

8 September 2021

Report to: South Cambridgeshire District
Council Planning Committee

Lead Officer: Director of the Greater Cambridge
Planning Service

S/2553/16/CONDH – Ward Linton / Parish Linton (Land Off Horseheath Road)

Proposal: Submission of details required by condition 12 (foul water drainage) of planning permission S/2553/16/OL for outline planning application with all matters reserved for up to 42 dwellings and allotments (not less than 0.45 hectares)

Applicant: Croudace Homes

Key material considerations: Foul Water Drainage and Neighbour Amenity

Date of Member site visit: N/A

Is it a Departure Application?: No

Decision due by: September 2021

Application brought to Committee because: The application is one that in the opinion of officers, in consultation with the Chair and Vice-Chair, should be determined by Committee because of the complexity of the application having regard to the sites history

Presenting officer: Karen Pell-Coggins

Executive Summary

1. The application seeks to agree the foul drainage details in relation to condition 12 of planning consent S/2553/16/OL for the erection of up to 42 dwellings on the site and allotments.
2. The foul drainage system will consist of discharge of foul drainage from the dwellings via foul water sewers to a private foul pumping station which would

then direct the flows via foul water sewers towards manhole 1801 in Lonsdale to connect to main foul sewerage system.

3. The concerns from the Parish Council and local residents in relation to the method of foul drainage and the impacts upon the foul drainage system and the amenities of existing and new dwellings is noted. This includes a related concern about the relationship between the surface water drainage solution and the proposals for foul water drainage.
4. However, the statutory consultees consider the foul drainage scheme to be acceptable and it would not result in significant harm to the quality of water resources or adversely affect the amenities of neighbours of the existing or new dwellings.

Relevant planning history

5. **S/4418/19/RM** - Approval of matters reserved for access appearance landscaping layout and scale following outline planning permission S/2553/16/OL for the erection of 42 dwellings including the provision of 0.45ha for allotments - Approved
6. **S/2553/16/OL** - Outline planning application with all matters reserved for up to 42 dwellings and allotments (not less than 0.45 hectares) - Appeal Allowed

Planning policies

7. **South Cambridgeshire Local Plan 2018 Policies**
CC/7 Water Quality
HQ/1 Design Principles
SC/10 Noise Pollution
SC/14 Odour and Other Fugitive Emissions to Air
8. **Supplementary Planning Documents (SPD's)**
Cambridgeshire Flood and Water - Adopted November 2016
Greater Cambridge Sustainable Design and Construction - Adopted January 2020
9. **National Policy**
National Planning Policy Framework (NPPF) 2021
National Design Guide 2019

Consultation

10. **Anglian Water** – Has no objections, as amended.

Comments 6 September 2021

Foul Water:

We can confirm that after visiting the area we discovered our asset map was incorrect, as the resident correctly states. We have carried out an investigation of this part of the foul network and have now corrected our asset records. We have also re-assessed the application based on the submitted documents and our updated records, our capacity assessment concludes that the foul only network has capacity to receive the additional foul flows from the development proposal.

Surface Water:

We have been involved in discussions with residents, Linton Parish Council and the LLFA regarding the recent flooding. The flooding was caused by surface water. Surface water enters our foul only network which causes surcharging. This surface water should not be in the foul system, and on new major development sites we work with and rely on the expertise of the LLFA as they are the statutory body for surface water management. This development site is not proposing to connect the surface water into Anglian Water assets, we therefore cannot comment on the suitability of the surface water proposals, this is the responsibility of the LLFA.

Previous comments 16 October 2020

No objections.

Response to Linton Parish Council response to the Anglian Water comments on Linton Parish Council Drainage Consultant's report 26 July 2021

We can confirm that our senior engineer has reviewed the assessment supplied to the parish by A E Designs and we made the following observations

In general the flow rates used are substantially higher than we would use to determine demand loading. Although Sewers for Adoption is a recognised standard the flow rate employed (4000 lts/head/day) is a factored value rather than a limit state parameter. It is used to ensure sufficient allowance is made for areas of uncertainty in design when considering the most appropriate minimum pipe size. It is not intended as representative of actual demand.

