

Appendix 1

MEETING NOTES

LOWER RAINHAM MEETING NOTE

Application Ref: MC/19/1566

17/09/2019

ATTENDANCE

Hannah Gunner - Medway
Rob Neave - Medway - Part
Simon Tucker - DTA - Part
Duncan Parr - Rapleys
Michael Birch - Rapleys

HIGHWAYS

Rob outlined that the draft response may be updated following review from Michael Edwards on his return from leave next week w/c 23rd September.

Nevertheless the below matters were discussed:

Care home - DTA outlined they have re-run TRICS to exclude edge of town centre and suburban. However, given the modest change it was agreed by all to retain the assumptions within the submitted TA.

Education - Rob outlined that he believes the figure of 41% of external trips to the school will be by car is far too small and it will be a lot closer to 100% considering the surrounding road network and distances that will be required. As such, should Paul Clarke agree with the assumption that 70 children will attend the school from external homes (not included within the development) it was agreed that DTA would update the report to include the worst case scenario that all children will be driven to school - DTA/Medway to chase Paul for agreement.

Commercial areas - Rob outlined that more certainty is required on what is included within the village centre as different types of uses evidently have different traffic impacts. It was agreed that maximum unit sizes could be introduced to provide more certainty. Likewise, it was agreed that local examples would be reviewed to also provide further comfort for officers. Land east of Horn Dean in East Hampshire was outlined as a possible good example. Rapleys and DTA to liaise.

Distribution - considering the above commercial elements Rob required further information in regards to the outlined 30% of trips will be for leisure uses (why 30% was used and why leisure?). Case studies discussed above should also be reviewed for these figures.

External distributions - more information is required on the model used and also the 'sense checking'?

Wider junction assessment / traffic counts required along Lower Rainham Road. Possible locations outlined:

- Bloors Lane, Three Mariner and Yokosuka Way.

Rob outlined Medway have commissioned their own assessment/model which will be completed shortly. Once finalised this will be provided to the applicant to review further turning counts and assessments at junctions.

Rob outlined additional commentary is required on the mitigation measure at Yokosuka Way and Lower Rainham road junction re. increasing the flare lane.

Access Design. RB confirmed he was generally comfortable with the principles subject to the RSA. ST confirmed that was in hand and will be included with appropriate design office response in the first technical note (T1).

T1 note to include - Trip Generation, Distribution, RSA, Mitigation (flare lane)

WIDER PLANNING COMMENTARY

Rapleys advised they are likely to have updates to provide to the officer on Agricultural Land and Historic environment next week.

Drainage information likely to be issued late October (albeit Southern Testing emails since the meeting means this may be issued later)

Archaeology - Rapleys outlined that trenching is not practical considering the current operation and in any event, the level of trenching that could be done would not be appropriate / representable. It would be more appropriate to request this following outline permission and with each phase as they came forward. This will also still allow for appropriate flexibility. Hannah Gunner agreed that the masterplan had sufficient flexibility and would speak with Ben Found at KKC Archaeology to discuss.

Hannah Gunner discussed S106 figures and outlined she will seek further information from the consultees as to how they got to the final figures. Rapleys questioned how the open space contribution requested will work with Natural England comments re. recreation space - officer will request further info on this matter and revert back to Rapleys.

Officer chasing landscaping, trees and wildlife comments.

Officer to pass comments in regards to Ecology, Air Quality, Peoples Trust, LLFA, NHS and Policy.

In regards to NHS, the officer outlined that they have requested a 2 consultancy room doctors.

Further meeting agreed for the 16th October 2019.

In all likelihood planning committee in the New Year.

Considering the above, target presentation to members in December 2019.

Officer and Rapleys agreed to produce Heads of terms before going to committee.

Rapleys to issue letters of support to the planning officer for inclusion on the planning register

Meeting Note – Pump Farm, Lower Rainham

28th October 2019

Attendees:

Hannah Gunner – Medway Council

Robert Neave – Medway Council

Simon Tucker/ Jacqueline Aggiss – DTA

Duncan Parr/ Henry Asson - Rapleys

Meeting set up to discuss position in respect of consultee comments, notably highway comments, on the above application.

1. There was a general discussion in respect of planning matters, consultee comments and third party comments.
2. Comments received from Network Rail requesting a review of additional rail passengers and car parking provision. RN will review position in respect of multi-storey car park proposals internally, although he was not aware there were any firm plans. DTA will respond to the comments in respect of rail travel.
3. RN had reviewed DTA Technical Note 1 (17th October 2019). It was requested all external pupil trips for the primary school would travel by car. DTA agreed to revise accordingly. Comments were raised in respect of the TRICS output and maximum housing numbers. DTA will review.
4. RN asked for additional junction counts to the east of the site. DTA will commission these.
5. In respect of committed development DTA confirmed that has been included in the 2029 base scenario. [post meeting RN confirmed his requirements]
6. All other aspects of the note were agreed.
7. RN confirmed the Medway model work was ongoing and would be available mid-November.
8. DTA confirmed there would be no impact from peak hour revisions to the traffic figures in respect of the air quality assessment.
9. HG confirmed the application was likely to go to the February committee.
10. It was agreed a further meeting be held at the end of the w/c 25th November to update on progress.

Next Steps **DTA to provide response to Network Rail**

DTA to prepare updated note confirming education trips and overall trip generation in advance of re-running junction models

RN to review car parking plans at Rainham station

RN to provide results of the Medway model when available

LOWER RAINHAM MEETING NOTE APP REF: MC/19/1566
22.01.2020

Attendance	
Hannah Gunner (HG)	Medway - Planning Officer
Rob Neave (RN)	Medway - Highways Officer
Nick Brandreth (NB)	Lambert & Foster - Surveyor
Simon Tucker (ST)	DTA - Highways Consultant
Jacqueline Aggiss (JA)	DTA - Highways Consultant
Duncan Parr (DP)	Rapleys - Planning Consultant
Michael Birch (MB)	Rapleys - Planning Consultant

Highways

HG explained a report had been prepared by an external consultant in respect of third party comments. A committee date in April was discussed, depending on resolving the outstanding matters.

DTA asked for clarification of the outstanding points following the previous meeting. These were confirmation of the trip generation and the use of the sites in TRICS.

RN confirmed the use of the TRICS sites is accepted, subject to a check on the rates removing bungalow sites. DTA to remove and re-issue.

RN had concern with overall trip generation in comparison to the modelling work undertaken by Sweco on behalf of Medway. RN to confirm brief provided to Sweco for modelling.

DTA explained the work is based on an agreed methodology and provided in considerable detail within the TA. Subject to two outstanding points (now resolved - education and bungalows), this has been agreed throughout the process. The Sweco modelling showed significantly higher person trip rates with no explanation of how the figures had been derived. DTA requested further detail in this regard. RN to provide methodology for trip generation forecasts, traffic distribution and future growth projections input to Sweco modelling.

The model is made up of 7 subnetworks. 3 of the networks have been presented (2, 3 and 7). DTA asked for clarification that the tested networks are those that Medway consider are impacted by the development. RN confirmed this was the case and the other subnetworks (1, 4, 5 and 6) do not experience significant impact and are therefore not included in the model output. Medway confirmed they do not require any assessment on the wider network.

DTA asked for the results of subnetwork 1 (trunk road) to assist in responding to Highways England. RN to provide modelling results for subnetwork 1.

DTA queried the title of the modelling report which reads 'Sensitivity Tests 1, 2 and 3'. RN confirmed there is only 1 test and that is in fact the development test. DTA requested the title be amended accordingly as the run is not a sensitivity test. RN to confirm Sensitivity tests 2 and 3 do not relate to this application site and that Sensitivity Test 1 is in fact the development test.

DTA queried the level of forecast development traffic on Lower Rainham Road which appeared incorrect. RN will seek further explanation of methodology from Sweco.

RN requested mitigation (Nil detriment) at the relevant junctions identified in the modelling report. These are set out in DTA Technical Note 3. RN to review to junctions highlighted in Technical Note 3 and confirm these are the only junction that require assessment. RN to confirm if modelling on additional junctions are necessary.

RN will provide traffic flows for each of the junctions from the Sweco model.

DTA will then review and provide comment on need for and extent of mitigation.

There are currently 5 junctions which require improvements, RN noted, if these all could illustrate 'nil effect' then it would be difficult to justify an objection. However, there may be a balancing exercise if some junctions could show improvements while others a negative effect.

RN to discuss internally re. S106 contribution against s278 works. DTA outlined that pooling money will allow the authority to direct work where necessary when considering not only the application site but other developments within the authority.

Comments received from Network Rail requesting a review of additional rail passengers and car parking provision. DTA will review forecast rail passengers for the AM peak period (06:00-09:00). DTA will respond to Network Rail comments.

It was agreed a further meeting be held in 3-4 weeks for a progress update.

Planning

HG noted that further consultation responses have been received from Historic England, Conservation Officer and Rural Planning and she would provide these to Rapleys in due course.

HG noted that informal landscape comments have been received which indicate an objection, albeit she is waiting for formal comments before sending to Rapleys.

HG outlined she would chase to understand the comments from leisure/recreation and Natural England to understand the contributions sought.

HG will liaise with NHS to understand their position regarding possible doctors on site. However, in principle DP outlined there is no issue in providing this.

It was agreed by all that an April committee was a sensible target.

Appendix 2

CHRONOLOGY OF SUBMISSIONS

The application was submitted and received on 13 June 2019 and validated on 28 June 2019 with reference number MC/19/1566.

DETERMINATION OF APPLICATION

Relevant submissions / actions include:

1. Planning Presentation to Members undertaken by Rapleys on 22 July 2019
2. Signed PPA issued to the Local Planning Authority on 6 August 2019.
3. Response issued on 20 August 2019 to the Local Planning Authority following initial comments from Highways England (HE).
4. Meeting with the Local Planning Authority (Planning and Highways Officers) on 17 September 2019
5. Transport Technical Note 1 provided to the Local Planning Authority on 10 October 2019.
6. Consultation rebuttal documents were provided to the Local Planning Authority on 11 October 2019. This included: Heritage Note (KM Heritage), Air Quality Note (PBA) and Policy Note (Rapleys).
7. Response on Best Most Versatile land sent to the Local Planning Authority on 18 October 2019.
8. Meeting with Planning and Highways Officers on 28 October 2019.
9. Response to Local Lead Flood Authority issued to the Local Planning Authority on 15 November 2019.
10. Transport Technical Note 2 issued to the Local Planning Authority on 9 January 2020.
11. Meeting held on 22 January 2020 with Planning and Highways Officers at the Local Planning Authority.
12. Drainage Strategy note and IHRA addendum submitted to Natural England and the Local Planning Authority on 6 February 2020.
13. Addendum Heritage Note issued to the Local Planning Authority on 12 February 2020.
14. Amended Environmental Statement submitted on 1 April 2020 including: Drainage, Transport, Air Quality and Loss of Agricultural Land rebuttals.
15. Second response to HE Issued to both the Local Planning Authority and HE on 2 April 2020.
16. Housing Supply Note issued to the Local Planning Authority on 2 April 2020.
17. Letter issued to Dave Harris (Head of Planning at Local Planning Authority) on 10 April 2020 concerning maladministration of application.
18. Landscape consultant response issued to Rapleys 21 May 2020 dated December 2019.
19. Air Quality response from Environmental Health Officer issued to Rapleys 26 May 2020 dated 9 March 2020.
20. Application refused under delegated powers on 12 June 2019.

Appendix 3

APPELLANT CONSULTATION LETTER



A letter has been dispatched to 7,820 properties in the vicinity of the site, shown on the map below.



The letter, which accompanies this summary, contains information on the process and on the new reports.

It provides a link to www.PumpLane.org. This website contains links to all relevant documents. The documents can be viewed on the website or downloaded in PDF format and printed.

T 020 7587 3049 |

The Royal Doulton Factory, 312 China Works, Black Prince Road, London, SE1 7SJ



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The letter and website includes postal and email contact details and information on how contacts will be forwarded.

The website also includes a page where comments can be returned to us.

The site will remain live until 15 Feb 2021 or as instructed.

Your Shout

Jan 2021

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Your Shout, 312 China Works, SE1 7SJ
24 December 2020

Dear Resident

We are writing to you on behalf of our clients A C Goatham & Son Ltd in relation to the following:

Planning Inspectorate Appeal Reference: APP/A2280/W/20/3259868

Planning Application Reference: MC/19/1566 (Alternative Reference: PP-07846586)

Appellant: A C Goatham & Son

Site: Land off Pump Lane, Rainham, Kent ME8 7TJ

Description of Development: *Outline planning application with some matters reserved (appearance, landscaping, layout and scale) for redevelopment of land off Pump Lane to include residential development comprising of approximately 1,250 residential units, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle).*

A Public Inquiry (via a virtual platform) will commence on 15th February 2021.

As part of the above appeal, the Appellant has submitted further documentation relating to Transportation and Access matters, and specifically in relation to reasons given by the local planning authority, Medway Council, for refusing the planning application for the proposed development (Medway Council reference: MC/19/1566) on 12 June 2020.

This further Transportation and Access documentation comprises the following:

- 20230-05 Rev E Overall Access Strategy and Key network. This shows the overall access strategy which includes a new right hand island junction to the north of the site to Lower Rainham Road, a connection to Pump Lane south and two interim crossing points on Pump Lane itself. The detailed plans of each arrangement are:
 - 20230-05-2 Rev D- Proposed Right Turn Lane Lower Rainham Road
 - 20230-05-6 Rev E – Northern Pump Lane crossing arrangement
 - 20230-05-5 Rev E – Southern Local Access / Spine Road Junction
 - 20230-05-1 Rev E – Pump Lane Proposed Railway Bridge Improvements

The above documentation is displayed on the project website hosted by Your Shout at **PumpLane.org** and separately on Medway Council's website (see <https://www.medway.gov.uk/info/200133/planning>: please search under Application reference MC/19/1566).

The above documentation is displayed in addition to the Appellant's Environmental Statement (updated: dated 22nd Sept 2020) and Appeal statement (dated 22nd Sept 2020), with Appendices, including the Appellant's Transport Assessment (dated 21st Sept 2020) and accompanying plans.

If you wish to make any representations on the above Transportation and Access documentation, or more generally, please email these to PumpLane@yourshout.org. Alternatively, representations may be sent to Freepost RTXU-JGSR-KHLE, Your Shout, 312 China Works, SE1 7SJ.

Representations must be received by 15 February 2021. All responses received by You Shout by 15 February 2021 will be promptly forwarded to the public inquiry Inspector, the Secretary of State (for Housing, Communities and Local Government) and Medway Council for their consideration, in addition to the Appellant.

Representations received by You Shout after 15 February 2021 may not be forwarded on. Accordingly, representations not sent by 15 February 2021 must instead be sent to Medway Council (Planning section, for the attention of Dave Harris) at: Dave Harris | Head of Planning, Medway Council, Gun Wharf, Dock Road, Chatham, ME4 4TR.

Yours sincerely,

Your Shout on behalf of A C Goatham and Son Limited

Appendix 4

PLANNING POLICY OFFICER CONSULTATION REPSONSE

MEMO

Planning Policy Response

To: Hannah Gunner	From: Tom Gilbert
CC:	Date: 15/07/19
Application: MC/19/1566	

PROPOSAL: Outline planning application with some matters reserved (appearance, landscaping, layout and scale) for redevelopment of land off Pump Lane to include residential development comprising of approximately 1,250 residential units, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle).

LOCATION: Land at Pump Farm & Bloors Farm, Rainham

POLICY & GUIDANCE:

Listed below are policies deemed relevant to this application. In reference to the Local Policies those listed are saved and have been tested for consistency with the NPPF and confirmed to conform unless otherwise stated.

National Policy

National Planning Policy Framework (2012):

- Paragraph 8
- Paragraph 61
- Paragraph 63
- Paragraph 91
- Paragraph 104
- Paragraph 170

Local Policy

Medway Local Plan 2003:

- S1 – Development Strategy
- S2 – Strategic Principles
- BNE25 – Development in the Countryside
- BNE34 – Area of Local Landscape Importance
- CF13 – Tidal Flood Risk

Local Guidance

Medway Landscape Character Assessment (2011):

- 21. Lower Rainham Farmland

COMMENTS:

Development Plan Status

The current Development Plan for Medway is formed of saved policies of the Medway Local Plan 2003 (MLP). These are in force until a new Local Plan has been adopted.

Work has started on the production of a new Local Plan in 2014, with a planned adoption date 2020. The detailed programme for this work is outlined in the Council's Local Development Scheme published in the December 2018.

5 Year Land Supply

The council acknowledges that it does not currently possess a 5 year land supply for housing and a 20% buffer should be applied. The Council has and is taking steps to rectify this position.

Strategic Land Availability (2018)

In July 2018 Medway Council published its latest version of the SLAA assessing site for suitability for inclusion within the emerging Medway Local Plan. Sites 750 and 1061, which form this pre-application area were tested. Both sites were found to be unsuitable for the following reasons: access to services, landscape and impact on agricultural land. Whilst the SLAA does not grant planning permission and influence it in any way it does highlight potential issues.

Principle of Development

The proposed scheme comprises 1,250 residential units, extra care, care home, local centre and primary school. The proposed scheme falls outside the urban boundary in the countryside (Policy BNE25), an area of local landscape importance (BNE34). In normal circumstances the proposal would in principle be unacceptable. It would be deemed contrary to the strategic direction of the MLP2003 highlighted in Policy S1. This policy directs development to brownfield sites and is supported by policy BNE25 that restricts development in the countryside.

The application of these policies is compromised by the lack of a 5 year housing land supply (as explained above) and the conformity of the policies to the NPPF.

As noted above the site lies outside of the urban boundary and so policy BNE25 applies. An assessment of the conformity of this policy with the NPPF – undertaken by the Council- has found it to have significant issues, except as a definition of the separation between the urban and rural areas. Therefore if a site is just located in the countryside is no longer a reason for refusal and the sustainability of the site needs to be assessed.

Due to the present 5 year land supply the sustainability of the site is very important. Sustainability is defined in paragraph 8 of the NPPF. It has three

dimensions, including: environmental, social and economic considerations. Any assessment needs to encompass all of the dimensions of sustainable development and note that they are 'mutually dependent' as per paragraph 8 of the NPPF.

In principle upon assessing the site against the NPPF it is felt the site is not sustainable. The reasons for this are as follows:

- **Not sustainable due to proximity to local sources of employment.** Development of the site would bring about short-term economic benefits through construction jobs and associated employment. However this is very niche and would not supply work for the new residents of the proposed development. These residents will need to find employment elsewhere and the proposal is not located within a sustainable distance of existing employment sites that is a key consideration as per (para 92). Therefore the development would not be sustainable economically.
- **Environmental – due to significant impact on high grade agricultural land and an area of landscape value.** The site is within an area of local landscape importance Policy BNE34. A designation supported by paragraph 170 of NPPF. This stipulates that valued landscapes should be protected and enhanced.

