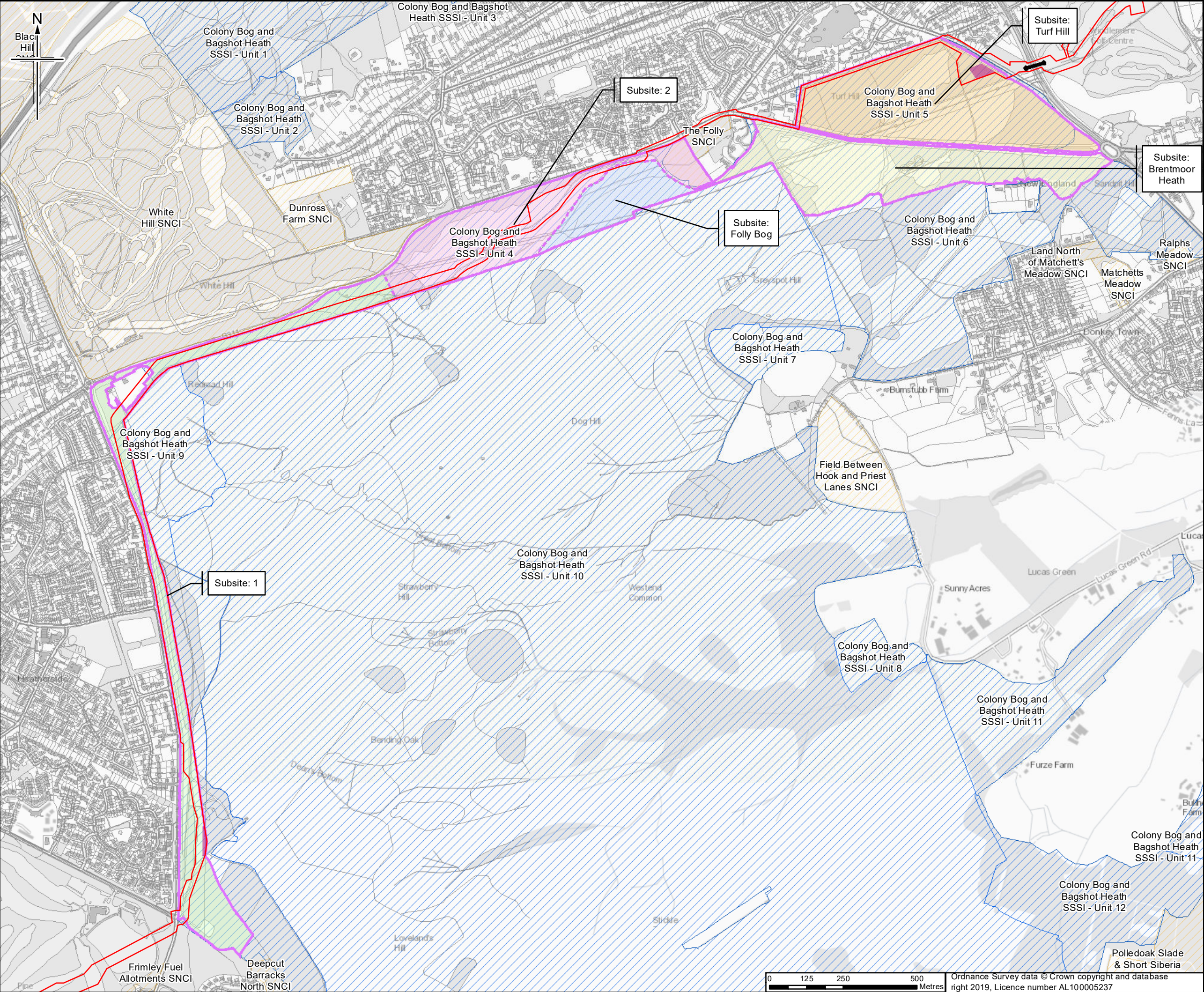
Landscape Institute and Institute of Environmental Management and Assessment (2013). Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3). London: Routledge.

Environment Agency (2013). Rainfall Runoff Management for Developments. Bristol: Environment Agency.



3 Figures

TH.1.11.1: Site Plan of Colony Bog and Bagshot Heath SSSI



Legend

- Order Limits
- Construction compound
- Trenchless crossing
- SSSI
- SINC/SNCI
- Survey site boundary
- Survey subsite boundary

Survey subsite

- 1
- 2
- Brentmoor Heath
- Folly Bog
- Turf Hill

Sheet displays part of Section E and F

0	08/11/2019	For issue	LM	TC	EJ	SN
Rev.	Rev. Date	Purpose of revision	Orig/Dwn	Checkd	Rev'd	Apprv'd

JACOBS

1180 Ekeade Road, Weybridge, Wokingham, RG41 5TU, UK
Tel: +44(0)118 946 7000 Fax: +44(0)118 946 7001
www.jacobs.com

Client

Esso Petroleum Company, Limited
Ermyn House,
Ermyn Way,
Leatherhead,
Surrey,
KT22 8UX

Project

Southampton to London Pipeline Project

Drawing title

SITE PLAN OF COLONY BOG AND BAGSHOT HEATH SSSI
SHOWING SURVEY SUBSITES

APFP Reg. (2009) 5(2)(l)

Drawing Status	For Issue
Scale	1:12,000 @ A3 DO NOT SCALE
Jacobs No.	B2325300
Project/Wise No.	B2325300-JAC-000-ENV-DRG-111122
Drawing number	Figure TH.1.11.1 Sheet 1 of 1
	Rev 0

This drawing is not to be used in whole or part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.

0 125 250 500 Metres

Ordnance Survey data © Crown copyright and database right 2019, Licence number AL100005237