In evaluating actual demand ahead of flow measurement, our practice is to base the initial assumptions on the values derived from our observations of water consumption, occupancy and asset performance. We refer to this in our minimum asset standards (MAS) and calculate the base dry weather flow value as follows:

Occupancy rate of 2.35 people per dwelling
Consumption rate of 125 lt/head/day
Diurnal peak factor of 2.12
Infiltration allowance of 25%

These represent an average of values across our region.

Whereas using the Sewers for Adoption rate produces a peak dry weather flow of 0.046 l/s per property, the MAS calculation for demand is 0.008 l/s per property.

There is in general, a pronounced diurnal pattern in demand flow from residential areas. Consequently sewerage is designed to allow for a degree of flow balancing. Therefore, along with the instantaneous flow rate when assessing capacity, we also consider the volumetric loading in cubic metres over a given time (eg. m³/hr or m³/day).

In this context the 10-fold disparity between our average observed volumetric loading and that extrapolated from the Sewers for Adoption rate becomes very significant.

Response to Linton Parish Council Drainage Consultant's Report - Assessment of Foul sewerage facilities in Linton Village August 2016 15 April 2021

Anglian Water was consulted on both planning applications for Land Off Horseheath Road Linton and Bartlow Road, Linton. We can confirm that there is a capacity to accommodate the foul flows from both developments. We note that both planning applications were approved by the Local Planning Authority South Cambridgeshire with drainage conditions applied to the decision notices. Anglian Water works closely with the Local Planning Authority and the developer to ensure that the approved drainage strategy is complied without causing detriment to our network and to the local area.

We have checked the reported incidents to Anglian Water for this area. We can confirm that our field technicians who visited the area have investigated these issues accordingly and resolved them on site. We can confirm these issues within our foul network were related to blockages in our foul network which are caused by non-flushable items being flushed into our network. These items can cause issues and prevent the foul sewerage flows from moving within the network causing blockages until our field technicians from our operations team do visit the affected area and flush the network.

Our network capacity assessment is based on the number of dwellings as well as the applicant's drainage strategy such as the point of connection and the proposed discharge rates. Our engineers when carrying out their capacity assessment take into account the additional foul flows from the proposed development to be discharged into our network. They also take into account the existing developments and local growth in the area as well as any incidents of flooding that are network capacity related incidents. The available capacity within the network and within our water recycling centre will be dependent upon the development proposal, location of any connection point and proposed discharge rates proposed by the applicant.

Please note we don't take into account the incidents of flooding that are not related to capacity in our network such as blockages caused by non-flushables,

tree roots, operational maintenance issues and surface water flooding. Such incidents need to be reported to our operation team on 0345 714 5145. During the heavy rainfall storm events our foul drainage network may become overwhelmed with the sudden surge of surface water caused by heavy rainfall which can enter our network for not having anywhere else to drain. These incidents are also not related to capacity in our network.

11. **SCDC Drainage Officer** - No objections, as amended.

Comments 10 March 2021

Information has been supplied to confirm the outstanding points raised. The foul water scheme shall be constructed and maintained in full accordance with submitted information supplied on 10 December 2020.

The foul water pumping station is still within close proximity of a dwelling, whilst this may have the potential for smell nuisance this is outside of our remit to comment on.

Previous comments 8 September 2020

Croudace Drainage Statement referenced DES/035/410 (C) and dated July 2020 has been reviewed.

The Croudace Drainage Statement appears to propose a private foul water pumping station with 24 hour storage capacity and telemetry system 'which will provide the management company with a direct contact should a failure occur'.

The foul water pumping station will discharge at a yet to be agreed rate to an existing foul water public sewer manhole within the neighbouring Lonsdale Estate.

Confirmation of the private pump station rate that has been agreed with Anglian Water is required.

Consideration of the risk of flooding following failure of the on-site pumping station and how this risk will be managed - supported by calculations - is required.

Detailed construction drawings of the proposed foul water drainage system and onsite pump station are required.

Confirmation that an agreement has been made with the necessary landowners/consenting authorities to cross third party land is required.