To assess the value of the landscape the Medway LCA 2011 has been reviewed. The site falls within section 21. Lower Rainham Farmland of the Medway LCA 2011. This describes the site as having moderate sensitivity and moderate condition. It recommends to 'resist further built development and introduce more positive landscape management systems'.

The site is high grade agricultural land as defined by agricultural land classification mapping 1988 and the applicants own surveys. Grades 1-3 are the best and versatile agricultural land. As such this area demands a certain level of protection from development as outlined in para 170 of the NPPF that seeks to recognise the 'economic and other benefits' of BMV agricultural land. The applicant has assessed the site and feels the economic potential of the land to be minimal for agricultural value at the scale that it is currently used for. However another landowner or producer may be able to make to site work economically due to different methods.

Other considerations

Self-build

It is noted that the site has made provision for 8 self-build plots on site in the proposed masterplan. While this is not a material planning consideration and their presence does not change the sustainability considerations of the site the Planning Policy Team does have some comment on their inclusion.

Medway Council is required to keep a register of those interested in self and custom build housing. At present there are 78 individuals and two associations on the register (11 permitted). In terms of areas of demand

Rainham is the third most popular area with Medway. Therefore the 8 units proposed is less than 1% of the overall housing proposed on site, which appears to not be a reasonable level.

Conclusion

In summary while it is noted that the proposal would bring about positive benefits in relation to the delivery of housing and address some of the issues of social sustainability, it would still be detrimental on the economic and environmental grounds. For these reasons the proposed development would not be sustainable and should not be considered acceptable.

Tom Gilbert
Senior Planner (Policy)

Appendix 5

TIM GOODWIN ECOLOGY NOTE



ECOLOGYSOLUTIONS

Part of the ES Group

AC GOATHAM AND SON LTD

LAND AT PUMP LANE
AND LOWER BLOORS FARM,
LOWER RAINHAM,
KENT

**Written Statement in
respect of Ecology and
Nature Conservation**

by
TIMOTHY J. GOODWIN
BSc (Hons), MSc,
MIEnvSc, MCIEEM, MIALE

January 2021
8252.WrittenStatement.Ecology.vf

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ANNEXES (BOUND SEPARATELY)

ANNEX 1	DAS Letter from Natural England dated 1 April 2019
ANNEX 2	Email from Sean Hanna (Natural England) to Simon Taber (Ecology Solutions) dated 24 April 2020
ANNEX 3	Consultation Response from Natural England dated 1 August 2019
ANNEX 4	Technical Note: Surface Water Drainage Strategy Addendum (Stantec, January 2020)
ANNEX 5	Addendum Note: Information for Habitats Regulations Assessment – Update with regards to Hydrological Matters (Ecology Solutions, February 2020)
ANNEX 6	Consultation Response from Paul Hyde (Natural England) to Medway Council dated 4 March 2020
ANNEX 7	Land at Lower Rainham Road – Bespoke Wardening Package (Ecology Solutions, July 2020)
ANNEX 8	Letter from Tim Goodwin (Ecology Solutions) to Sean Hanna (Natural England) dated 18 August 2020
ANNEX 9	DAS Letter from Perdeep Maan (Natural England) to Simon Taber (Ecology Solutions) dated 14 September 2020
ANNEX 10	Technical Note: European Sites Avoidance and Mitigation Strategy (Ecology Solutions, October 2020)

- ANNEX 11 DAS Letter from Perdeep Maan (Natural England) to Simon Taber (Ecology Solutions) dated 16 November 2020
- ANNEX 12 Email from Tim Goodwin (Ecology Solutions) to Perdeep Maan (Natural England) dated 20 November 2020
- ANNEX 13 Email from Perdeep Maan (Natural England) to Tim Goodwin (Ecology Solutions) dated 20 November 2020

1. QUALIFICATIONS

- 1.1. My name is Tim Goodwin. I hold a BSc (Hons) degree in Environmental Biology from Leicester University, an MSc in Environmental Resources from the University of Salford and I am a member of the Institute of Ecology and Environmental Management and the Institution of Environmental Sciences, on whose council I was elected between 1993 and 2000.
- 1.2. From 1990 to 1991, I was a Director of RPS Clouston, a large environmental consultancy. I previously worked as Development Officer for the Northants Wildlife Trust, followed by a position with the World Conservation Monitoring Centre in Cambridge, a division of the International Union for the Conservation of Nature, Gland, Switzerland. I have carried out consultancy work for the World Wide Fund for Nature (WWF), Greenpeace, the Department for Environment, Food and Rural Affairs and HM Customs and Excise and I was retained as an independent consultant by the latter two Government Departments between 1981 and 2010 to advise on sections of the Wildlife and Countryside Act 1981, the Endangered Species (Import and Export) Act 1976 and Zoo Licensing Act 1981.
- 1.3. In 1992, I formed Epcad, of which I was one of the principal partners, heading the Ecology section. At the end of 2004 Epcad demerged into two companies with the ecology arm becoming known as Ecology Solutions of which I am one of the main Directors. In addition to inquiry work, Ecology Solutions undertakes all types of environmental planning work, in relation to ecology, with recent clients including BAES, CEMEX, the Hanson Group, Belfast City Airport, SITA, E.on, Fulham Football Club, Prudential, Aviva, Prologis, Helios, Pfizer plc, British Aerospace, Legal and General, Stanhope, Northern Ireland Electricity and a range of national house-builders including Countryside Properties, Persimmon, Taylor Wimpey, Linden, Redrow, Bellway, Robert Hitchins, Fairview and Crest Nicholson.
- 1.4. I have extensive experience of considering and evaluating development proposals in relation to a range of sensitive ecological sites including statutory designated sites (Ramsar Sites, Special Areas of Conservation [SACs], Special Protection Areas [SPAs] and Sites of Special Scientific Interest [SSSIs]), non-

statutory designated sites (Local Wildlife Sites) and Ancient Woodland. I have particular experience in both the Habitat Regulations and the Habitat and Birds Directives and I have given evidence in a number of high profile cases where consideration of the provisions within the Regulations have been paramount. I have prepared numerous mitigation strategies for a range of protected sites and species including Badgers, Reptiles, Great Crested Newts, Dormice, Bats and Water Voles.

- 1.5. I have been intimately involved in a number of high profile projects relating to the ecology and conservation of various species and habitats, including Leisure Developments, New Settlements, Mineral Workings, Water / Flood Alleviation Schemes, Highway Proposals and Land Restoration Schemes. I have given evidence at numerous section 78 appeals; call-in inquiries, local plan inquiries and I have prepared and given evidence for select committee and in the High Court for judicial review proceedings.

2. BACKGROUND

- 2.1. Ecology Solutions was commissioned by AC Goatham and Son Ltd in February 2019 to consider emerging development proposals in respect of Land at Pump Lane and Bloors Farm, Lower Rainham, Kent (the Appeal Site). Specifically, Ecology Solutions was originally instructed to undertake detailed assessment of the potential implications of the Appeal Proposals on international / European designated sites situated in close proximity, including (but not limited to) the Medway Estuary and Marshes Special Protection Area (SPA) and Ramsar site.
- 2.2. The findings of this assessment work are set out within the document entitled "*Information for Habitats Regulations Assessment*" (IHRA), dated May 2019, which supported the planning application. As outlined in paragraph 1.1.2 of the IHRA, this document was produced to ensure that the Competent Authority (the Secretary of State in relation to the Appeal process; formerly, Medway Council) has all the necessary information before them to carry out their duties in considering the application, in line with relevant planning policy and legislation, including specifically The Conservation of Habitats and Species Regulations 2017, as amended (commonly referred to as the Habitats Regulations).
- 2.3. Following the submission of the planning application, in a letter dated 1 August 2019, Natural England (the statutory advisor to Government on nature conservation matters) raised a number of points relating to international / European designated sites. A copy of this letter is included at Annex 3 of this Written Statement. Additional information and clarification have subsequently been provided in respect of the two areas raised by Natural England: specifically, in relation to hydrological matters; and in relation to the measures proposed to address potential recreational disturbance arising due to the Development Proposals.
- 2.4. In light of this detail, Natural England confirmed in an email dated 20 November 2020 that they no longer hold concerns in relation to the potential for adverse effects arising upon European designated sites as a result of the Development Proposals. A copy of this email is included at Annex 13 of this Written Statement.

- 2.5. With regard to general ecological matters, including other designated sites of nature conservation interest, habitats and protected / notable species, survey and assessment work was undertaken by The Ecology Partnership. The results of the survey work completed at the Appeal Site and the assessment of potential effects arising from the Development Proposals are outlined in Chapter 15 of the Environmental Statement (ES) which was submitted in support of the application.

- 2.6. With the exception for Reason for Refusal 1 (relating to Medway Estuary and Marshes Special Protection Area [SPA] and Ramsar site), no concerns were raised by Medway Council to the Appeal Proposals insofar as they relate to ecological matters.

- 2.7. Whilst it is understood that no specific objection was raised, KCC Ecology identified several specific points regarding ecology in their consultation response to the planning application. It is also understood that third parties have objected to the Appeal Proposals on the grounds of on-site ecology.

3. PURPOSE OF WRITTEN STATEMENT

- 3.1. This Written Statement has been prepared to provide further assistance and clarity to the Secretary of State in relation to European designated sites matters, specifically:
- To briefly summarise the legislation, guidance and case law pertinent to the consideration of the Appeal Proposals, insofar as it relates to international / European designated sites, to assist the Secretary of State in discharging his duties;
 - To provide a clear chronology regarding consultation with Natural England throughout the course of the planning application;
 - To collate all further information, assessments and clarification produced relevant to international / European designated sites following the submission of the application; and
 - To confirm the package of avoidance, mitigation and enhancement measures which have been agreed with Natural England.
- 3.2. It is understood that Natural England has recently been in contact with Medway Council to provide clarity regarding the discussions between the Appellant and the statutory authority since July 2020. The information set out in this Written Statement seeks to complement that provided by Natural England and ensure that the Secretary of State has all relevant information available in a single place.
- 3.3. This Written Statement also seeks to address other ecological matters raised by KCC Ecology and third parties, to provide the Secretary of State with all relevant information pertinent to consideration of the Appeal Proposals on the grounds of ecology and nature conservation.

4. LEGISLATION, GUIDANCE AND CASE LAW

European Designated Sites

- 4.1. Section 2 of the IHRA sets out (in detail) the legislation, guidance and case law which are relevant to the consideration of potential effects arising upon European designated sites as a result of the Appeal Proposals.
- 4.2. Under the Habitats and Birds Directives¹, Member States are required to designate the most suitable sites to maintain the distribution and abundance of priority habitats and species, and to conserve the habitats of rare species of birds respectively. Such sites, referred to as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), form part of the Natura 2000 network, and are afforded strict protection under the Directives.
- 4.3. In the UK, the requirements of the Habitats and Birds Directive are transposed by The Conservation of Habitats and Species Regulations 2017 (as amended), commonly referred to as the Habitats Regulations. As a matter of policy², Ramsar sites (designated under the Convention on Wetlands of International Importance Especially as Wildfowl Habitat 1971, commonly known as the Ramsar Convention) receive the same protection as designated SACs and SPAs.
- 4.4. Under the Habitats Regulations, Competent Authorities have a duty to ensure that the activities that they regulate have no adverse effect upon the integrity of European designated sites. Regulation 63 requires that:
- “63(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for a plan or project, which:-*
- (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects) and*

¹ European Council Directives 92/43/EEC and 2009/147/EC (previously 79/409/EEC) respectively

² As noted at paragraph 176(b) of the National Planning Policy Framework (February 2019)

(b) is not directly connected with or necessary to the management of the site

must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives

63(5) In the light of the conclusions of the assessment, and subject to regulation 64, the authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be)"

4.5. The test at Regulation 63 requires certainty beyond reasonable scientific doubt that a plan or project will have no adverse effect upon the integrity of European designated sites, both when the plan is considered alone and also in combination with other plans and projects.

4.6. As stated in Regulation 63(6), it is important to note that in undertaking an assessment "*... the authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions to which it proposes that the consent, permission or other authorisation should be given*".

4.7. It is therefore pertinent for the Secretary of State to take into account the full package of avoidance and mitigation measures which form part of the Appeal Proposals, when considering the relevant test.

4.8. With regard to the position of the statutory authority (Natural England in this case), Regulation 63(3) states:

"63(3) The competent authority must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority specifies"

4.9. It is important to note that the Habitats Regulations remain in place with only relatively minor changes coming into force on 31 December 2020 (effected by the Conservation of Habitats and Species Amendment (EU Exit) Regulations

2019, which will come into force on 31 December 2020). It is also understood that courts in the UK (with the sole exception of the Supreme Court) will continue to be bound by judgements handed down by the Court of Justice of the European Union (CJEU) and by domestic courts prior to 31 December 2020 when interpreting the Habitats Regulations.

- 4.10. Case law from the CJEU has provided further clarity regarding the process of undertaking assessments pertinent to the Habitats Regulations. Judgments such as *Waddenzee*, *Sweetman*, *People over Wind* and *Holohan* have further underlined the requirement for certainty with regard to the potential for effects to arise. Further information in relation to each of these cases is provided below.

Waddenzee Judgment

- 4.11. In the '*Waddenzee*' case (C-323/17) the CJEU decided that an appropriate assessment is required for a plan or project where there is a probability or a risk that it will have a significant effect on the SPA. The Judgment states [at paragraph 3(a)] that:

"...any plan or project not directly connected with or necessary to the management of the site is to be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects."

- 4.12. Hence the need for an appropriate assessment should be determined on a precautionary basis.

- 4.13. The Judgment gives clarity that the test of 'likely significant effect' should also be undertaken in view of the European site's conservation objectives. It is stated [at paragraph 3(b)] that:

"where a plan or project not directly connected with or necessary to the management of a site is likely to undermine the site's conservation objectives, it must be considered likely to have a significant effect on that site."

- 4.14. Paragraph 4 of the Judgment emphasises the requirement for the appropriate assessment to rely on objective scientific information:

“...an appropriate assessment...implies that, prior to its approval, all the aspects of the plan or project which can, by themselves or in combination with other plans or projects, affect the site's conservation objectives must be identified in the light of the best scientific knowledge in the field. The competent national authorities, taking account of the appropriate assessment of the implications...for the site concerned in the light of the site's conservation objectives, are to authorise such an activity only if they have made certain that it will not adversely affect the integrity of that site. That is the case where no reasonable scientific doubt remains as to the absence of such effects.”

Sweetman Case

- 4.15. Further guidance in relation to the consideration of impacts in the light of the Habitats Regulations is provided in the *Sweetman* case (C-258/11). The case as set out by the Advocate General considered in detail the test for likely significant effect in paragraphs 50 and 51:

“50. The test which that expert assessment must determine is whether the plan or project in question has ‘an adverse effect on the integrity of the site’, since that is the basis on which the competent national authorities must reach their decision. The threshold at this (the second) stage is noticeably higher than that laid down at the first stage. That is because the question (to use more simple terminology) is not ‘should we bother to check’ (the question at the first stage) but rather ‘what will happen to the site if this plan or project goes ahead; and is that consistent with “maintaining or restoring the favourable conservation status” of the habitat or species concerned’...

“51. It is plain, however, that the threshold laid down at this stage of Article 6(3) may not be set too high, since the assessment must be undertaken having rigorous regard to the precautionary principle. That principle applies where there is uncertainty as to the existence or extent of risks. The competent national authorities may grant authorisation to a plan or project only if they are

convinced that it will not adversely affect the integrity of the site concerned. If doubt remains as to the absence of adverse effects, they must refuse authorisation.”

- 4.16. The Court of Justice of the European Union (CJEU) agreed with the Advocate General's conclusions, and held:

“40. Authorisation for a plan or project, as referred to in Article 6(3) of the Habitats Directive, may therefore be given only on condition that the competent authorities – once all aspects of the plan or project have been identified which can, by themselves or in combination with other plans or projects, affect the conservation objectives of the site concerned, and in the light of the best scientific knowledge in the field – are certain that the plan or project will not have lasting adverse effects on the integrity of that site. That is so where no reasonable scientific doubt remains as to the absence of such effects.”

- 4.17. Hence a plan or project may be authorised only if no reasonable scientific doubt remains as to the absence of effects. Reasonable scientific doubt will exist if the evidence is not sufficiently conclusive, or if there are gaps in the information.

People over Wind Judgment

- 4.18. This CJEU judgment concerned a Preliminary Ruling in Case C-323/17. A request for a preliminary ruling was made to the CJEU concerning the interpretation of Article 6(3) of Council Directive 92/43/EEC (the Habitats Directive). The request was made in relation to proceedings brought by 'People Over Wind', and Mr Peter Sweetman against Coillte Teoranta. The ruling is as follows:

“Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site.”

- 4.19. The ruling from the CJEU, departs from previous domestic jurisprudence (in particular the Dilly Lane Decision), where it was deemed acceptable to include consideration of any mitigation / avoidance measures, which formed an integral part of the plan or project, in considering the first stage of assessment and screening for likely significant effects on a European site (or Ramsar site). In that case, where it could be concluded that no likely significant effect arises there was no recourse to move to Appropriate Assessment and address the Integrity test.
- 4.20. In view of this ruling from the CJEU, in addressing the test at Regulation 63(1) of the Habitats Regulations, it is necessary to undertake the screening assessment in the absence of any consideration of avoidance or mitigation measures.

Holohan Judgment

- 4.21. In the case of *Holohan v. An Bord Pleanála*, the CJEU considered the appropriate assessment procedure to be adopted when considering potential impacts on a European Site. In considering this case, the CJEU ruled, amongst other matters:
- a) *An appropriate assessment (AA) must catalogue the entirety of the habitat types and species for which a site is protected.*
 - b) *It must also identify and examine the implications of the proposed project for the species present on that site and for which that site has not been listed. Additionally, it must examine the implications for habitat types and species outside the boundaries of the protected site, insofar as those implications are liable to affect the site's Conservation Objectives.*
 - c) *Where the competent authority rejects findings of an expert that additional information must be obtained, the Appropriate Assessment must include a detailed statement dispelling all reasonable scientific doubt concerning effects on the protected site.*

Other Ecological Matters

4.22. As outlined in Chapter 15 of the Consolidated ES, the planning policy framework that relates to nature conservation is issued at two main administrative levels: nationally through the National Planning Policy Framework (NPPF); and at the local level through the Medway Local Plan.