A Management and Maintenance Plan for all proposed drainage features that are to be adopted and maintained by a third party management company is required.

Please submit the MicroDrainage Network Model for the foul water drainage network.

With reference to Appendix G (Foul Water Drainage Strategy) of the Drainage Statement, the minimum distance of the private foul water pumping station to habitable buildings appears to be around 2.5m. Sewers for adoption guidance indicates 15m may be more appropriate to minimise the risk of odour, noise and nuisance. Please provide justification for the distance of the private foul water pumping station to any habitable buildings

12. **Environment Agency** – No objections, as amended.
13. **Environmental Health Officer** – No objections, as amended.

Comments 29 April 2021

Accepts that the noise is unlikely to be an issue given the attenuation that is likely to be achieved through the siting of the electric pump in the underground concrete tank.

In relation to the odour, a pump rate of 2 or 3 a day is unlikely to allow septicity to occur whilst it is waiting to be pumped (particularly as it will be diluted material with other waste water such as baths, sinks, showers, etc.) and it is accepted that it is unlikely that odour nuisance will occur.

Previous comments 29 March 2021

I understand a number of concerns have been raised by local residents and Linton parish council concerning the suitability of the proposal, citing amongst concern, issues of noise and odour. In response, I make the following comments.

Noise

The applicant has not provided any details of the noise that may arise from the equipment or how this will be attenuated. Whilst I do not feel it necessary for a full noise survey to be undertaken, some information concerning the noise levels from the pump (or any other significant noise contributors) would be useful as well as the expected attenuation any housing would provide could allow me to ensure that these concerns are unlikely to affect local residents to the proposal.

Odour

Generally speaking, odour may arise from pumping stations if the waste is allowed to go septic. Whether this material is likely to go septic will depend on multiple factors including how often the pumping station discharges into the mains sewer, whether any chemical dosing is undertaken as well as the concentration of waste to the water. It would be useful for the applicant to confirm how they calculate the capacity of the pumping station and how frequent they estimate that the waste will be pumped.

14. **Lead Local Flood Authority** – The condition application is for the discharge of a foul condition, which we do not comment on. As stated in our previous response, the application does not appear to have any surface water flood risk or drainage implications therefore we have no comments to make.
15. **Linton Parish Council** – Objects to the application, as amended.

Comments on application 29 September 2021

Linton Parish Council has repeatedly raised material concerns about SCDC's handling of applications for the Bartlow Road and Horseheath Road sites. This has come to a head and LPC has reluctantly started Judicial review.

Planning Committee are being asked to tick the boxes retrospectively for:

1. The revival and alteration of a planning consent that lapsed in 2019.
2. Unauthorised work to continue despite evidence of serious harm to the environment.
3. Approval of drawings that have not been publicly consulted on.

Planning Committee is not being provided with the full case to consider –

1. Technical consultee responses are based on different drawings to the ones being determined.
2. Planning Committee are not being provided with the evidence provided by local people, which includes photographs, videos and other relevant evidence. LPC responses have repeatedly been abridged including on the planning portal which removes the relevant illustrations.

The published Enforcement report does not include the works at Bartlow Road including connection to the defective old 6" foul drain in contravention of S/1963/15/OL Condition 11 and construction of sand filled pits in the porosity test positions.

The report on unauthorised work on Horseheath Road fails to mention its flooding of the village (page 621).

The report fails to tell you:

Horseheath Road

1. The work on site has continued apace without consent and the show home and its roadside neighbours are almost complete, contrary to the SCDC enforcement agreement.
2. On 20 July 2021, there was a rainstorm at Linton (not unusual). During the rainstorm, there was a major flood on the site, where the flood attenuation basin proved totally incapable of dealing with the demand. It overflowed into adjoining homes, roadways and gardens around the site, and then down the slopes into the rest of the village. The village is still clearing up.
3. The developer brought in a tanker, and instead of removing the floodwater, they pumped it into the village's drainage system. As a result, the flooding of the homes, roadways and properties became a distinctive light brown silt colour and texture which showed the source.