4.23. Paragraph 170 of the NPPF states that planning policies and decisions should:

“contribute to and enhance the natural and local environment by:

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan).....

d) “minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”

4.24. Paragraph 175 of the NPPF states that local planning authorities should apply the following principles when determining planning applications:

a) “if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) “development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific

interest, and any broader impacts on the national network of Sites of Special Scientific Interest.”

4.25. The Medway Local Plan contains a number of policies relevant to ecology and nature conservation, including:

- Policy BNE35, which relates to international and national nature conservation sites;
- Policy BNE36, which relates to strategic and local nature conservation sites;
- Policy BNE37, which relates to wildlife habitats;
- Policy BNE38, which relates to wildlife corridors; and
- Policy BNE39, which relates to protected species.

5. EUROPEAN DESIGNATED SITES MATTERS

- 5.1. The following section of my Written Statement considers matters of relevance to international / European designated sites.

Consultation with Natural England

- 5.2. The following paragraphs provide a brief chronology of consultation between the Appellant and Natural England throughout the course of the planning application. As outlined below, Ecology Solutions has been actively engaged with the statutory authority both prior to the submission of the planning application and indeed throughout the course of the application. It is also important to note that the package of avoidance, mitigation and enhancement measures has evolved over time to take on board the advice from Natural England.
- 5.3. Copies of all relevant documents and correspondence are included as Annexes to this Written Statement (bound separately), where noted below.
- 1) **February 2019** – Ecology Solutions instructed to undertake detailed assessment of the Appeal Proposals in relation to international / European designated sites.
 - 2) **25 March 2019** – Pre-application telephone meeting between Natural England (Sean Hanna) and Ecology Solutions (Simon Taber) under Natural England's Discretionary Advice Service (DAS) to discuss the emerging development proposals, specifically considering the potential for effects to arise upon international / European designated sites and the scope of assessment work required.
 - 3) **1 April 2019** – Natural England issue DAS letter summarising their initial advice. Points raised in relation to recreational disturbance, air quality, water quality and functionally linked land (Annex 1).

- 4) **12 April 2019** – Ecology Solutions (Simon Taber) provide Natural England (Sean Hanna) with further details regarding emerging proposals for on-site open space, in the form of a Design Note and draft layout plan.
- 5) **24 April 2019** – Natural England response welcoming the principles set out in the Design Note as “*appropriate to help mitigate impacts from recreational disturbance to the coastal designated site as part of a broader package of measures...*” (Annex 2).
- 6) **13 June 2019** - Submission of planning application, supported by *Information for Habitats Regulations Assessment* (dated May 2019).
- 7) **1 August 2019** – Natural England consultation response to Medway Council, summarised as “*Further information required to determine impacts to designated sites*”. The consultation letter specifically requested further detail regarding additional measures in respect of recreational pressure, and further clarity regarding surface water drainage measures insofar as they relate to the international / European designated sites (Annex 3).
- 8) **6 February 2020** – Ecology Solutions provide Natural England and Medway Council with further detail regarding hydrological matters, in the form of a Surface Water Drainage Strategy Addendum (prepared by Stantec, January 2020; Annex 4) and Addendum Note: Information for Habitats Regulations Assessment – Update with regards to Hydrological Matters (prepared by Ecology Solutions, February 2020; Annex 5).
- 9) **4 March 2020** – Natural England consultation response to Medway Council confirming that the statutory authority is content in relation to surface water drainage and requesting further detail regarding measures in respect of recreational disturbance (Annex 6). It was the Appellant’s understanding that Medway Council and Natural England were liaising at this stage in relation to further measures.

- 10) **23 July 2020** – Ecology Solutions provide Natural England with details of a bespoke wardening strategy developed in light of the evidence base associated with North Kent SAMMS approach (Annex 7).
- 11) **14 August 2020** – Telephone meeting between Natural England (Perdeep Maan) and Ecology Solutions (Simon Taber) under Natural England's DAS to discuss the bespoke wardening strategy.
- 12) **18 August 2020** – Ecology Solutions (Tim Goodwin) letter to Natural England (Sean Hanna) requesting a clear steer from Natural England in relation to the bespoke wardening package (Annex 8).
- 13) **14 September 2020** – Natural England issue DAS letter requesting further clarification and justification in relation to the bespoke wardening package and the provision of alternative greenspace (Annex 9).
- 14) **26 October 2020** – Ecology Solutions provide Natural England with a "*European Sites Avoidance and Mitigation Strategy*" document to provide full clarification with regard to the package of avoidance and mitigation measures proposed in respect of international / European designated sites (specifically, the provision of on-site greenspace, strategic contribution towards the North Kent SAMMS project and the bespoke wardening package) (Annex 10).
- 15) **16 November 2020** – Natural England issue further DAS letter confirming that the statutory authority is satisfied with the provision of on-site green space and the bespoke wardening measure, highlighting concern regarding the potential for ongoing impacts beyond the 10-year bespoke wardening period and suggesting that an enhanced and proportionate SAMM contribution is made to address this (Annex 11).
- 16) **20 November 2020** – Ecology Solutions (Tim Goodwin) email to Natural England (Perdeep Maan) to provide an update regarding engagement with Birdwise and propose a 25% uplift in respect of the North Kent SAMM contributions in light of Natural England's concerns (from £306,950 to £383,687.50) (Annex 12) .

- 17) **20 November 2020** – Natural England (Perdeep Maan) email to Ecology Solutions (Tim Goodwin) confirming that the statutory authority is satisfied with this additional contribution (Annex 13).
- 5.4. Following extensive liaison with the statutory authority (as outlined above), it is clear that subject to securing the comprehensive package of avoidance and mitigation measures (as outlined in the planning application documents and summarised below for the avoidance of doubt), Natural England no longer hold any remaining concerns in respect of potential for effects to arise upon international / European designated sites.

Avoidance and Mitigation Measures Proposed

- 5.5. The following section provides a high-level summary of the comprehensive avoidance and mitigation strategy proposed in respect of recreational pressure at the international / European designated sites. Further detail in relation to each of the three elements below is provided within the “*European Sites Avoidance and Mitigation Strategy*” document (Annex 10).
- 5.6. The first element is the provision of an appropriate financial contribution towards the North Kent SAMMS. As noted in paragraphs 19 to 25 inclusive of Annex 10, this strategic approach funds a range of component projects which serve to avoid and mitigate for adverse effects associated with recreational pressure at the Medway Estuary and Marshes SPA / Ramsar site (and other European designated sites along the North Kent Coast).
- 5.7. The decision as to which projects are funded by the strategic contributions is made by the North Kent SAMMS Project Board. It is understood that Medway Council were appointed as the Accountable Body for the North Kent SAMMS, and as such their role is to hold and administer funds collected by the partner local authorities, and also to action the commissioning of projects and survey work approved by the Project Board.
- 5.8. In light of discussions with Natural England (as noted above), an increased contribution towards the North Kent SAMMS is proposed, with a 25% uplift as

an enhancement. On the basis that the Appeal Proposals are for up to 1,250 new residential dwellings, the total SAMMS contribution (with this uplift) would therefore be up to **£383,687.50** (excluding legal and monitoring officer's costs). This would be secured by an appropriate legal agreement (Section 106 agreement or Unilateral Undertaking).

- 5.9. The second element is the provision of on-site greenspace within the Appeal Site, which provides an attractive and welcoming alternative for informal recreation, and therefore mitigates for a potential increase in recreational pressure at the more sensitive international / European designated sites. As outlined in paragraphs 26 to 44 inclusive of Annex 10, open space within the new development has been designed in light of the evidence base to include features such as circular routes (of different lengths), specific facilities for the benefit of dog walkers such as off-lead dog areas and dog waste bins, interpretation boards and signage and varied and attractive habitats.
- 5.10. As outlined in Section 6 below in relation to general ecological matters, the network of open space within the Appeal Site serves a dual function, providing both ecological mitigation and enhancements in respect of both habitats and protected / notable faunal species, and also opportunities for informal recreation.
- 5.11. Whilst further information regarding the management, maintenance and design of on-site greenspace are to be confirmed at the Reserved Matters stage, and can be secured via suitably worded planning conditions, the funding of on-site open space in perpetuity will be secured by an appropriate legal agreement.
- 5.12. It is important to emphasise that the efficacy of such measures is well established, and that the provision of on-site open space represents a 'tried and tested' approach towards the avoidance and mitigation of potential recreational effects. Indeed, this approach forms a key element of the package of agreed strategic avoidance and mitigation measures in respect of many international / European sites throughout the UK.
- 5.13. The third element is a bespoke wardening package which will be fully funded by the Appeal Proposals. As noted in paragraphs 45 to 72 of Annex 10, the Appeal

Proposals will fund a bespoke visitor warden, who will work closely with the North Kent SAMMS seasonal wardens to deliver identified avoidance and mitigation measures at the international / European designated sites, with a focus on Medway Estuary and Marshes SPA / Ramsar site.

- 5.14. The benefits of the additional visitor warden are that they will provide educational services, including raising awareness of the sensitivity of the designated site with key user groups, and engaging with existing residents and organisations. The bespoke wardening role will be fully funded for 10 years, at an estimated cost of **£198,101.98**. This additional contribution would again be secured by an appropriate legal agreement.

Summary

- 5.15. Taking into account all three elements as outlined above, no significant effects are likely to arise and one can be certain beyond reasonable scientific doubt that Appeal Proposals are not likely to lead to a significant effect upon the integrity of international / European designated sites as a result of an increase in recreational pressure, either alone or in combination. Having provided further detail as outlined above, it is axiomatic that Natural England share this conclusion.

6. OTHER ECOLOGICAL MATTERS

6.1. This section of my Written Statement considers other ecological matters of relevance to the Appeal Site.

Summary of Ecological Survey and Assessment

6.2. As outlined in Chapter 15 of the Consolidated ES (dated September 2020), a suite of ecological surveys was completed at the Appeal Site to ascertain the current baseline, against which potential effects arising from the Proposed Development could be assessed.

6.3. As summarised at paragraph 15.7 and in Table 15.1 of the ES, surveys were completed in respect of the following ecological features:

- Habitats present within the Appeal Site (June 2017);
- Foraging and commuting bats (including transect surveys in June, July and September 2018 and static detector surveys in May, July and September 2018 respectively);
- Reptiles (May and June 2018);
- Badgers (between May and September 2018);
- Great Crested Newts (environmental DNA surveys completed in June 2018); and
- Breeding birds (April, May and June 2018).

6.4. Surveys confirmed that the Appeal Site primarily comprises extensive commercial Apple orchards. The orchards support narrow grassland strips and are subject to intensive management to maximise production, which involves grassland being regularly mown and herbicide treatment applied. The habitat features of relatively greater value are the hedgerows and treelines which

largely form the boundary of the Appeal Site, although these are species-poor and are of limited ecological significance.

6.5. As summarised in Table 15.6 of the ES, survey work identified that the Appeal Site is utilised by the following faunal groups / species:

- Foraging and commuting bats, with low levels of activity recorded, typically associated with boundary features and a total of five species identified at the Appeal Site;
- Evidence of Badger foraging activity, although no setts were identified within or in close proximity to the Appeal Site;
- Common reptiles (Slow-worm and Common Lizard) associated with longer grassland at the edges of the Appeal Site; and
- An assemblage of common breeding bird species, utilising boundary vegetation for nesting.

6.6. In summary, whilst at first glance the orchards within the Appeal Site may superficially appear to be habitats of greater ecological value than, for instance, arable fields, the commercial orchards are in fact of very limited value due to the intensive management regime, and provide few, if any, opportunities for protected and notable species. Although the Appeal Site does provide some opportunities for protected and notable species, such opportunities are largely limited to boundary vegetation.

6.7. As outlined in the ES, detailed consideration has been afforded to potential effects arising to designated sites, habitats and protected / notable species as a result of the Proposed Development, both during the construction and operation periods. To avoid and mitigate for potential adverse effects, specific measures are proposed which include the following:

- Enhancing retained habitats through the bolster planting of hedgerows with native species and creating new species-rich semi-natural habitats within the Appeal Site, in the form of green infrastructure corridors and

areas, to provide new and improved opportunities for faunal species and maintaining connectivity for species passing through and across the Appeal Site;

- Instigation of a long-term management plan for open space within the Appeal Site to maximise opportunities for informal recreation and improve the biodiversity value of the Appeal Site, particularly for groups such as birds, bats and reptiles;
- Provision of bat roosting boxes and bird nesting boxes to provide enhancements for both groups;
- Providing attractive opportunities for informal recreation for new residents at the Appeal Site, in the form of a connected network of informal footpaths and open spaces passing throughout the Appeal Site, to mitigate for potential effects at nearby designated sites;
- Adoption of standard engineering protocols and best practice throughout the construction period, in accordance with a Construction Environmental Management Plan (CEMP), produced at the detailed stage, which would include measures listed at paragraph 15.98 of the ES;
- Protection of existing treelines and hedgerows throughout the construction period to retain opportunities for nesting birds and foraging bats, utilising measures such as temporary protective fencing;
- Adoption of specific measures prior to the clearance of grassland habitats to safeguard reptiles from harm, such as translocation;
- Incorporating standard measures into the construction process to protect Badgers from potential harm, including an updated survey prior to the commencement of works;
- Undertaking clearance of suitable bird nesting habitats outside of the main bird breeding season, or alternatively following a check by a

suitably qualified ecologist to confirm that no active nests would be affected; and

- Delivery of a sensitive lighting scheme as part of the Proposed Development, to minimise lightspill to green corridors and maintain dark corridors, for the benefit of nocturnal species such as bats and Badgers.

6.8. Having undertaken an independent review of the survey and assessment work undertaken by The Ecology Partnership, and having viewed the site myself on 22 December 2020, I am content that the information outlined in the ES Chapter accurately reflects the current baseline position at the site. I also concur with the assessment of potential effects as set out in the ES Chapter, and that subject to securing the avoidance, mitigation and enhancement measures summarised above, the Appeal Proposals will deliver ecological benefits compared to the existing situation.

Issues raised by KCC Ecology

6.9. As outlined in the Officer's Report for the planning application, KCC Ecology noted that in their view the information submitted "*provides a good understanding of the ecological interest of the site*", and furthermore that "*in principle, KCC Ecology agrees with the mitigation proposed as the majority of the species have been recorded within the site boundaries which are to be retained*". It is clear from this statement that KCC Ecology share the view that the Appeal Site supports a commercial orchard, as opposed to a traditional orchard (see below).

6.10. However, KCC Ecology raised concern that the site boundaries are narrow, and that given the size of the Appeal Site "*there is opportunity to increase and enhance the site boundaries / green space to benefit the species current [sic] present within the site*".

6.11. KCC Ecology subsequently stated that in their view the proposals will "*negatively impact the site boundaries and species present due to an increase in disturbance from several factors including an increase in lighting, noise, recreational pressure.*" and that to minimise impacts "*it is recommended that*

there is a need for the area of green space within the proposed development to be significantly increased".

- 6.12. From the information set out in the Officer's Report, the position of KCC Ecology is therefore unclear. Initially, it appears as though they are content with the mitigation proposed, but are seeking additional areas of green space to increase and enhance biodiversity within the Appeal Site – i.e. to deliver an enhancement. However, concerns then appear to have been raised regarding the potential for adverse effects to arise from disturbance, such that additional green space is required to provide adequate mitigation. No specific concerns relating to particular species or groups are highlighted however.
- 6.13. In my view, it is likely that this position has been influenced by the fact that areas of open space within the Appeal Site have also been designed to provide opportunities for informal recreation, as part of the package of avoidance and mitigation measures in respect of European designated sites. If this is indeed correct, then it may be that the concerns raised by KCC Ecology are that the use of green space within the site for informal recreation would prohibit, or limit, the extent to which they would mitigate for potential adverse effects to habitats and species; therefore, it is the dual function of these areas that is their key concern.
- 6.14. Having undertaken an independent review of the Appeal Proposals, my view is that the areas of open space proposed are fully adequate in terms of their scale to mitigate both potential adverse effects upon habitats and protected / notable species, and also to deliver avoidance / mitigation in respect of recreational pressure. Moreover, in my view they do indeed provide opportunities to deliver biodiversity enhancements compared to the existing situation. Whilst it is clear that further consideration in relation to their design and layout will be required at the Reserved Matters stage, I believe that they will fully satisfy both of these functions.
- 6.15. To provide further reassurance that both of these objectives can be delivered, I consider below how this can be achieved both in respect of habitats and each of the key species / groups recorded within the Appeal Site.

Habitats

- 6.16. The retention and enhancement of existing hedgerows and treelines, and the provision of new species-rich native habitats including grassland, wetlands (associated with SuDS) and tree planting will clearly mitigate for minor losses to habitats of value within the Appeal Site.
- 6.17. With the implementation of long-term management that seeks to maximise both the biodiversity value and opportunities for faunal species in these areas, this would deliver enhancements. In my view, this is entirely consistent with providing and encourage informal recreation through the site.

Bats and Badgers

- 6.18. In relation to foraging and commuting bats and Badgers, the retention and enhancement of semi-natural habitats passing across and through the Appeal Site will not only safeguard existing opportunities for these species but will in fact provide better habitats. By controlling lightspill to ensure that areas remain as dark corridors (at the detailed stage), potential adverse effects can be avoided, and the provision of new bat roosting boxes would deliver additional enhancements. The use of green infrastructure corridors within the Appeal Site for informal recreation would not have any bearing on their value for either bats or foraging Badgers

Reptiles

- 6.19. Opportunities at present for reptile species within the Appeal Site are restricted due to the intensive management regime of grassland within the commercial orchard, with only limited numbers recorded during the survey work.
- 6.20. Under the Appeal Proposals, extensive new areas of grassland habitats are to be provided in green corridors passing through the Appeal Site. Whilst amenity use may necessitate that some areas require more regular management (such as off-lead dog areas), with more relaxed management elsewhere the area of suitable reptile habitat across the Appeal Site as a whole will still be significantly increased. By taking the requirements of this group into account as part of the

long-term management plan for the Appeal Site, this will ensure that enhancements will be delivered that will benefit this group.

Birds

- 6.21. The provision of new hedgerow, tree and scrub planting within the Appeal Site will provide new opportunities for nesting birds, and habitats such as grassland and wetland features will improve foraging opportunities. Bird boxes would also provide additional opportunities for this group.
- 6.22. Whilst disturbance associated with informal recreation could theoretically deter some species from nesting in specific locations, given that the Appeal Site at present supports only a relatively limited assemblage of common bird species, and as the overall area of suitable nesting and foraging habitat will be increased (and be managed in the long term), the Proposed Development is anticipated to deliver improvements compared the existing situation.
- 6.23. In summary therefore, for the reasons listed above there is no conflict between the use of green space within the Appeal Site for both informal recreation and biodiversity enhancements. Specific concerns regarding recreational pressure and ecological mitigation / enhancements for protected species can be fully addressed as part of the detailed design of green space within the site at the Reserved Matters stage and in the details proposed for the long term management of these areas.
- 6.24. In relation to designated sites, KCC Ecology raised concerns relating to the potential for impacts to arise due to an increase in recreational pressure, stating that the site plan did not provide opportunities for recreation within the site such as a dog walking loop.
- 6.25. As outlined in detail in Section 5 above, a comprehensive strategy has been developed and agreed with Natural England which includes (as one key element) the provision of on-site green space. This includes not only four circular walking routes, but also other elements such as off-lead dog areas, interpretation boards and dog bins to promote and encourage the use of areas by both new and existing residents. As such, it is considered that the concerns

raised by KCC Ecology have been superseded. The final detail of such matters will be resolved at the Reserved Matters stage and can clearly be dealt with by way of condition.

Issues raised by Third Parties

- 6.26. As reported in the Officer's Report, it is understood that third parties objecting to the planning application have raised concerns relating to biodiversity. These comments specifically relate to the potential impacts of the Appeal Proposals on the area of orchards within Medway, and the associated effect on the species able to either traverse or otherwise benefit from the orchards.
- 6.27. As outlined in detail in the ES and summarised above, whilst the orchards present within the Appeal Site may superficially appear to be of high biodiversity value, in fact they hold very low ecological value – in essence, they are more akin to intensively managed arable fields. This is primarily due to the intensive management regime which is required to maximise productivity, including herbicide application and regular mowing of grassland habitats, but also due to the varieties and age of the orchard trees themselves. Paragraphs 13.41 to 13.48 of the Consolidated ES provide further background regarding the commercial operation of the orchard.
- 6.28. It is important to differentiate between commercial orchards, such as those present within the Appeal Site, and traditional orchards. Traditional orchards are typically managed in a low intensity way, and unlike the Appeal Site, are not subject to significant inputs of chemicals or frequent mowing. As such, they are of considerable ecological value, and they can provide ideal habitats for faunal species and groups such as invertebrates and roosting bats. The two habitat types are therefore not comparable or of equivalent ecological significance.
- 6.29. For this reason, it is not considered that losses to commercial orchards such as those within the Appeal Site would be of any particular significance in ecological terms, in much the same manner as the loss of intensively managed arable fields would.

6.30. Turning to faunal species utilising the orchard, as the information outlined in the ES Chapter notes, the intensive management regime present offers extremely limited (if any) opportunities for groups such as nesting birds, foraging and commuting bats and reptiles. Whilst it is acknowledged that such species may move through the commercial orchards from time to time, the provision of a network of green spaces and corridors passing through and extending across the Appeal Site will ensure that they will continue to be able to move through the area using these corridors post-development (as noted in paragraph 15.122 of the Consolidated ES). Indeed, the provision of more species-rich habitats is likely to enhance connectivity for such groups compared the existing situation, such as reptiles.

Summary

- 6.31. By incorporating suitable measures into the detailed design and long-term management of green infrastructure within the Appeal Site, in my view it may be robustly concluded that the Appeal Proposals will not result in adverse effects to designated sites, habitats or protected / notable species. Moreover, it is likely that the Proposed Development would in fact deliver biodiversity gains.
- 6.32. Although it has not reached statute (at the time of writing), it is noted that the draft Environment Bill is likely to mandate a requirement for new development to secure a net gain in biodiversity of at least 10% compared to the existing ecological baseline at a site. Given all of the benefits and enhancements proposed as part of the Appeal Scheme, as noted above, there is no doubt in my mind that the Proposed Scheme would exceed this emerging requirement.

7. SUMMARY AND CONCLUSIONS

- 7.1. As outlined in my Written Statement above, having considered all of the potential significant effects that could arise from the Appeal Proposals, and in light of the comprehensive package of avoidance and mitigation measures proposed, in my professional judgement it can be concluded that the Appeal Proposals would not result in any adverse effects on the integrity of any international / European designated sites, when the proposals are considered alone or in combination with other plans and projects.
- 7.2. Following extensive liaison with Natural England throughout the course of the planning application, it is clear that they are fully content with the package of avoidance and mitigation measures proposed. It is therefore axiomatic that the statutory authority has also reached this conclusion.
- 7.3. Whilst concerns have been raised in relation to other ecological matters, these did not form a reason for the refusal of the application and for the reasons set out above, in my view the points raised are not hold up to scrutiny. In contrast, the Appeal Proposals will not only mitigate for all potential adverse effects to habitats and protected species, but will in fact deliver net gains in biodiversity compared to the existing situation.
- 7.4. On this basis, the Appeal Proposals fully accord with all legislation and planning policy requirements in respect of ecology and nature conservation, and therefore I believe that the Secretary of State may properly and safely grant consent for the Appeal Proposals.



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GOATHAM AND SON LTD

LAND AT PUMP LANE
AND LOWER BLOORS FARM,
LOWER RAINHAM,
KENT

**Annexes to Written Statement
in respect of Ecology and
Nature Conservation**

by
TIMOTHY J. GOODWIN
BSc (Hons), MSc,
MIEnvSc, MCIEEM, MIALE

January 2021
8252.WrittenStatement. Annexes.Ecology.vf

ANNEXES

ANNEX 1

DAS Letter from Natural England dated 1 April 2019

Date: 01 April 2019
Our ref: DAS/14124/275569
Your ref: -



Simon Taber
Ecology Solutions
Farncombe House
Farncombe Estate
Broadway
Worcestershire
WR12 7LJ

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

By email only, no hard copy to follow

0300 060 3900

Dear Simon Taber

Discretionary Advice Service (Charged Advice)

Contract reference DAS4417

Proposed residential development on land at Pump Farm and Bloors Farm, Lower Rainham, Kent

Thank you for your consultation on the above dated 04 March 2019, which was received on the same day.

This advice is being provided as part of Natural England's Discretionary Advice Service. Ecology Solutions has asked Natural England to provide the following:

- Advice on potential impacts to designated sites

This advice is provided in accordance with the Quotation dated 14 March 2019 and Agreement dated 22 March 2019.

The following advice is based upon the information within the following:

- Site location plan (dated September 2018)
- Conference call dated 25 March 2019 attended by Simon Taber (Ecology Solutions) and Sean Hanna (Natural England)

From our discussion, I understand that the two farms are currently producing top fruit and there are proposals for a development of up to 1,250 residential units on the site. Our conversation focussed on the potential impacts to the coastal designated nature conservation sites and the information which would be required to inform a Habitats Regulations Assessment and I have summarised the advice we discussed below.

Recreational disturbance

The proposed application site lies approximately 200 metres from the Medway Estuary and Marshes Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Wetland of International Importance under the Ramsar Convention (Ramsar Site). The residents of the new dwellings will be able to directly access these designated sites via a public footpath to the north of Pump Lane which leads to the Saxon Shoreway long distance trail and Riverside Country Park.

The North Kent Environmental Planning Group, of which Medway Council is a key member, commissioned research to try and better understand the causes of bird declines within the Thames Estuary and Marshes, the Medway Estuary and Marshes and The Swale SPAs and Ramsar Sites. The research suggested that recreational disturbance may be one of the contributing factors to bird

declines in these coastal sites. The Thames, Medway and Swale Estuaries Strategic Access Management and Monitoring Strategy (SAMMS) has been agreed and is implementing (funded via developer contributions) a suite of strategic access management measures whilst helping to facilitate housing growth.

As we discussed during our conference call, for significant housing sites within close proximity to the coastal SPAs and Ramsar Sites, the SAMMS measures are unlikely to be effective on their own. Given the significant increase in residents and the attraction/draw of the coast as highlighted within the visitor studies supporting the SAMMS, additional measures are likely to be required. For other schemes in close proximity to the designated sites I have recommended that a suite of measures (in addition to the SAMMS financial contribution) are secured. Such measures include the provision of significant on-site high quality semi-natural greenspace easily accessible by residents; dedicated dog exercising areas (for dogs off the lead) within the development site and the funding of additional SAMMS wardens given the relative ease of access for new residents to the designated sites. I would also recommend talking to Medway Council to see if there are areas of land outside the proposed development boundary, designated sites and Riverside Country Park which could provide opportunities for the creation of new areas of accessible greenspace with views of the coast but which do not increase recreational disturbance.

Air quality

I mentioned during our discussion the formal advice that Natural England provided to Medway Council in relation to their emerging local plan. The advice relates to the potential impacts to the designated sites detailed below from traffic generated air quality which should be considered, both alone and in-combination with other plans or projects. The sites this relates to are:

- Medway Estuary and Marshes SPA and Ramsar Site
- Thames Estuary and Marshes SPA and Ramsar Site
- The Swale SPA and Ramsar Site
- North Downs Woodland Special Area of Conservation (SAC)

For clarity, I would recommend that the potential for traffic generated air quality impacts should be considered on the wider road network, not just the Lower Rainham Road which runs adjacent to the site subject to this advice letter. Consequently, I would recommend that information is provided on the likely air quality impacts that could arise from traffic associated with this proposal to these sites within 200 metres of main roads when considered in-combination with other plans or projects. Evidence collected for the local plan may help inform this assessment and I understand you are undertaking traffic modelling which again should help inform this assessment.

Such an approach is in accordance with the *Wealden District Council v Secretary of State for Communities and Local Government*, *Lewes District Council and South Downs National Park Authority* [2017] EWHC 35 1 judgement which was issued in March 2017.

Water quality

From the information we discussed, it appears that there are unlikely to be environmental pathways for surface or foul water to impact the Medway Estuary and Marshes SSSI, SPA and Ramsar Site. However, I would recommend that this needs to be fully considered as part of any subsequent planning application; if impacts are likely then details of the avoidance and mitigation measures will also need to be provided.

Functionally linked land

I understand that the land for the proposed residential development is currently growing top fruit. Whilst orchards offer limited roosting and feeding opportunities for wetland birds associated with the coastal designated sites, it would seem appropriate for any application to provide information as to whether the proposed development site provides supporting habitat or functionally linked land.

Draft Habitats Regulations Assessment

Whilst outside the scope of this advice, should you want further advice on the draft Habitats Regulations Assessment, I would be pleased to arrange for this to be provided through an extension

to this Discretionary Advice Service contract.

The advice provided in this letter has been through Natural England's Quality Assurance process

The advice provided within the Discretionary Advice Service is the professional advice of the Natural England adviser named below. It is the best advice that can be given based on the information provided so far. Its quality and detail is dependent upon the quality and depth of the information which has been provided. It does not constitute a statutory response or decision, which will be made by Natural England acting corporately in its role as statutory consultee to the competent authority after an application has been submitted. The advice given is therefore not binding in any way and is provided without prejudice to the consideration of any statutory consultation response or decision which may be made by Natural England in due course. The final judgement on any proposals by Natural England is reserved until an application is made and will be made on the information then available, including any modifications to the proposal made after receipt of discretionary advice. All pre-application advice is subject to review and revision in the light of changes in relevant considerations, including changes in relation to the facts, scientific knowledge/evidence, policy, guidance or law. Natural England will not accept any liability for the accuracy, adequacy or completeness of, nor will any express or implied warranty be given for, the advice. This exclusion does not extend to any fraudulent misrepresentation made by or on behalf of Natural England.

This letter concludes Natural England's Advice within the Quotation and Agreement dated 22 March 2019. For any queries relating to the specific advice in this letter only please contact Sean Hanna on 0208 0266 064 or by email to sean.hanna@naturalengland.org.uk.

Yours sincerely

Sean Hanna

Sean Hanna
Senior Adviser
Sussex and Kent Team

ANNEX 2

Email from Sean Hanna (Natural England) to Simon
Taber (Ecology Solutions) dated 24 April 2020

Jodie Dixon

From: Hanna, Sean <Sean.Hanna@naturalengland.org.uk>
Sent: 24 April 2019 10:26
To: Simon Taber
Cc: Tim Goodwin; Jodie Dixon; Vicky Locke
Subject: RE: Land at Pump Farm, Lower Rainham - Design Note regarding On-site Open Space (Our ref: 8252)

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Green Category

Dear Simon

Thank you for your email following our recent telephone conversation. The principles within the Design Note and the indicative recreational plan prepared by Rapleys appear appropriate to help mitigate impacts from recreational disturbance to the coastal designated site as part of a broader package of measures which we discussed a few weeks ago and are summarised in my letter of the 1 April (reference DAS/14124/275569).

If you would like us to provide additional advice as the proposal develops, please do not hesitate to contact me and we would be pleased to provide this through an extension to the Discretionary Advice Service contract.

Kind regards
Sean

Sean Hanna
Senior Adviser
Natural England Sussex and Kent Team, 9th Floor, International House, Dover Place, Kent TN23 1HU
Direct dial 0208 0266 064 Email sean.hanna@naturalengland.org.uk

Please note: I work compressed hours and am not generally in the office on a Friday.

www.gov.uk/natural-england

We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

In an effort to reduce Natural England's carbon footprint, I will, wherever possible, avoid travelling to meetings and attend via audio, video or web conferencing.

From: Simon Taber [mailto:Simon.Taber@ecologysolutions.co.uk]
Sent: 12 April 2019 14:20
To: Hanna, Sean <Sean.Hanna@naturalengland.org.uk>
Cc: Tim Goodwin <Tim.Goodwin@ecologysolutions.co.uk>; Jodie Dixon <Jodie.Dixon@ecologysolutions.co.uk>; Vicky Locke <Vicky.Locke@ecologysolutions.co.uk>
Subject: Land at Pump Farm, Lower Rainham - Design Note regarding On-site Open Space (Our ref: 8252)

Hi Sean,

Following our recent telecon to discuss emerging proposals for the Pump Farm site in Lower Rainham (in light of European designated sites), the project team has undertaken further work in terms of the design of on-site open space, to seek to address a number of the points that we discussed in the call. Please find attached to this email a Design Note produced by the project team, in addition to a draft layout plan. We would be very grateful for your views in relation to the information attached.

Obviously if this will involve further work in line with the DAS process, please do not hesitate to let me know; similarly, if you have any queries or require any further information please do not hesitate to let me know.

Kind regards,
Simon

Simon Taber

Director

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ANNEX 3

Consultation Response from Natural England dated
1 August 2019

Date: 01 August 2019
Our ref: 287468
Your ref: MC/19/1566



Hannah Gunner
Medway Council - Planning Service
Physical & Cultural Regeneration
Regeneration, Culture, Environment & Transformation
Civic Headquarters
Gun Wharf
Dock Road
Chatham ME4 4TR

Customer Services
Hornbeam House
Crewe Business Park
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T 0300 060 3900

By email only, no hard copy to follow

Dear Hannah Gunner

Proposal: Outline planning application with some matters reserved (appearance, landscaping, layout and scale) for redevelopment of land off Pump Lane to include residential development comprising of approximately 1,250 residential units, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle).

Location: Land off Pump Lane, Rainham, Kent, ME8 7TJ

Thank you for your consultation on the above dated 28 June 2019 which was received by Natural England on the same day

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.

Summary of Natural England's advice

Further information required to determine impacts to designated sites

As submitted, the application could have potential significant effects on the Medway Estuary and Marshes Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Wetland of International Importance under the Ramsar Convention (Ramsar Site) and the Medway Estuary Marine Conservation Zone (MCZ).

Natural England requires further information in order to determine the significance of these impacts and the scope for mitigation and suggest that the following information is provided:

- Clarity on the additional measures (over and above the contribution to the Strategic Access Management and Monitoring Strategy) that will be provided to ensure impacts to the designated sites from recreational disturbance do not occur;
- Clarity on the surface water drainage measures that are to be implemented to ensure that the water entering the designated sites via the existing outfall does not result in impacts to habitats or species associated with them

Without this information, Natural England may need to object to the proposal. Please re-consult Natural England once this information has been obtained. Natural England's further advice on designated sites/landscapes and advice on other issues is set out below.

Additional Information required

Given the close proximity of the application site to the Medway Estuary and Marshes SPA and Ramsar Site and the number of dwellings that are proposed, Natural England's advice is that in addition to the appropriate financial contribution being made to the Strategic Access Management and Monitoring Strategy, additional measures will also be required. These could include the provision of significant areas of off-site greenspace and the provision of additional wardening at locations closest to the application site, for example.

The applicant acknowledges that further measures are required, as detailed within Section 5.73 of the 'Information for Habitats Regulations Assessment' document submitted in support of the application. This suggests that discussions will be held with Medway Council regarding the additional measures that will be implemented. Natural England advise that details of the further measures that will be implemented to manage recreational disturbance to the coastal designated sites in close proximity to the development should be provided at this stage to ensure that the proposal does not result in an adverse effect on the integrity of the SPA or Ramsar Site.

Section 5.47 of the 'Information for Habitats Regulations Assessment' report accompanying the planning application confirms that the surface water drainage will discharge into the River Medway via a connection to the existing surface water sewer (MH2754). The report details that measures to manage the flow of contaminated run-off leaving the site will be agreed following further technical studies. Given the scale of the development and the apparent direct discharge via the surface water sewer into the designated sites, we recommend that further information should be provided at this stage to demonstrate that measures can be implemented to ensure that contaminated surface water does not enter the River Medway. We acknowledge that the detailed design will follow at the reserved matters stage but sufficient information should be provided at the outline application stage to give certainty that measures can be implemented to prevent impacts to the designated sites.

Upon submission of the further information above, we will of course be pleased to provide our further advice. Please note that if your authority is minded to grant planning permission contrary to the advice in this letter, you are required under Section 281 (6) of the Wildlife and Countryside Act 1981 (as amended) to notify Natural England of the permission, the terms on which it is proposed to grant it and how, if at all, your authority has taken account of Natural England's advice. You must also allow a further period of 21 days before the operation can commence.

In addition, Natural England would advise on the following issues with further general advice on protected species and other natural environment issues is provided at Annex A appended to this letter.

Soils and Land Quality

Having considered the proposals as a consultation under the Development Management Procedure Order (as amended), and in the context of Government's policy for the protection of the 'best and most versatile' (BMV) agricultural land as set out in paragraph 170 and 171 of the National Planning Policy Framework, Natural England draws your Authority's attention to the following land quality and soil considerations.

Based on the information provided with the planning application, it appears that the proposed development will result in the direct loss of 51.5 hectares of land classified as 'best and most versatile' (Grades 1, 2 and 3a land in the Agricultural Land Classification (ALC) system).