4. The contents of the drain left sewage in the village and contaminated the rare chalk stream.
5. The extent of silted water showed that the Anglia Water maps for Linton are wrong. The drainage from Lonsdale does not go in the direction plotted, and the flood water, surface water and foul water pipework all go into the old defective 6" foul water pipework. The Bartlow Road sewer pipe is a shared drainage pipe carrying surface and foul water.
6. Committee is being asked to sign off approval on a failed scheme where promises of a redesign are made, but no drawings are available or consulted on, and there are substantial discrepancies between the claims for the infiltration, and the photographic evidence that it fails to drain.

Village drainage

7. The Minutes of Bartlow Road S/1963/15/OL explain fully that the independent drainage report was fully accepted by SCDC and Anglia Water, that there was evidence of greater historic river flooding, and that Conditions 10 and 11 were required to protect the village against the risk of flooding. The report showed that numerous sections of pipework within the old 6" Bartlow Road section failed basic foul water capacity and technical requirements. Connection to the newer village drain was required. The S73 and unauthorised works blatantly ignore this.
8. All calculations by all parties have been based on Linton drainage being a foul water system only. The events of 20 July showed this was a gross underestimate as Linton has a mixed sewer system which also takes surface water flooding from the hillsides and the village.
9. The photographic evidence showed that even the newer section of drain was incapable of dealing with the demands of a mixed system. The foul drainage from approximately 1000 houses and the silt from Horseheath Road ran directly into the River Granta, our Protected chalk stream.
10. None of the responsible authorities recorded this as a major contamination incident, which the evidence shows it is. The people extracting along this river would not have been aware they were extracting substantial amounts of sewage as well as silt.
11. LPC has repeatedly asked for there to be a moratorium on development until the drainage situation at Linton is fully investigated and resolved. The statutory authorities agreed.
12. The Planning Report and LLFA letter refers to an 'investigation' (as a result no action would be taken). This did not comply with the basics of an investigation as no procedure was published, no person qualified as an inspector was appointed and no local witnesses were interviewed.

Summary The evidence shows that the Committee Report lacks transparency.

LPC hopes that this Planning Committee will properly question this report and if still required to decide on the applications, to test the clarity and evidence, and properly consider the Council's responsibilities to carry out a transparent decision process and to protect against the risk of flood

Letter dated 23 July 2021

Linton Parish Council have grave concerns regarding your consideration of LPC comments, which appear to be being ignored or not treated with due seriousness. Also, weight appears to be given to information that is based on inconsistent drawings, out-dated, inaccurate or inappropriate. We request that the conditions for drainage schemes, surface water and foul water conditions are re-considered and that your objections to these are re-instated.

Following the heavy rainfall of 20th July 2021 which, although not unprecedented, has served to highlight the special issues of flooding in this village, LPC request a full inquiry into flooding and a moratorium on development and the use of SUDs schemes. The inadequacy of the sewage system and poor maintenance of drains are contributing factors to the flooding. The need to review the systems that affect the village and lead to the problems have been seen so clearly over the past few days and solutions need to be found. These are issues that LPC has been raising for many years.

Please see comments previously raised by LPC on SUDS and surface water drainage schemes. These include:

- i) Inadequate porosity and infiltration tests - wrong time of year, inappropriate sites, following long dry spells, unable to repeat accurately due to changed surface and substrate of test holes.
- ii) The routes of surface water flooding - down spine roads, following contours rather than the route that developers would like them to follow
- iii) Historic flooding levels
- iv) Local knowledge of flooding routes and levels of water.
- v) Inadequacy of flood prevention measures such as loss of bunds as shown in the OL applications
- vi) Inaccurate EA flooding maps, or the wrong/outdated/inaccurate maps being used.
- vii) Conflict between plans and drawings in different applications.
- viii) Impact of balance ponds and hard structures on the landscape
- ix) Failure to take into account the cumulative effect of development on the drains.

Full details are in the comments submitted by LPC to the applications and amendments.

LPC has not been given the right of response and in a number of cases has only discovered retrospectively that the specialist drainage report that the planning condition was based on has been ignored.