Government policy is set out in Paragraph 170 and 171 of the National Planning Policy Framework which states that:

'Planning policies and decisions should contribute to and enhance the natural and local environment by:

recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland.

And

Plans should distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework¹; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries

As this application site does not benefit from a development plan allocation, the Council needs to fully consider the impacts that will arise from the direct loss of best and most versatile agricultural land as a result of this proposal to ensure the decision is in accordance with Government policy.

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 Sean Hanna on 0208 0266 064 or by email to sean.hanna@naturalengland.org.uk. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

Yours sincerely



Sean Hanna
Senior Advisor
Sussex and Kent Team

¹ Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.

Annex A

Natural England offers the following additional advice:

Landscape

Paragraph 170 of the National Planning Policy Framework (NPPF) highlights the need to protect and enhance valued landscapes through the planning system. This application may present opportunities to protect and enhance locally valued landscapes, including any local landscape designations. You may want to consider whether any local landscape features or characteristics (such as ponds, woodland or dry stone walls) could be incorporated into the development in order to respect and enhance local landscape character and distinctiveness, in line with any local landscape character assessments. Where the impacts of development are likely to be significant, a Landscape & Visual Impact Assessment should be provided with the proposal to inform decision making. We refer you to the [Landscape Institute Guidelines for Landscape and Visual Impact Assessment](#) for further guidance.

Best and most versatile agricultural land and soils

Local planning authorities are responsible for ensuring that they have sufficient detailed agricultural land classification (ALC) information to apply NPPF policies (Paragraphs 170 and 171). This is the case regardless of whether the proposed development is sufficiently large to consult Natural England. Further information is contained in [GOV.UK guidance](#).

Agricultural Land Classification information is available on the [Magic](#) website on the [Data.Gov.uk](#) website. If you consider the proposal has significant implications for further loss of 'best and most versatile' agricultural land, we would be pleased to discuss the matter further.

Guidance on soil protection is available in the Defra [Construction Code of Practice for the Sustainable Use of Soils on Construction Sites](#), and we recommend its use in the design and construction of development, including any planning conditions. Should the development proceed, we advise that the developer uses an appropriately experienced soil specialist to advise on, and supervise soil handling, including identifying when soils are dry enough to be handled and how to make the best use of soils on site.

Protected Species

Natural England has produced [standing advice](#)² to help planning authorities understand the impact of particular developments on protected species. We advise you to refer to this advice. Natural England will only provide bespoke advice on protected species where they form part of a SSSI or in exceptional circumstances.

Local sites and priority habitats and species

You should consider the impacts of the proposed development on any local wildlife or geodiversity sites, in line with paragraphs 171 and 174 of the NPPF and any relevant development plan policy. There may also be opportunities to enhance local sites and improve their connectivity. Natural England does not hold locally specific information on local sites and recommends further information is obtained from appropriate bodies such as the local records centre, wildlife trust, geoconservation groups or recording societies.

Priority habitats and Species are of particular importance for nature conservation and included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. Most priority habitats will be mapped either as Sites of Special Scientific Interest, on the Magic website or as Local Wildlife Sites. List of priority habitats and species can be found [here](#)³. Natural England does not routinely hold species data, such data should be collected when impacts on priority habitats or species are considered likely. Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land, further information including links to the open mosaic habitats inventory can be found [here](#).

² <https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals>

³ <http://webarchive.nationalarchives.gov.uk/20140711133551/http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx>

Ancient woodland, ancient and veteran trees

You should consider any impacts on ancient woodland and ancient and veteran trees in line with paragraph 175 of the NPPF. Natural England maintains the Ancient Woodland [Inventory](#) which can help identify ancient woodland. Natural England and the Forestry Commission have produced [standing advice](#) for planning authorities in relation to ancient woodland and ancient and veteran trees. It should be taken into account by planning authorities when determining relevant planning applications. Natural England will only provide bespoke advice on ancient woodland, ancient and veteran trees where they form part of a SSSI or in exceptional circumstances.

Environmental enhancement

Development provides opportunities to secure net gains for biodiversity and wider environmental gains, as outlined in the NPPF (paragraphs 8, 72, 102, 118, 170, 171, 174 and 175). We advise you to follow the mitigation hierarchy as set out in paragraph 175 of the NPPF and firstly consider what existing environmental features on and around the site can be retained or enhanced or what new features could be incorporated into the development proposal. Where onsite measures are not possible, you should consider off site measures, including sites for biodiversity offsetting. Opportunities for enhancement might include:

- Providing a new footpath through the new development to link into existing rights of way.
- Restoring a neglected hedgerow.
- Creating a new pond as an attractive feature on the site.
- Planting trees characteristic to the local area to make a positive contribution to the local landscape.
- Using native plants in landscaping schemes for better nectar and seed sources for bees and birds.
- Incorporating swift boxes or bat boxes into the design of new buildings.
- Designing lighting to encourage wildlife.
- Adding a green roof to new buildings.

You could also consider how the proposed development can contribute to the wider environment and help implement elements of any Landscape, Green Infrastructure or Biodiversity Strategy in place in your area. For example:

- Links to existing greenspace and/or opportunities to enhance and improve access.
- Identifying opportunities for new greenspace and managing existing (and new) public spaces to be more wildlife friendly (e.g. by sowing wild flower strips)
- Planting additional street trees.
- Identifying any improvements to the existing public right of way network or using the opportunity of new development to extend the network to create missing links.
- Restoring neglected environmental features (e.g. coppicing a prominent hedge that is in poor condition or clearing away an eyesore).

Access and Recreation

Natural England encourages any proposal to incorporate measures to help improve people's access to the natural environment. Measures such as reinstating existing footpaths together with the creation of new footpaths and bridleways should be considered. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Relevant aspects of local authority green infrastructure strategies should be delivered where appropriate.

Rights of Way, Access land, Coastal access and National Trails

Paragraphs 98 and 170 of the NPPF highlights the important of public rights of way and access. Development should consider potential impacts on access land, common land, rights of way and coastal access routes in the vicinity of the development. Consideration should also be given to the potential impacts on the any nearby National Trails. The National Trails website www.nationaltrail.co.uk provides information including contact details for the National Trail Officer. Appropriate mitigation measures should be incorporated for any adverse impacts.

Biodiversity duty

Your authority has a [duty](#) to have regard to conserving biodiversity as part of your decision making. Conserving biodiversity can also include restoration or enhancement to a population or habitat. Further information is available [here](#).

ANNEX 4

Technical Note: Surface Water Drainage Strategy
Addendum (Stantec, January 2020)

TECHNICAL NOTE

Job Name: Pump Farm Lower Rainham
Job No: 44538
Note No: 44538/TN001
Date: January 2020
Prepared By: Iris Kalaci
Subject: **Surface Water Drainage Strategy Addendum**

1. Introduction

This note has been produced by Stantec, on behalf of AC Goatham & Son and is issued in support of the Outline Planning application MC/19/1566 for approximately 1,250 residential units, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle).

This note is an addendum to the surface water drainage strategy detailed in the approved PBA's Flood Risk Assessment (January 2019) included in **Appendix E**. The subsequent sections of this note detail only the changes made to the surface water drainage strategy.

2. Executive Summary of Changes

The surface water drainage strategy has been amended to address comments made by LLFA and Natural England (NE) during the planning consultation process (see **Appendix A**). Below is a list of the changes made:

- show ground infiltration as the surface water drainage solution for the proposed development;
- use Flood Estimation Handbook (FEH) rain profile data in the drainage modelling and design;
- provide drainage modelling results (Micro-Drainage) for storms with return 1 in 100 year plus 40% climate change;
- allow for Urban Creep, 10% increase in impermeable areas; and,
- include further information on SuDS train and water quality improvement.

The latest surface water drainage proposals and catchments are detailed in drawing 44538/2001/001 included in **Appendix B**. The latest Micro-Drainage surface water drainage modelling and calculations are included in **Appendix D**.

DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed (Discipline Lead)	Approved (Project Director)
44538/TN001	-	14.01.20	IK	IK	ET	ET

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TECHNICAL NOTE

3. Impermeable Areas

The Masterplan has been produced by PRC and is divided into sub-catchments (development plots), as shown in drawing 44538/2001/001 in **Appendix B**.

The existing extent of impermeable surfaces is assumed to be zero. **Table 3.1** presents a breakdown of the proposed impermeable areas of the development plots (sub-catchments) shown in the Masterplan. In line with the drainage strategy detailed in the FRA, residential, care and village centre areas (including for minor access roads both within and between sub-sites) are assumed to comprise of 65% impermeable area, whilst the school impermeable area has been assumed as 80%. In addition, in accordance with CIRIA Report C753 '*The SuDS Manual*' (2015) a 10% increase has been included in the drainage calculations to account for Urban Creep. The proposed open spaces are anticipated to retain the same greenfield drainage characteristics as existing.

Table 3.1 Proposed Impermeable Areas

Development Use	Gross Development Area (ha)	Impermeable Area %	Net Impermeable Area (ha)	Net Impermeable Area (ha) incl. 10% Urban Creep
A1	3.789	65	2.463	2.709
A2	1.150	65	0.748	0.822
B1(a)	1.252	65	0.813	0.894
B1(b)	0.535	65	0.348	0.382
B2	1.314	65	0.854	0.940
B3 (inc. care)	1.526	65	0.992	1.091
C(a)	8.037	65	5.224	5.746
C(b)	0.305	65	0.198	0.218
D(a)	1.938	65	1.260	1.385
D(b)	8.024	65	5.215	5.737
E1(a)	3.378	65	2.195	2.415
E1(b)	0.669	65	0.434	0.478
E2	2.117	65	1.376	1.514
SCHOOL	2.603	80	2.082	2.291
Total	36.637	-	24.205	26.625

4. Hierarchy of Surface Water Disposal

The method of disposing surface water from sites is prioritised within the Building Regulations Requirement Part H3. It requires that rainwater from roofs and paved areas is carried away from the surface to discharge to one of the following, listed in order of priority:

- infiltration, or where that is not reasonably practicable;
- a watercourse, or where that is not practicable;
- a sewer.

TECHNICAL NOTE

In order to prove suitability of ground infiltration and determine the infiltration rates, borehole soakage testing was undertaken by Southern Testing Laboratories Ltd in October 2019, and the results are included in **Appendix C**. These test results indicate that the infiltration rate of the chalk layer is generally in excess of 1×10^{-5} m/s, which proves that infiltration is a suitable surface water drainage solution for the Site. *Kent Design Guide, Making it Happen, Sustainability Drainage Systems (February 2007)* notes that a minimum infiltration rate of 1×10^{-5} m/s is required for deep bore soakaway drainage solutions.

5. Ground Conditions and Groundwater

From the earliest available historical records, the Site which comprises both Pump Farm and Bloor Farm has been predominantly used as agricultural land since the mid nineteenth century.

Currently both farms are generally covered by orchards. Pump Farm contains several associated agricultural buildings, caravans for temporary workers on the north-eastern part of the Site and a large water tank. On Bloors Farm there is a large segmental steel circular water storage tank on a concrete plinth and local to it a borehole used for water abstraction. Both farms have an active irrigation system for watering the orchards.

As detailed in the FRA a Phase 1 Ground Conditions Assessment has been prepared by PBA (2018), which provides an overview of the expected ground conditions at the Site. A summary of the ground conditions detailed in this assessment is shown in **Table 5.1**.

Table 5.1 Summary of Ground Conditions (PBA, 2018) Note:

The final figure shows that chalk continues pass the end of the bore holes.

Strata	Base Level (m bgl)	Typical Description
Topsoil	0.3 – 0.5	n/a
Head Deposits	0.5 – 3.0	Loam. Locally thinning at northern boundary and probably absent to south of Site.
Thanet Beds	2.0 – 6.0	Stiff or very stiff, brown sandy CLAY with gravel and occasional roots. Locally thinning to north of the Site.
Seaford Chalk Formation	>16.70	Firm chalk with fragments of hard chalk and flint

Groundwater levels recorded in close proximity to the Lower Twydall Chalk Pit landfill are taken from the 2015 annual monitoring report [Ground and Environmental Services Limited (GES) 2015] and are presented in the PBA Ground Conditions Assessment report (PBA, 2018). During 2015 groundwater levels ranged between 3.33mAOD and 3.99mAOD in the higher parts of the Site (ground levels 24.00-22.00m AOD) e.g. borehole BH1, to the south of the landfill site; and between 1.99mAOD and 2.14mAOD in the lower parts of the Site (ground levels 9.15m AOD) e.g. borehole BH3a, to the north of the landfill site closest to Lower Rainham Road.

When considering the GES 2015 report water monitoring borehole BH2A, with starting ground level as 14.56m AOD (i.e. towards the northern lower end of the Site), found chalk at 2.5m below the ground and encountered groundwater at 12.8m below ground, therefore, there is an unsaturated chalk band of 10.3m.

TECHNICAL NOTE

Recently, Southern Testing Laboratories Ltd carried out borehole permeability testing to confirm the borehole soakage rates for the Site. **Table 5.2** shows a summary of the ground conditions encountered during these investigative works (see **Appendix C** for further details). As part of these works a groundwater monitoring well was installed. The groundwater monitoring results are not available at the time of writing this Technical Note and are to be considered at the next stage of the drainage design.

Table 5.3 shows a summary of the groundwater strikes encountered during the investigative works by Southern Testing Laboratories Ltd.

The ground conditions and groundwater level presented in the PBA's Phase 1 Ground Conditions Assessment (2018) are generally similar/in line with those established by Southern Testing Laboratories Ltd. Due to the size of the Site it is proposed that a detailed site investigation and ground water monitoring is carried out at the next stage of the development to confirm the infiltration rates and inform the surface water drainage detailed design for each development plot.

Table 5.2 Summary of Ground Conditions (Southern Testing Laboratories, 2019)

Note: The final figure shows that chalk continues pass the end of the bore holes.

Strata	Base Level (m bgl)	Typical Description
Topsoil	0 – 0.5	Brown, silty CLAY with rootlets
Made Ground	0/0.5 – 0.6/1.5	Dark brown/brown & brownish white, CLAY with gravel of chalk, brick flint & sandstone
Seaford Chalk	1.5 – 5.90	CHALK recovered as silty very gravelly CLAY or very clayey gravelly SILT with occasional flint cobbles
Seaford Chalk	8.0-9.5	CHALK recovered as off-white, clayey very gravelly SILT with flint cobbles

Table 5.3 Summary of Groundwater Strikes (Southern Testing Laboratories, 2019)

Borehole Reference	Typical Description
BH01	Wet soil from approximately 8.6m. Water struck at 9.5m BGL and rose to 9.25m after 30min.
BH02	Wet soil from approximately 15.0m BGL. Water struck at 15.2m. Water 15.16m at completion of installation.

The groundwater is within the Seaford Chalk Formation, which has been identified as being a Principal Aquifer. The surface water drainage design detailed in the subsequent sections of this note is based on the Southern Testing Laboratories following design criteria:

- *Development Plot A1, A2, B1(b), B2, B3, C(b), D(b), E1(a), E1(b), E2 and School:* It is assumed that the groundwater level at the location of the proposed attenuation basins for these development plots is 9.0m BGL, which is reflective of that surveyed/recorded on borehole BH01 by Southern Testing Laboratories Ltd;
- *Development Plot B1(a), C(a), D(a) and D(b):* It is assumed that the groundwater level at the location of the proposed attenuation basins for these development plots is 15.0m BGL, which is reflective of that surveyed/recorded on borehole BH02 by Southern Testing Laboratories Ltd;

TECHNICAL NOTE

As detailed in **Figure 5.1**, there are no Groundwater Source Protection Zones within 500m of the Site. The ground water protection zones are described by the Environment Agency as follows:

- *Inner zone – SPZ1*: This zone is 50day travel time of pollutant to source with a 50 metres default minimum radius;
- *Outer zone – SPZ2*: This zone is 400day travel time of pollutant to source. This has a 250 or 500 metres minimum radius around the source depending on the amount of water taken;
- *Total catchment – SPZ3*: This is the area around a supply source within which all the groundwater ends up at the abstraction point. This is the point from where the water is taken. This could extend some distance from the source point;
- *Zone of special interest – SPZ4*: This zone is where local conditions require additional protection.

6. Groundwater Flooding

As detailed in the FRA, the PFRA provides a high-level view of the general areas that might be at risk from groundwater flooding. It shows that there is a potential for groundwater flooding on the Site. However, in common with the majority of datasets showing areas which may experience groundwater emergence, it covers a large area of land, and only isolated locations within the overall susceptible area are actually likely to suffer the consequences of groundwater flooding.

The PFRA provides no evidence of historic groundwater flooding for the Site and goes on to state that there is no evidence for there being a future risk across Medway and groundwater rebound is not believed to be an issue in the area.

From a review of the available geotechnical information (see **Section 5**), the depth to the groundwater varies from ~ 15m at the higher southwestern end of the Site to ~ 9m at the lower north-eastern end.

From an overview of historic flooding in Medway, it was reported in the PFRA, there has been no groundwater flooding recorded on the Site. Therefore, as noted in the FRA it is assessed that there is a low risk of groundwater flooding on the Site.

TECHNICAL NOTE

MAGiC Groundwater Protection Map

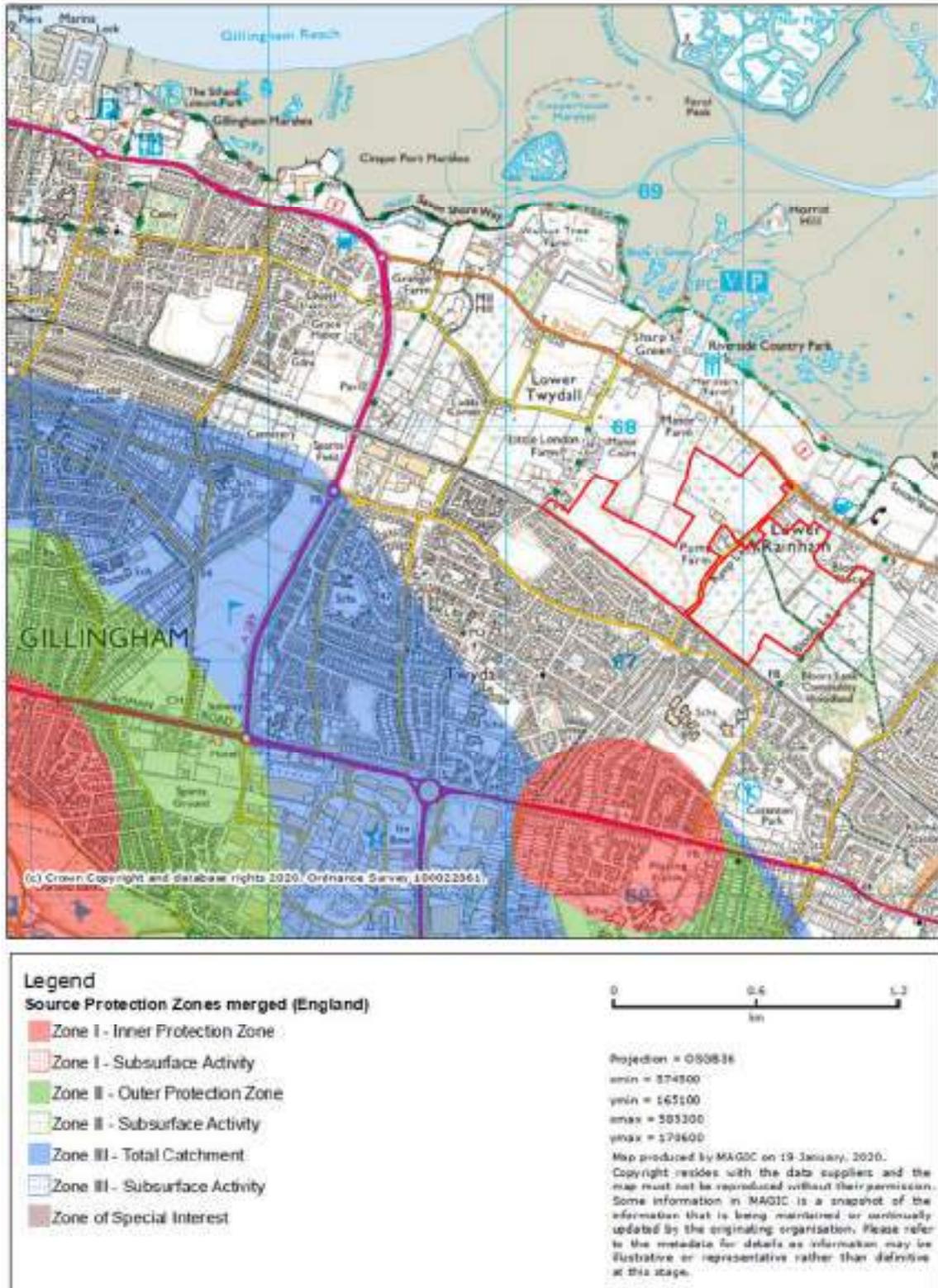


Figure 5.1 Groundwater Protection Zones Map (DEFRA)

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TECHNICAL NOTE

7. Existing and Proposed Discharge Rates

The Site is currently undeveloped agricultural land and therefore it is assumed that there are no below ground/sub-soil drainage pipes serving the Site. Due to the topography of the Site and the made ground/clay make-up of the topsoil layers, it is considered that the greenfield surface water runoff drains overland towards the existing lower ground areas (incl. Pump Lane and Lower Rainham Road) to the north of the Site as shown in Drawing No. 44538-2001-002 (see **Appendix B**). The topographic survey and the Southern Water asset records (see the FRA in **Appendix E**) indicate that there are existing road gullies and surface water sewers on Pump Lane and Lower Rainham Road. These gullies and sewers drain in a northerly direction towards Rainham Creek Marshes. In addition, based on DEFRA Maps (see **Figure 2.1**) it appears that the low ground areas immediately to the north of the Site fall in a northerly direction towards the Rainham Creek Marshes. Therefore, it can be concluded that the surface water runoff from the existing Site eventually drains into the Rainham Creek Marshes via either overland flows or the surface water piped drainage networks in Pump Lane and Lower Rainham Road. It should be noted that Rainham Creek Marshes form part of Medway Estuary and Marshes Special Protection Area / Ramsar Site.

The existing greenfield surface water runoff rate (Q_{BAR}) has been established using the ICP SuDS Method of Micro-Drainage and is as summarised in **Table 7.1** and detailed in **Appendix D**.

Table 7.1 Greenfield Runoff Rates

AEP Event	Runoff Rate (l/s/ha)
100%	2.00
Q_{BAR}	2.4
3.33%	5.4
1%	7.6

As shown in Drawing No. **44538-2001-001** (see **Appendix B**), the proposed development is sub-divided into various development plots. The proposed surface water discharge rate from each development plot will be limited to the combined infiltration rate of the deep bore soakaways provided within that development plot as detailed in **Table 7.2** below.

The infiltration/discharge rate of the boreholes is estimated based on the guidance notes of *Kent County Council's The Soakaway Design Guide, July 2000*. The calculations and design assumptions are detailed in **Appendix D**. The infiltration rates shown in **Table 7.2** are considered to be conservative and it is recommended that additional deep borehole and pit soakage tests are undertaken at the locations of the proposed attenuation basins to confirm groundwater level, infiltration rates of deep boreholes and that of the basins. The borehole soakaways are proposed to extend 8.0m and 14.0m BGL providing a minimum of 1.0m clearance between the bottom liner of the soakaway and the recorded groundwater.

Table 7.2 Infiltration Rates per Catchment

Note (#): Refer to the drainage calculations in Appendix D for details of the estimated infiltration rates

Catchment	Proposed Number of Deep Bore Soakaways	Estimated Infiltration Rate per Soakaway (l/s) (#)	Total Infiltration Rate per Catchment (l/s)
A1	18	0.143	2.6
A2	7	0.143	1.0
B1(a)	6	1.018	6.1

TECHNICAL NOTE

B1(b)	4	0.143	0.6
B2	7	0.143	1.0
B3 (inc. care)	9	0.143	1.3
C(a)	24	1.018	24.4
C(b)	3	0.143	0.4
D(a)	9	1.018	9.2
D(b)	8	1.018	8.1
	25	0.143	3.6
E1(a)	18	0.143	2.6
E1(b)	4	0.143	0.6
E2	7	0.143	1.0
SCHOOL	14	0.143	2.0

8. Attenuation Requirements

It is recognised that surface water attenuation will need to be provided within the surface water drainage system, to demonstrate that (in accordance with Building Regulations – Approved Document Part H, 2015) the drainage system accommodates the surface water runoff for all storm events up to and including the 1 in 100 (1%) Annual Probability event plus 40% climate change.

Surface water attenuation requirements have been estimated using the Flood Estimate Handbook (FEH) rainfall data and the 'Quick Storage Estimate' function of Micro-Drainage and are based on the estimated infiltration/discharge rates detailed in in **Table 7.2**.

The required volumes of surface water attenuation to serve the proposed development plots for all storms up to an including 1 in 100y plus 40% climate change are summarised in **Table 8.1** and copies of the Micro-Drainage outputs are included in **Appendix D**.

The volume of surface water attenuation proposed for each development plot is detailed in **Table 8.2**. It is proposed that the surface water attenuation will be provided by lined permeable paving, swales, attenuation basins, deep bored soakaways and piped drainage network. At this stage of the design, the volume of attenuation provided by the swales and piped drainage network has not been accounted for and is not reflected in **Table 8.2**.

The layout and extent of the proposed SuDS is shown in drawing 44538/2001/001 (see **Appendix B**) and is subject to detailed design and coordination with the existing and proposed utility services routes, surface finishes, soft landscaping, architectural layouts/sections, site logistics, phasing of works, building foundations etc, all of which will be confirmed at the detailed design stage.

Based on experience from other projects, the average volume of attenuation provided from lined permeable paving of 1ha residential development is 250m³. It is assumed that permeable paving will be provided on driveways, communal external hardstanding/landscape areas and communal parking areas of the development plots.

TECHNICAL NOTE

The volume of attenuation provided by a deep bore soakaway would consist of the volume of attenuation provided by the chamber and that by the deep bore soakaway. At this stage of the design, the deep bore soakaway chambers are considered to be 1.5m diameter and 1.5m deep (see **Figure 8.1** as an example of Deep Bore Soakaway). The deep bore soakaways are considered to have a 0.25m borehole diameter and either a depth of 8.0m or 14.0m this depending on the groundwater level.

$$\text{Volume Soakaway Chamber} = \pi \times r^2 \times \text{depth} = \pi \times 0.75^2 \times 1.5 = 2.65\text{m}^3$$

$$\text{Volume of Deep Bore Soakaway (8m BGL)} = \pi \times r^2 \times \text{depth} = \pi \times 0.125^2 \times (8.0-1.5)$$

$$\text{Volume of Deep Bore Soakaway (8m BGL)} = 0.32\text{m}^3$$

$$\text{Volume of Deep Bore Soakaway (14m BGL)} = \pi \times r^2 \times \text{depth} = \pi \times 0.125^2 \times (14.0-1.5)$$

$$\text{Volume of Deep Bore Soakaway (14m BGL)} = 0.61\text{m}^3$$

$$\text{Total Volume of 1no Deep Bore Soakaway (8m BGL)} = 2.65 + 0.32\text{m}^3 = 2.97\text{m}^3$$

$$\text{Total Volume of 1no Deep Bore Soakaway (14m BGL)} = 2.65 + 0.61\text{m}^3 = 3.26\text{m}^3$$

The volume of attenuation provided by the proposed basins is estimated based on a maximum 1.20-1.50m surface water depth (excluding freeboard). The overall depth of the basins would be 1.50-1.80m (to allow for 0.3m freeboard) with inner slopes ranging from 1 in 3 to 1 in 4 and maintenance access along the perimeter.

TECHNICAL NOTE

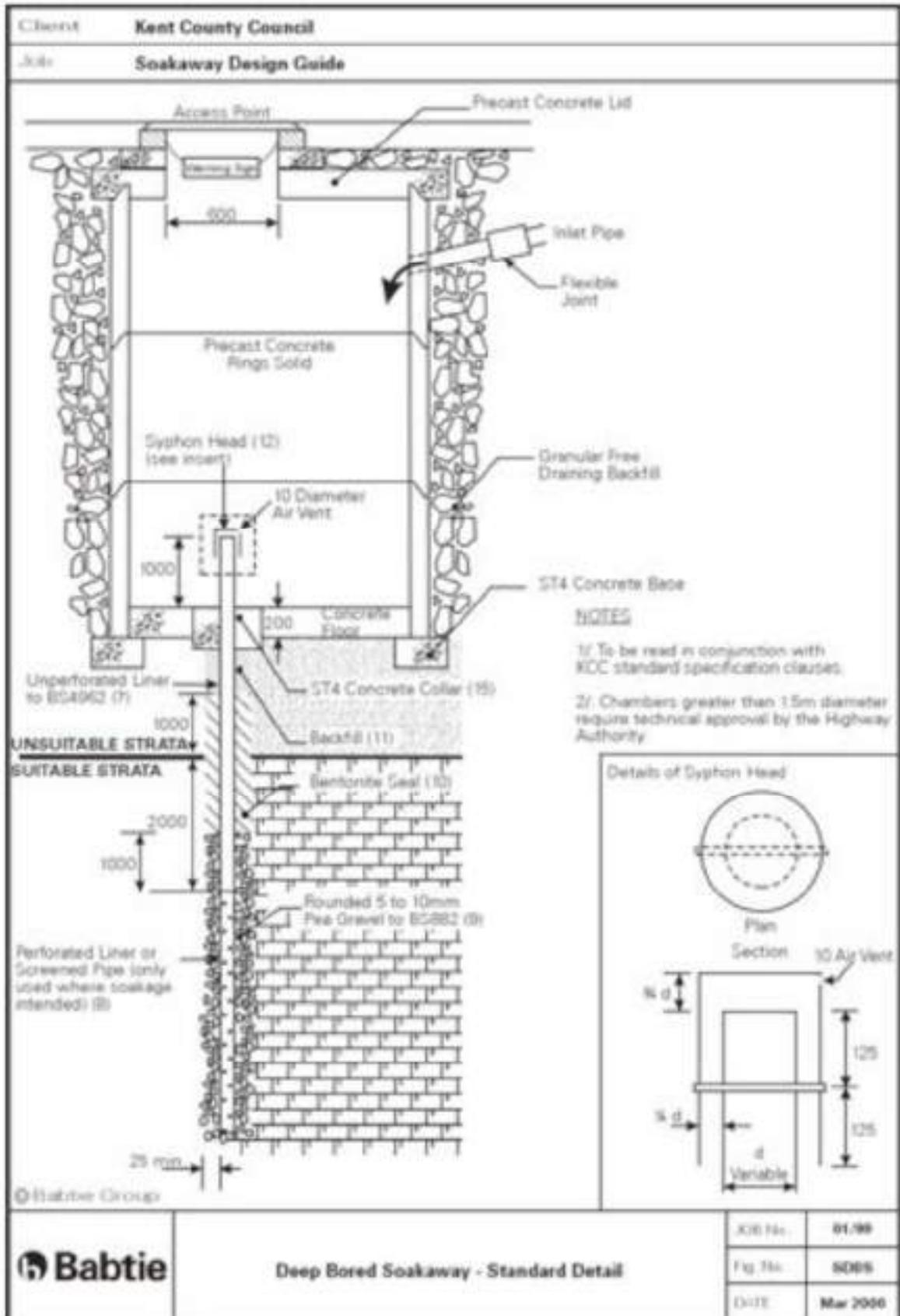


Figure 8.1 Deep Bore Soakaway Standard Details, KCC's Soakaway Design Guide (2000)
 Contains Kent County Council Information © KCC

TECHNICAL NOTE

Table 8.1 Attenuation Volume Requirements for All Storms up to and Incl. 1 in 100y plus 40% CC

Catchment	Gross Development Area (ha)	Net Impermeable Area (65%) Plus 10% Urban Creep (ha)	Proposed Maximum Discharge (l/s)	Required Total Attenuation Volume (m ³)
A1	3.789	2.709	2.6	3960
A2	1.150	0.822	1.0	1162
B1(a)	1.252	0.894	6.1	851
B1(b)	0.535	0.382	0.6	517
B2	1.314	0.940	1.0	1353
B3 (inc. care)	1.526	1.091	1.3	1547
C(a)	8.037	5.746	24.4	6174
C(b)	0.305	0.218	0.4	286
D(a)	1.938	1.385	9.2	1329
D(b)	8.024	5.737	11.7	7355
E1(a)	3.378	2.415	2.6	3471
E1(b)	0.669	0.478	0.6	672
E2	2.117	1.510	1.0	2310
SCHOOL	2.603	2.291	2.0	3391
Total	36.637	26.625		34,378

Table 8.2 Attenuation Volume Provided on Site

Catchment	Proposed Attenuation Vol. Permeable Paving 250m ³ / ha (m ³)	Proposed Attenuation Vol. Deep Bore Soakaways (m ³)	Proposed Attenuation Vol. Basins (m ³)	Proposed Total Attenuation Volume (m ³)
A1	615 (2.463 x 250)	47 (16 x 2.97)	3466	4128
A2	187 (0.748 x 250)	20 (7 x 2.97)	1161	1368
B1(a)	203 (0.813 x 250)	19 (6 x 3.26)	725	947
B1(b)	87 (0.348 x 250)	12 (4 x 2.97)	671	770
B2	213 (0.854 x 250)	20 (7 x 2.97)	1260	1493
B3 (inc. care)	248 (0.992 x 250)	27 (9 x 2.97)	1300	1575
C(a)	1306 (5.224 x 250)	78 (24 x 3.26)	4820	6204
C(b)	49 (0.198 x 250)	8 (3 x 2.97)	1179	1601
D(a)	315 (1.260 x 250)	29 (9 x 3.26)	1060	1404
D(b)	1306 (5.224 x 250)	48 (8 x 3.26) 74 (25 x 2.97)	1224 4722	7374
E1(a)	548 (2.195 x 250)	53 (18 x 2.97)	3015	3616
E1(b)	108 (0.434 x 250)	12 (4 x 2.97)	636	756
E2	344 (1.376 x 250)	20 (7 x 2.97)	2000	2364
SCHOOL	520 (2.082 x 250)	42 (14 x 2.97)	2868	3430
Total	6047	846		37,030

TECHNICAL NOTE

9. Design Standards and Exceedance

Adoptable piped sewer systems will be designed in accordance with Sewers for Adoption with any private drainage systems designed in accordance with Building Regulations – Approved Document Part H (2015).

The surface water attenuation for the proposed development plots has been sized to accommodate surface water runoff with no flooding for all storms up to and including the 1 in 100 (1%) Annual Probability plus 20% climate change event. The 20% Climate Change is based on the latest guidance from the EA (EA, 2016). The impact of a 40% Climate Change has also been considered and as detailed in **Table 8.1** and **8.2** the proposed attenuation can accommodate all storms with a return period up to and including 1 in 100 (1%) Annual Probability plus 40% climate change event.

During an exceedance event [i.e. drainage outfall from the development plot blocked, or storm events exceeding the 1 in 100 (1%) Annual Probability plus 20% climate change], the flood water will be directed towards the proposed basins, which are positioned at the lowest part of the Site. In order to not exacerbate the existing flood risk downstream of the Site, it is proposed that all basins include a 0.30m freeboard to accommodate flood exceedance.

As outlined in **Section 8** above, the development proposals have been designed on a precautionary basis to avoid direct discharge into Medway Estuary and Marshes Special Protection Area / Ramsar site, through the use of deep bore soakaways. Moreover, the proposals will accommodate surface water runoff with no flooding associated with storms up to the 1 in 100 (1%) annual probability plus 40% climate change event, such that there would be no discharge of flood water into the European designated site. However, in a worst-case scenario, where the freeboard of the proposed basins is surpassed, flood water would be directed by basin overflows and site wide exceedance routes towards Pump Lane and Lower Rainham Road and will drain towards the Rainham Creek Marshes. The likelihood of such an event is considered to be very low in light of the design; moreover, it is important to reiterate that the current situation involves discharge of surface water runoff to the Medway Estuary from the Site in any event.

10. Sustainable Urban Drainage Systems (SuDS)

It is a requirement of the NPPF that SuDS are used in all major development, if feasible. The LLFA also advocate the use of appropriate SuDS measures in new developments.

CIRIA Report C753 *'The SuDS Manual'* (2015) outlines the various types of SuDS, their benefits and limitations, and design considerations associated with each. Not all SuDS components/methods are feasible or appropriate for all developments, factors such as available space, ground conditions, and site gradient will influence the feasibility of different methods for a particular development.

The surface water management strategy has been developed to ensure that surface water runoff from the Site receives the appropriate level of water quality treatment in line with the guidelines and requirements of CIRIA Report C753 *'The SuDS Manual'* (2015) Table 26.2 and 26.3. Below is a summary of the SuDS considered appropriate for the proposed development.

Permeable Paving (Source Control): Permeable paving is proposed where practical on driveways, communal external hardstanding/landscape areas and communal parking areas of the development plots. Permeable paving will provide attenuation, water quality treatment and slow down the time of concentration into the drainage network.