The parlous state of the foul water and sewage systems have been repeatedly raised. The cumulative effect of development and additional pressure on the system has been ignored. The disputed calculations of Anglian Water appear to have over-ridden the LPC commissioned engineering reports, the informed comments of our own engineers on LPC and consultants, in making decisions on development.

In the documents recently forwarded to LPC as part of the appeal process. we see that a document has been used to inform the decision to remove the LLFA

objections to the Bartlow Road drainage scheme. This probably refers to work done on the river around 1968. This work would have been done by the EA and is probably the cement lining of the river to change the drainage through the village near the High Street bridge and Dog and Duck. This did not change the floodplain or affect the river near the development sites; it merely turned a section of the rare chalk stream into a drainage channel (work that is currently being reviewed with a view to returning the stream to its natural state). Being so far downstream, there is no effect on the development site.

Later work, by LPC, has helped restore the floodplain (helped by a grant from SCDC) but this is again downstream of the development site and has no bearing on flooding or surface water drainage in that area. In fact we are acutely aware that the development sites could undo the work done by LPC to protect the village, FYI all this work by LPC was advised by experts and appropriate authorities and with full permission.

The points raised by the developer that these works have any bearing on flooding on site is refuted. The surface water flooding schemes proposed by the developers would add to flooding problems in the village, downstream and the state of our rare chalk stream.

The unique geological, geographical and flooding sensitivity of Linton need to be fully understood and the proposals of the developers reviewed - current housing development is not appropriate and not sustainable. Linton is in a river valley with a rare chalk stream. It can flood from the river, from surface water and also from the gravel beds beneath the village. It lies over a main aquifer which, like the river, may be full or nearly dry due to over abstraction; a sensitive area. This, combined with a dated sewage system, already at overcapacity, leaves us vulnerable to climate changes or even seasonal changes - the latest flood is nothing new.

If developers would design houses suited to needs, in appropriately small numbers and with proper provision for the welfare of neighbours and the situation, then they might be acceptable. As it is, a full review of housing development and its effects on the established community need to be re-considered and the development proposals rejected.

For the moment we need building work to be stopped at Horseheath Road, and any supposed pre-commencement work to be forbidden at Bartlow Road.

It is clear that the drainage and foul water schemes for both sites are not appropriate, will not work, are detrimental to the village and will add to the long-term problems of Linton.

NB A recent short burst of heavy rain had the Horseheath Road "balance pond" overflowing, flooding neighbouring gardens and houses in Lonsdale, and causing flooding downstream into the village. The developer saw fit to pump out the pond into the yellow pipe leading to the manhole on Bartlow Road (not currently a permanent connection, and one that LPC object to most strongly) the result was, as expected, muddy water and grit flooding out near the Fire

Station. This is what will happen should a permanent connection be made, though then it will be sewage that floods out. The capacity of the system cannot cope with additional waste added to the Bartlow Road manholes, as LPC have said repeatedly.

Previous comments on application 14 April 2021

Please read in conjunction with the comments on S/4418/19/CONDD, Foul Water Pump. The recent amendments/information only refer to noise and odour (relying on manufacturer assertions rather than data) but LPC now comment on the drainage scheme.

LPC are aware that a connection has been laid to the Lonsdale manhole, for which SCDC approval has not been given, indeed this connection has been specifically objected to by LPC, as it links to the already over-capacity Bartlow Road sewer pipe (see below and also the Bartlow Road development).

Anglian Water has been cavalier, if not negligent, in its assessment of the connections, and hold vicarious responsibility and would be liable should the foul water scheme fail.

When this condition came to LPC for comment, we responded (along with the Sustainable Drainage Engineer) that there was insufficient information to give fully informed comments. We now submit comments on the (still incomplete) information that has been submitted.

A drainage layout is included which gives insufficient detail regarding the route of the foul water drains and how they might link to the main sewer (the 6 inch victorian pipe) , which runs down Bartlow Road. The link across the easement is not drawn nor is the link to the main sewer. It appears that the link to the village sewage system is expected (by the developer) to be via the manhole in Lonsdale that then links to the already overburdened sewer on Bartlow Road. This is not acceptable and the condition should be refused.

i) The sewage pipe is planned to go through the "easement" of the SCDC Ransom Strip to link to the already-overburdened Lonsdale manhole. This is not part of the original plan and has not been sufficiently assessed i.e. in conjunction with the overall sewage system.

ii) This will then link to the 6inch Victorian sewer on Bartlow Road; a link expressly forbidden in the Bartlow Road development due to lack of capacity. Since that OL application, there have been several infill houses and extensions that also feed into this sewer pipe. However, the connection at Lonsdale has not been evaluated to consider the additional burden.