TECHNICAL NOTE

Swales (Interception and Conveyance): Swales are proposed along the perimeter of the development plots and highways. These will intercept, collect and convey surface water runoff, whilst also providing water quality treatment. As noted in the CIRIA report C753 'The SuDS Manual' (2015) Chapter 17, there is usually no runoff from the majority of the small rain fall events.

Detention Basins (Interception, Downstream End): Detention basins are proposed at the lowest parts of the proposed development plots. These will offer attenuation, water quality treatment, amenity space and will house the proposed deep bore soakaways described below. It is proposed that the basins are 1.50-1.80m deep in order to provide 1.20-1.50m of surface water attenuation and 0.30m of freeboard. All basins shall include forebays to contain accumulating sediments and overflows to route exceedance flood water. Basins will provide attenuation and water quality treatment via gravitational settling of particulate pollutants. Vegetated detention basins can deliver some Interception because there tends to be no runoff from them for the majority of small rainfall events. The water soaks into the basin topsoil layer and is removed via evapotranspiration. At the next stage of the design, the infiltration capacity of the basins shall be considered as a design solution based on detailed Site Investigation data. The drainage design shown in this Technical Note does not account for basin infiltration. The inner basin side slopes would be between 1 in 3 to 1 in 4 and the outside tie-in slopes would be 1 in 3. A 3.0-3.5m track is to be provided around the basins for maintenance access.

Filter Drains (Conveyance): Filter drains can be used to drain surface water runoff from the proposed highways. Filter drains can help reduce pollutant levels in surface water runoff by filtering out fine sediments, metals, hydrocarbons and other pollutants. The use and extent of filter drains is to be detailed in the next stage of design through consultations with the Highway Authority.

Deep Bore Soakaways (Source Control): Deep bored soakaways have been proposed as the surface water drainage solution. These are to be located within the proposed detention basins and in other landscaped areas at least 10.0m away from housing, roads and infrastructure to avoid settlement and ground collapse due to fines (very small particles within a soil of various sizes particles) migrating into widened fissures, or open voids within the underlying chalk. Refer to the deep bore soakaway design in [Appendix D](#) for further details.

11. Pollution Control and Water Quality Management

Appropriate pollution control and water quality management measures will be included in the proposed surface water drainage system to minimise the risk of contamination or pollution entering the ground from surface water runoff from the development.

In particular it is essential to provide treatment within the SuDS components for the frequent rainfall events (i.e. 1 in 1-year storm events) and the first flush, where urban contaminants are being mobilised and washed off urban surfaces.

The proposed SuDS management treatment train detailed below and in drawing no. 44538/2001/001 will use drainage components/SuDS in series to achieve a robust surface water management system that does not pose an unacceptable risk of pollution to groundwater.

This is in line with the Environment Agency's approach to groundwater protection, guideline G13 - Sustainable Drainage Systems and CIRIA Report C753 'The SuDS Manual' (2015).

Furthermore, the proposed surface water sewer network will incorporate suitable pollution control measures such as trapped gullies and catchpit manholes to manage sediment control.

TECHNICAL NOTE

The final strategy of pollution control and water quality management will be confirmed as part of the detailed design.

Residential Roofs: Surface water runoff from roofs will undergo two stages of treatment, one via swales and another via the basins. As detailed in CIRIA Report C753 'The SuDS Manual' (2015) Table 26, the pollution hazard indices for roofs are detailed as follows:

- Total Suspended Solids = 0.2
- Metals = 0.2
- Hydrocarbons = 0.05

[First Stage of Treatment] In accordance with CIRIA Report C753 'The SuDS Manual' (2015) Table 26.3, the swales provide the following SuDS mitigation indices:

- Total Suspended Solids = 0.5
- Metals = 0.6
- Hydrocarbons = 0.6

[Second Stage of Treatment] In accordance with CIRIA Report C753 'The SuDS Manual' (2015) Table 26.3, the basins provide the following SuDS mitigation indices:

- Total Suspended Solids = 0.5
- Metals = 0.5
- Hydrocarbons = 0.6

The overall SuDS mitigation indices for residential roof runoff is derived in accordance with the CIRIA Report C753 'The SuDS Manual' (2015) recommendations as follows:

Total SuDS Mitigation Index = Mitigation Index 1 + 0.5 x (Mitigation Index 2...)

- Total Suspended Solids = 0.75 (0.5+0.5x0.5)
- Metals = 0.85 (0.6+0.5x0.5)
- Hydrocarbons = 0.9 (0.6+0.5x0.6)

On this basis, it can be concluded that the proposed swales and basins will provide adequate water quality treatment for the residential roof runoff.

Highways: Surface water runoff from the highways will undergo three stages of treatment via filter drains, swales and basins. As detailed in CIRIA Report C753 'The SuDS Manual' (2015) Table 26, the pollution hazard indices for highways are detailed below. These are based on the assumption that the Site will have more than 300 traffic movements a day.

- Total Suspended Solids = 0.7
- Metals = 0.6
- Hydrocarbons = 0.7

[First Stage of Treatment] In accordance with CIRIA Report C753 'The SuDS Manual' (2015) Table 26.3, the filter drains provide the following SuDS mitigation indices:

- Total Suspended Solids = 0.4

TECHNICAL NOTE

- Metals = 0.4
- Hydrocarbons = 0.4

[Second Stage of Treatment] In accordance with CIRIA Report C753 'The SuDS Manual' (2015) Table 26.3, the swales provide the following SuDS mitigation indices:

- Total Suspended Solids = 0.5
- Metals = 0.6
- Hydrocarbons = 0.6

[Third Stage of Treatment] In accordance with CIRIA Report C753 'The SuDS Manual' (2015) Table 26.3, the basins provide the following SuDS mitigation indices:

- Total Suspended Solids = 0.5
- Metals = 0.5
- Hydrocarbons = 0.6

The overall SuDS mitigation indices for highways runoff is derived in accordance with the CIRIA Report C753 'The SuDS Manual' (2015) recommendations as follows:

Total SuDS Mitigation Index = Mitigation Index 1 + 0.5 x (Mitigation Index 2...)

- Total Suspended Solids = 0.9 (0.4+0.5x0.5+0.5x0.5)
- Metals = 0.95 (0.4+0.6x0.5+0.5x0.5)
- Hydrocarbons = 1.0 (0.4+0.5x0.6+0.5x0.6)

On this basis, it can be concluded that the proposed filter drains, swales and basins will provide adequate water quality treatment for the highway's runoff.

Driveways and Car Parking Areas: Surface water runoff from the driveways and car parking areas will undergo three stages of treatment via lined permeable paving, swales and basins. As detailed in CIRIA Report C753 'The SuDS Manual' (2015) Table 26, the pollution hazard indices for the driveways and car parking areas highways are detailed below. These are based on the assumption that the Site will have more than 300 traffic movements a day.

- Total Suspended Solids = 0.7
- Metals = 0.6
- Hydrocarbons = 0.7

[First Stage of Treatment] In accordance with CIRIA Report C753 'The SuDS Manual' (2015) Table 26.3, the lined permeable paving provides the following SuDS mitigation indices:

- Total Suspended Solids = 0.7
- Metals = 0.6
- Hydrocarbons = 0.7

[Second Stage of Treatment] In accordance with CIRIA Report C753 'The SuDS Manual' (2015) Table 26.3, the swales provide the following SuDS mitigation indices:

- Total Suspended Solids = 0.5
- Metals = 0.6
- Hydrocarbons = 0.6

TECHNICAL NOTE

[Third Stage of Treatment] In accordance with CIRIA Report C753 *'The SuDS Manual'* (2015) Table 26.3, the basins provide the following SuDS mitigation indices:

- Total Suspended Solids = 0.5
- Metals = 0.5
- Hydrocarbons = 0.6

The overall SuDS mitigation indices for driveways and car parking areas runoff is derived in accordance with the CIRIA Report C753 *'The SuDS Manual'* (2015) recommendations as follows:

Total SuDS Mitigation Index = Mitigation Index 1 + 0.5 x (Mitigation Index 2...)

- Total Suspended Solids = 1.2 (0.7+0.5x0.5+0.5x0.5)
- Metals = 1.15 (0.6+0.6x0.5+0.5x0.5)
- Hydrocarbons = 1.3 (0.7+0.5x0.6+0.5x0.6)

On this basis, it can be concluded that the proposed lined permeable paving, swales and basins will provide adequate water quality treatment for the driveways and car parking areas runoff.

The final strategy for the surface water runoff pollution control will be confirmed as part of the detailed design, however at this stage of the assessment and considering the Site constraints an appropriate upstream SuDS treatment train has been incorporated into the design prior to infiltration.

12. Adoption and Maintenance

The proposed surface water sewer networks up to the outfall headwalls into the swales and basins will be offered for adoption to the Drainage Authority under a Section 104 Agreement of the Water Industry Act (1991).

It is unlikely that the proposed SuDS features would be adopted by the LLFA, Drainage Authority or Highways Authority. The ongoing management and maintenance of the proposed SuDS will be the responsibility of a management company.

The long-term management of surface water drainage assets, including any SuDS components, is essential to ensure they continue to function to their design standard. As such, a management and maintenance plan will be developed at detailed design stage in order to ensure the systems continue to work effectively.

13. Conclusion

Surface water runoff from the development is proposed to be disposed via infiltration into the existing ground. The surface water management strategy will incorporate Sustainable Drainage Systems (SuDS) measures such as deep bore soakaways, permeable paving, filter drains, swales and basins to provide water quality and surface water attenuation benefits.

TECHNICAL NOTE

Through the use of on-site infiltration via deep bore soakaways, in addition to the use of SuDS measures as detailed above to fully address potential pollutants, the surface water drainage strategy ensures that the development will not result in impacts to off-site habitats or species associated with the Medway Estuary. Noting that the final strategy for surface water runoff control at the Site will necessarily need to be confirmed at the detailed design stage, the additional information presented within this Addendum Note demonstrates that such measures can be implemented and provides certainty that the development will not lead to an adverse effect upon the integrity of Medway Estuaries and Marshes Special Protection Area / Ramsar site via hydrological pathways.

In conclusion, the future occupants and users of the proposed development will be at a low risk of flooding due to surface water runoff. It is demonstrated that the development proposals comply with the NPPF, PPG and the local planning policy with respect to management of surface water runoff.

TECHNICAL NOTE

Appendix A – Outline Planning Stakeholders Consultation

MC/19/1566 | Outline planning application with some matters reserved (appearance, landscaping, layout and scale) for redevelopment of land off Pump Lane to include residential development comprising of approximately 1,250 residential units, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle). | Land Off Pump Lane Rainham Kent ME8 7TJ

LLFA Decision: Condition recommended

The LLFA have made the decision to recommend a condition, based on the submitted Flood Risk Assessment (42252/2013) and following further site investigations;

At this early stage, infiltration/soakage tests have been undertaken and have shown good results and therefore, our initial concerns that a workable scheme had not been produced have been overcome. Going forward, the LLFA is confident a suitable scheme can be produced.

The Flood Estimation Handbook (FEH) should be used for the design storms, opposed to FSR. For runoff, outputs from both FEH and ICP SuDS should be submitted with the more conservative of the two, being selected. MicroDrainage outputs (or other industry appropriate software) should be provided for the critical duration for a 2 year, 30 year and 1 in 100 year + 40% intensity climate change scenarios. Urban creep, whereby the permeable surfaces are converted to impermeable over time should be considered as part of the design calculations. In this instance, it is recommended that an additional 10% impermeability is included. This is required at this stage to give the most conservative scenario as it may result in storage requirements increasing, which in turn could largely change the proposed site layout.

Whilst we support the use of SuDS across the site and especially the choices of SuDS, the location and use of them from a landscape perspective could be revisited. Locating swales and soakaway basins to the edge of the development and around the edge of catchments, is seen as a very practical solution, but a lost opportunity for facilitating the creation of place. The design of SuDS provides the opportunity to maximise other benefits associated with the use of SuDs and fulfil other planning objectives such as, increased biodiversity, landscaping and enhanced amenity. We strongly recommend seeking advice from the Council's Landscape Architect/Urban Designer with respect to the design and integration of SuDS systems with the surrounding landscape/public open space.

The SuDs scheme should be designed in accordance with SuDs Management Train principles including the prevention of runoff by reducing impermeable areas and utilising source, site and regional controls where necessary. We would recommend looking into options of managing surface water at source such as permeable paving.

The Environment Agency's updated surface water Flood Risk mapping indicates that areas the of site are at high risk of surface water flooding meaning that the chance of flooding in any one year is equal to or greater than 3.33% (1 in 30). We would expect any development to be avoided in areas at high or medium risk of surface water flooding. For any development in areas at low risk of flooding, we would expect finished floor levels to be raised suitably and flood resilience measures such as solid floors to be installed.

We would also expect the use of infiltration to be used to its maximum extent to reduce the stress on the Southern Water surface water sewer network. If it is proposed to use an existing surface water sewer, evidence will need to be provided that there is suitable capacity.

It should be ensured that there is a maintenance schedule in place for the lifetime of the development to maintain any SuDs, which serve it. All SuDS should be located in publicly accessible

areas, unless deemed inappropriate or not possible, to allow for suitable access for maintenance. We will need to see a plan of the frequency of maintenance for each SuDS feature on site based on guidance in the CIRIA SuDS Manual as well as details of who will carrying out the maintenance.

Cross sections for the ponds should be provided ensuring each pond has a minimum of a 1 in 3 side slope with a 300mm freeboard.

Condition 1: No development shall take place until a scheme showing details of the disposal of surface water, based on sustainable drainage principles, including details of the design, implementation, maintenance and management of the surface water drainage scheme have been submitted to and approved in writing by the Local Planning Authority in consultation with the Lead Local Flood Authority.

Those details shall include (if applicable):

- i. a timetable for its implementation (including phased implementation where applicable).
- ii. appropriate operational, maintenance and access requirements for each sustainable drainage component are adequately considered.
- iii. proposed arrangements for future adoption by any public body, statutory undertaker or management company.

Reason: To manage surface water during and post construction and for the lifetime of the development as outlined at Paragraph 165 of NPPF.

Condition 2: Prior to occupation (or within an agreed implementation schedule) a signed verification report carried out by a qualified drainage engineer (or equivalent) must be submitted to and approved by the Local Planning Authority to confirm that the agreed surface water system has been constructed as per the agreed scheme and plans. The report shall include details and locations of critical drainage infrastructure (such as inlets, outlets and control structures) including as built drawings, and an operation and maintenance manual for the unadopted parts of the scheme as constructed.

Reason: This condition is sought in accordance with paragraph 165 of the NPPF to ensure that suitable surface water drainage scheme is designed and fully implemented so as to not increase flood risk onsite or elsewhere.

Date: 01 August 2019
Our ref: 287468
Your ref: MC/19/1566



Hannah Gunner
Medway Council - Planning Service
Physical & Cultural Regeneration
Regeneration, Culture, Environment & Transformation
Civic Headquarters
Gun Wharf
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Chatham ME4 4TR

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T 0300 060 3900

By email only, no hard copy to follow

Dear Hannah Gunner

Proposal: Outline planning application with some matters reserved (appearance, landscaping, layout and scale) for redevelopment of land off Pump Lane to include residential development comprising of approximately 1,250 residential units, a local centre, a village green, a two form entry primary school, a 60 bed extra care facility, an 80 bed care home and associated access (vehicular, pedestrian, cycle).

Location: Land off Pump Lane, Rainham, Kent, ME8 7TJ

Thank you for your consultation on the above dated 28 June 2019 which was received by Natural England on the same day

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.

Summary of Natural England's advice

Further information required to determine impacts to designated sites

As submitted, the application could have potential significant effects on the Medway Estuary and Marshes Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Wetland of International Importance under the Ramsar Convention (Ramsar Site) and the Medway Estuary Marine Conservation Zone (MCZ).

Natural England requires further information in order to determine the significance of these impacts and the scope for mitigation and suggest that the following information is provided:

- Clarity on the additional measures (over and above the contribution to the Strategic Access Management and Monitoring Strategy) that will be provided to ensure impacts to the designated sites from recreational disturbance do not occur;
- Clarity on the surface water drainage measures that are to be implemented to ensure that the water entering the designated sites via the existing outfall does not result in impacts to habitats or species associated with them

Without this information, Natural England may need to object to the proposal. Please re-consult Natural England once this information has been obtained. Natural England's further advice on designated sites/landscapes and advice on other issues is set out below.

Additional Information required

Given the close proximity of the application site to the Medway Estuary and Marshes SPA and Ramsar Site and the number of dwellings that are proposed, Natural England's advice is that in addition to the appropriate financial contribution being made to the Strategic Access Management and Monitoring Strategy, additional measures will also be required. These could include the provision of significant areas of off-site greenspace and the provision of additional wardening at locations closest to the application site, for example.

The applicant acknowledges that further measures are required, as detailed within Section 5.73 of the 'Information for Habitats Regulations Assessment' document submitted in support of the application. This suggests that discussions will be held with Medway Council regarding the additional measures that will be implemented. Natural England advise that details of the further measures that will be implemented to manage recreational disturbance to the coastal designated sites in close proximity to the development should be provided at this stage to ensure that the proposal does not result in an adverse effect on the integrity of the SPA or Ramsar Site.

Section 5.47 of the 'Information for Habitats Regulations Assessment' report accompanying the planning application confirms that the surface water drainage will discharge into the River Medway via a connection to the existing surface water sewer (MH2754). The report details that measures to manage the flow of contaminated run-off leaving the site will be agreed following further technical studies. Given the scale of the development and the apparent direct discharge via the surface water sewer into the designated sites, we recommend that further information should be provided at this stage to demonstrate that measures can be implemented to ensure that contaminated surface water does not enter the River Medway. We acknowledge that the detailed design will follow at the reserved matters stage but sufficient information should be provided at the outline application stage to give certainty that measures can be implemented to prevent impacts to the designated sites.

Upon submission of the further information above, we will of course be pleased to provide our further advice. Please note that if your authority is minded to grant planning permission contrary to the advice in this letter, you are required under Section 281 (6) of the Wildlife and Countryside Act 1981 (as amended) to notify Natural England of the permission, the terms on which it is proposed to grant it and how, if at all, your authority has taken account of Natural England's advice. You must also allow a further period of 21 days before the operation can commence.

In addition, Natural England would advise on the following issues with further general advice on protected species and other natural environment issues is provided at Annex A appended to this letter.

Soils and Land Quality

Having considered the proposals as a consultation under the Development Management Procedure Order (as amended), and in the context of Government's policy for the protection of the 'best and most versatile' (BMV) agricultural land as set out in paragraph 170 and 171 of the National Planning Policy Framework, Natural England draws your Authority's attention to the following land quality and soil considerations.