LPC request that Anglian Water is engaged in discussion regarding the connection of this development to the sewage system via Lonsdale.

iii) We do not contest that there is capacity at the pumping station and sewage treatment works at Cow Gallery Woods, west of Linton. However, we do argue that the pipes and drains through the village are already at or over capacity (development in Linton includes recent infill areas, house expansion and other outline planning applications, not considered by the reports)

- iv) Linton Parish Council commissioned an independent report on the state of the drains on the western side of the village (AE Design report to be sent through to be considered with LPC comments). Our expert refutes the patency of the existing drain network.
- v) The recommendations of the AE Design Assessment of Foul Water Sewerage Facilities in Linton Village in August 2016 concluded that the foul water main from this area into the village was the worst part of the village's pipework, 'in a parlous configuration' and should not be put under additional stress by being added to. The report identified that these sections through the village had insufficient capacity to convey the loads, had poor velocity and were unable to self-cleanse. The charts referred to in Appendices show these sections failed as they were already at over capacity of 105% to 134% and had varying slopes of between 1in5 and 1in75, all of which failed.
- vi) The concern of LPC is that our expert is correct and that the High Street and historic core of the village will have to be dismantled (most houses in the Special Conservation Area have cellars and fragile foundations or baseplates) in order to accommodate larger pipes to carry the foul waste generated by the development. The pipework from this site does not just lie under the modern developments of the 1970's, as shown in both the analyses, but also under the historic core of the village - the Outstanding Conservation Area with the highest density of listed buildings in Cambridgeshire and its narrowest High Street.
- vii) The difficulties of installing new sewer pipes across the Recreation ground at the west of the village show how problematic it would be and the disruption that would be caused to the village to improve the sewage system to cope with the burden of the development.
- viii) The Diocese report (for the OL application) and Anglian Water do not assess the capacity of the main village drainage, only the local capacity close to the point of connection. Our expert assessed beyond this, where the old village main drain is undersized and defective. A connection to a different sewage pipe is required.
- ix) Recent moderate rainfall caused the contents of the Victorian sewer to overflow near the Fire Station (a regular event) the odour of sewage overflow was obvious and lasted for days. If this happens now, how much worse will it be when the additional houses (recent infill and being built) and this estate are added to the over-capacity system?

Please also see the comments on the Bartlow Road development which also contest the use of the Bartlow Road sewer for their estate.

Previous comments on application 28 September 2020

Concerns remain due to the proximity of the pumping station to houses with issues of noise, odours and loss of amenity (nuisance). This is placed at the area of the site that is prone to flooding, in SPZ2. Overflow or flooding from the foul sewage would contaminate the SUDS pond and the aquifer (which supplies our drinking water), immediately below or to Lonsdale. Please see previous comments, which still stand.

Please see Appendix A for a copy of the comments in relation to application S/4418/19/CONDD.

Please see Appendix B for a copy of the comments in relation to the Bartlow Road development.

Report from Linton Parish Council Drainage Consultant - Assessment of Foul sewerage facilities in Linton Village August 2016

The extant foul sewerage that may serve the proposed development is currently (allowing for variations in the assessment and discharge units calculations) delicately balanced between sufficiency and failure. Any loading additions to the sewerage under review should demonstrate the suitability of the extant installation. In particular, flow additions from surface water highway drainage and informal connections should be fully investigated before any drainage infrastructure proposals are offered.

From the desktop assessment carried out using Anglian Water sewerage data it is considered that the extant sewerage should not be further stressed by additional connections.

Please see Appendix C for a full copy of the above report.