Based on the information provided with the planning application, it appears that the proposed development will result in the direct loss of 51.5 hectares of land classified as 'best and most versatile' (Grades 1, 2 and 3a land in the Agricultural Land Classification (ALC) system).

Government policy is set out in Paragraph 170 and 171 of the National Planning Policy Framework which states that:

'Planning policies and decisions should contribute to and enhance the natural and local environment by:

recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland.'

And

Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework¹; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

As this application site does not benefit from a development plan allocation, the Council needs to fully consider the impacts that will arise from the direct loss of best and most versatile agricultural land as a result of this proposal to ensure the decision is in accordance with Government policy.

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 Sean Hanna on 0208 0266 064 or by email to sean.hanna@naturalengland.org.uk. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

Yours sincerely



Sean Hanna
Senior Adviser
Sussex and Kent Team

¹ Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.

Annex A

Natural England offers the following additional advice:

Landscape

Paragraph 170 of the National Planning Policy Framework (NPPF) highlights the need to protect and enhance valued landscapes through the planning system. This application may present opportunities to protect and enhance locally valued landscapes, including any local landscape designations. You may want to consider whether any local landscape features or characteristics (such as ponds, woodland or dry stone walls) could be incorporated into the development in order to respect and enhance local landscape character and distinctiveness, in line with any local landscape character assessments. Where the impacts of development are likely to be significant, a Landscape & Visual Impact Assessment should be provided with the proposal to inform decision making. We refer you to the [Landscape Institute Guidelines for Landscape and Visual Impact Assessment](#) for further guidance.

Best and most versatile agricultural land and soils

Local planning authorities are responsible for ensuring that they have sufficient detailed agricultural land classification (ALC) information to apply NPPF policies (Paragraphs 170 and 171). This is the case regardless of whether the proposed development is sufficiently large to consult Natural England. Further information is contained in [GOV.UK guidance](#).

Agricultural Land Classification information is available on the [Magic](#) website on the [Data.Gov.uk](#) website. If you consider the proposal has significant implications for further loss of 'best and most versatile' agricultural land, we would be pleased to discuss the matter further.

Guidance on soil protection is available in the Defra [Construction Code of Practice for the Sustainable Use of Soils on Construction Sites](#), and we recommend its use in the design and construction of development, including any planning conditions. *Should the development proceed, we advise that the developer uses an appropriately experienced soil specialist to advise on, and supervise soil handling, including identifying when soils are dry enough to be handled and how to make the best use of soils on site.*

Protected Species

Natural England has produced [standing advice](#)² to help planning authorities understand the impact of particular developments on protected species. We advise you to refer to this advice. Natural England will only provide bespoke advice on protected species where they form part of a SSSI or in exceptional circumstances.

Local sites and priority habitats and species

You should consider the impacts of the proposed development on any local wildlife or geodiversity sites, in line with paragraphs 171 and 174 of the NPPF and any relevant development plan policy. There may also be opportunities to enhance local sites and improve their connectivity. Natural England does not hold locally specific information on local sites and recommends further information is obtained from appropriate bodies such as the local records centre, wildlife trust, geoconservation groups or recording societies.

Priority habitats and Species are of particular importance for nature conservation and included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. Most priority habitats will be mapped either as Sites of Special Scientific Interest, on the Magic website or as Local Wildlife Sites. List of priority habitats and species can be found [here](#)³. Natural England does not routinely hold species data, such data should be collected when impacts on priority habitats or species are considered likely. Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land, further information including links to the open mosaic habitats inventory can be found [here](#).

² <https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals>

³ <http://webarchive.nationalarchives.gov.uk/20140711133551/http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx>

Ancient woodland, ancient and veteran trees

You should consider any impacts on ancient woodland and ancient and veteran trees in line with paragraph 175 of the NPPF. Natural England maintains the Ancient Woodland [Inventory](#) which can help identify ancient woodland. Natural England and the Forestry Commission have produced [standing advice](#) for planning authorities in relation to ancient woodland and ancient and veteran trees. It should be taken into account by planning authorities when determining relevant planning applications. Natural England will only provide bespoke advice on ancient woodland, ancient and veteran trees where they form part of a SSSI or in exceptional circumstances.

Environmental enhancement

Development provides opportunities to secure net gains for biodiversity and wider environmental gains, as outlined in the NPPF (paragraphs 8, 72, 102, 118, 170, 171, 174 and 175). We advise you to follow the mitigation hierarchy as set out in paragraph 175 of the NPPF and firstly consider what existing environmental features on and around the site can be retained or enhanced or what new features could be incorporated into the development proposal. Where onsite measures are not possible, you should consider off site measures, including sites for biodiversity offsetting. Opportunities for enhancement might include:

- Providing a new footpath through the new development to link into existing rights of way.
- Restoring a neglected hedgerow.
- Creating a new pond as an attractive feature on the site.
- Planting trees characteristic to the local area to make a positive contribution to the local landscape.
- Using native plants in landscaping schemes for better nectar and seed sources for bees and birds.
- Incorporating swift boxes or bat boxes into the design of new buildings.
- Designing lighting to encourage wildlife.
- Adding a green roof to new buildings.

You could also consider how the proposed development can contribute to the wider environment and help implement elements of any Landscape, Green Infrastructure or Biodiversity Strategy in place in your area. For example:

- Links to existing greenspace and/or opportunities to enhance and improve access.
- Identifying opportunities for new greenspace and managing existing (and new) public spaces to be more wildlife friendly (e.g. by sowing wild flower strips)
- Planting additional street trees.
- Identifying any improvements to the existing public right of way network or using the opportunity of new development to extend the network to create missing links.
- Restoring neglected environmental features (e.g. coppicing a prominent hedge that is in poor condition or clearing away an eyesore).

Access and Recreation

Natural England encourages any proposal to incorporate measures to help improve people's access to the natural environment. Measures such as reinstating existing footpaths together with the creation of new footpaths and bridleways should be considered. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Relevant aspects of local authority green infrastructure strategies should be delivered where appropriate.

Rights of Way, Access land, Coastal access and National Trails

Paragraphs 98 and 170 of the NPPF highlights the important of public rights of way and access. Development should consider potential impacts on access land, common land, rights of way and coastal access routes in the vicinity of the development. Consideration should also be given to the potential impacts on the any nearby National Trails. The National Trails website www.nationaltrail.co.uk provides information including contact details for the National Trail Officer. Appropriate mitigation measures should be incorporated for any adverse impacts.

Biodiversity duty

Your authority has a [duty](#) to have regard to conserving biodiversity as part of your decision making. Conserving biodiversity can also include restoration or enhancement to a population or habitat. Further information is available [here](#).

TECHNICAL NOTE

Appendix B – Drainage Strategy Drawings

GENERAL NOTES:

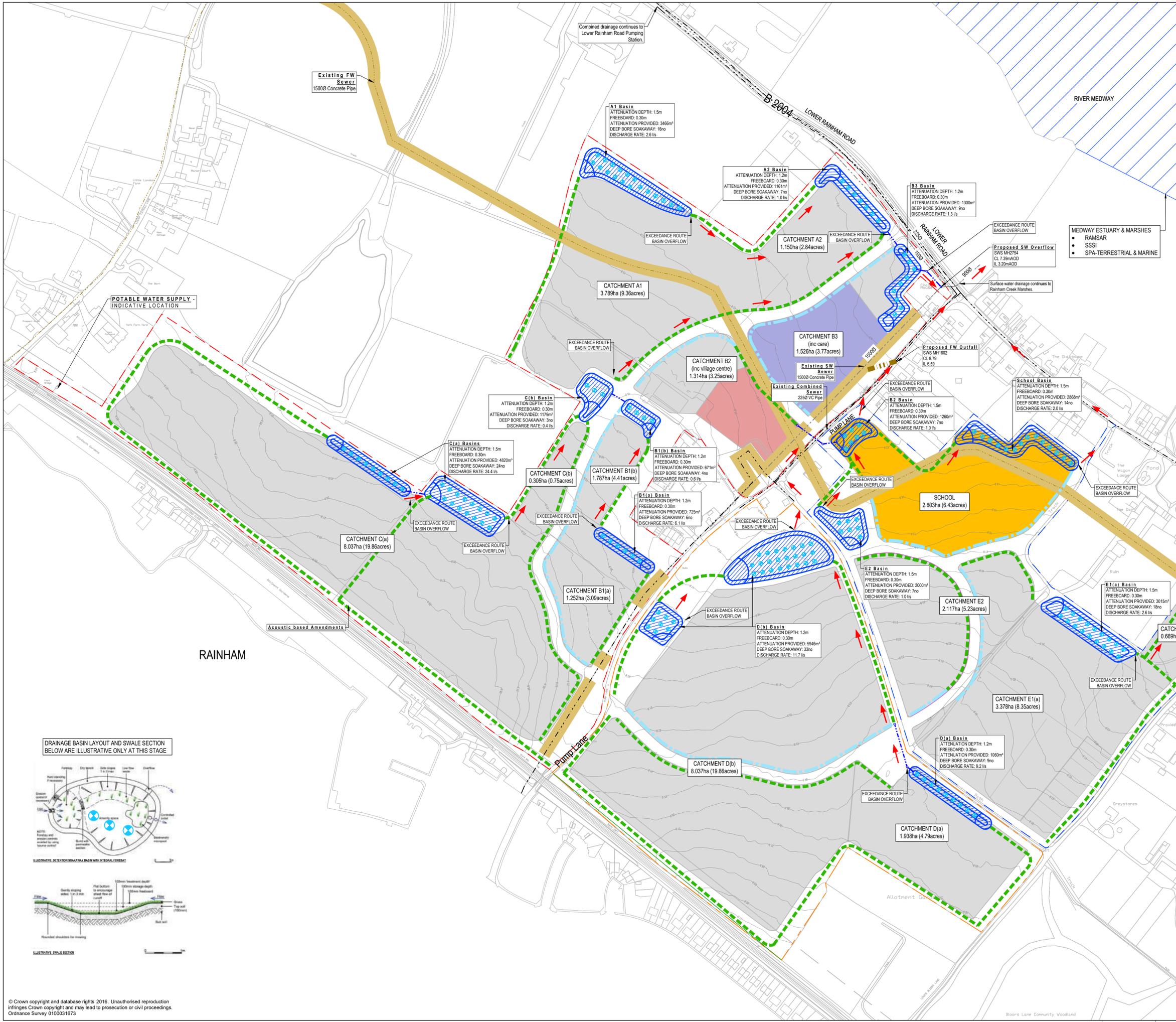
- DO NOT SCALE FROM THIS DRAWING.
- PROPOSED DRAINAGE LAYOUT SUBJECT TO MASTERPLAN AND DETAILED DRAINAGE DESIGN
- TOPOGRAPHICAL SURVEY INFORMATION BY JC WHITE, DRAWING REFERENCE 18/00188, DATED SEPTEMBER 2018.

LEGEND:

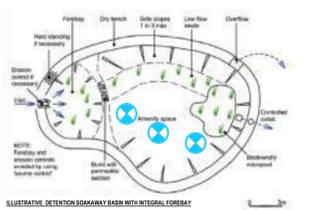
- SURFACE WATER SOAKAWAY BASIN
- PROPOSED SURFACE WATER SEWER
- PROPOSED FOUL WATER SEWER
- SOAKAWAY BORE HOLE
- STRATEGIC LANDSCAPING AREA
- EASEMENT 13.5m
- PROPOSED SWALE
- PROPOSED FILTER DRAIN
- EXISTING SURFACE WATER SEWER
- EXISTING FOUL WATER SEWER
- FLOOD EXCEEDANCE ROUTE
- DEVELOPMENT A
- DEVELOPMENT B
- DEVELOPMENT C
- DEVELOPMENT D
- DEVELOPMENT E

DEVELOPMENT AREAS

- DEVELOPMENT AREA 25.1 Ha
- DEVELOPMENT AREA 14.0 Ha
- DEVELOPMENT AREA 11.1Ha



DRAINAGE BASIN LAYOUT AND SWALE SECTION BELOW ARE ILLUSTRATIVE ONLY AT THIS STAGE



D	SURFACE WATER DRAINAGE SOLUTION CHANGED TO INFILTRATION. SIZE OF BASINS AND NUMBER OF DEEP BORE SOAKAWAYS AMENDED. FILTER DRAINS AND EXCEEDANCE ROUTES ADDED.	27.01.20	IK	IK	ET
C	UPDATED MASTERPLAN	05.12.18	AH	CD	CD
B	SURFACE WATER AREAS UPDATED	12.11.18	AP	CD	CD
A	CONTOUR INFORMATION SHOWN	08.11.18	AP	CD	CD

Mark Revision Date Drawn Chkd Appd

Drawing Issue Status
CONCEPT

PUMP FARM, LOWER RAINHAM DRAINAGE STRATEGY

Client
A.C. GOATHAM & SON

stantec.com/uk

Date of 1st Issue: 31.10.2018
Designed: -
Drawn: AP

A1 Scale: 1:2000
Checked: CD
Approved: CD

Drawing Number: 44538/2001/001
Revision: D

LONDON
Tel: 020 3824 6600

GENERAL NOTES:

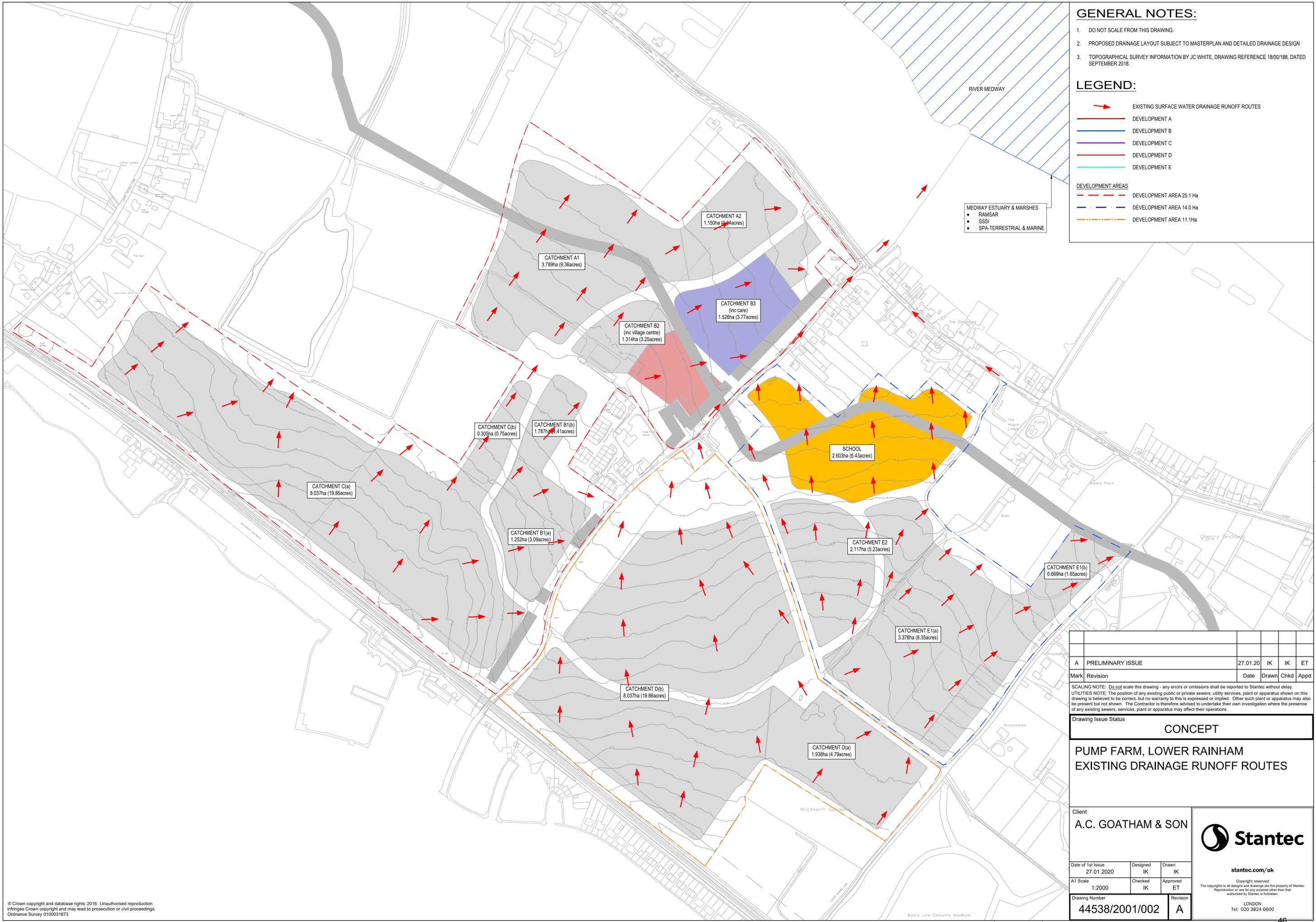
- DO NOT SCALE FROM THIS DRAWING.
- PROPOSED DRAINAGE LAYOUT SUBJECT TO MASTERPLAN AND DETAILED DRAINAGE DESIGN
- TOPOGRAPHICAL SURVEY INFORMATION BY JC WHITE, DRAWING REFERENCE 18/00/188, DATED SEPTEMBER 2018.

LEGEND:

- EXISTING SURFACE WATER DRAINAGE RUNOFF ROUTES
 - DEVELOPMENT A
 - DEVELOPMENT B
 - DEVELOPMENT C
 - DEVELOPMENT D
 - DEVELOPMENT E
- DEVELOPMENT AREAS**
- DEVELOPMENT AREA 25.1 Ha
 - DEVELOPMENT AREA 14.0 Ha
 - DEVELOPMENT AREA 11.1 Ha

MEDWAY ESTUARY & MARSHES

- RAMSAR
- SSSI
- SPA-TERRESTRIAL & MARINE



A	PRELIMINARY ISSUE	27.01.20	IK	IK	ET
Mark	Revision	Date	Drawn	Chkd	Appd

SCALING NOTE: Do not scale this drawing - any errors or omissions shall be reported to Stantec without delay.
 UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status **CONCEPT**

**PUMP FARM, LOWER RAINHAM
 EXISTING DRAINAGE RUNOFF ROUTES**

Client A.C. GOATHAM & SON			
Date of 1st Issue 27.01.2020	Designed IK		
A1 Scale 1:2000	Checked IK	Approved ET	stantec.com/uk Copyright reserved The copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorised by Stantec is forbidden. LONDON Tel: 020 3824 6600
Drawing Number 44538/2001/002	Revision A		