Response to Anglian Water's response to report 28 April 2021

We disagree with the contents of your letter and do not accept the assessment of capacity of the foul water system at that end of the village. The capacity to accommodate the foul flows from these developments is strongly doubted, knowing the parlous state of the sewerage system in this area (see the report of AE designs and that SCDC has previously identified Lonsdale as an area where drains are a problem). Since that report more housing has been linked to the Bartlow Road pipe, with more small developments to come, exacerbating the issue of over-capacity.

Neither the surface water drainage nor the foul water conditioning (for either Horseheath Road or Bartlow Road developments) have been approved by the Local Planning Authority. Without this approval Anglian Water must not allow the proposed connections to be made. Nor can the planning process be circumvented by the developer adding the sewer linkages to TTRO submissions. The approval of conditions by the LPA is a requirement that takes precedence over any "approvals" given by Anglia Water. The drainage strategies have not been approved nor the conditions complied with.

You refer to the reasons for blockages. The network would not block if the gradient and flow through the system were sufficient to cope with what is put into the system. It is evident that the diameter of the pipe and self-cleansing velocities are inadequate to deal with even the current input.

LPC would like to see the calculations and assessments that have been made that lead them to consider that the connections are suitable. We consider your capacity assessment to be flawed.

We note that surface water flooding has not been taken into account, as you have acknowledged.

This is a particular problem in Linton due to its situation in the Granta Valley, with water from the hills surging into the village; these are now a regular feature of our climate. As you state, the foul water system may become overwhelmed by the surface water floods. This will enter your system as there is nowhere else for it to go, and surely must be taken into account when making your assessments as this is part of the required capacity of the network.

The various incidents of flooding (pluvial, fluvial and upward through the gravel beds) have been regularly reported and are subject to investigation and discussion with the LLFA and EA. The incidents of overflow due to heavy rainfall, which then goes into the drains and sewers are definitely related to capacity in the network- sewage overflow from the inadequate pipes is hardly a new thing in Linton.

You note that Anglian Water "don't take into account incidents of flooding. ..caused by heavy rainfall which can enter the network for not having anywhere else to drain".

The principle of using SUDS schemes to deal with surface water flooding is that there is a natural watercourse to take the overflow, otherwise this is discharged into the sewage system.

SUDS maintenance will be undertaken by Anglian Water "From the end of the intermediate SUDS management area, where the adoption break point is identified and agreed ...up to the point where flows infiltrate into the ground, flow into a watercourse or enter the sewer network (Anglian Water Services Limited "Towards sustainable water stewardship" - Sustainable drainage systems (SUDS) adoption manual). The SUDs schemes to deal with surface water flooding do not meet conditions and have not been approved.

There is no natural watercourse for overflow on Horseheath Road - Martins Lane is not a watercourse but a footway and lane - so not to be considered as a natural watercourse for overflow, as the developer seems to consider. The overflow of surface water will join the already over-capacity sewer at Bartlow Road, causing sewage overflow.

There are clear issues with any of these end-points - the natural watercourse does not exist and the sewers are already overburdened. Dealing with this overflow is an issue for Anglian Water to deal with, and which has not been taken into account.

The attachment of more sewers to the current system is not acceptable.

Representation from Local MP

16. *Letter dated 29 September 2021*

As I am sure you will be aware there is significant concern within the village of Linton about flooding, following the flood event on 20 July. This has caused a significant amount of distress for a number of residents, some of whom have suffered damage to their property and have had to temporarily vacate their homes as a result. I am grateful to Stephen Kelly, Joint Director of Planning and Economic Development, Greater Cambridge Planning for joining a recent meeting I held on this issue along with other relevant parties, as well as for the correspondence I have received from him following that meeting regarding the situation in the village.

As the Lead Local Flood Authority (LLFA), Cambridgeshire County Council have acknowledged that there is evidence that the building works and the actions of Croudace Homes during the development of the land of the South of Horseheath Road contributed substantially to the pollution and flooding on 20 July. I understand that further mitigations have been proposed by the developer as a result, which have been approved by the LLFA. However, following a meeting I held with residents on the evening of 28 September, it is clear that significant concern remains and that residents and the Parish Council do not believe their views are being taken into consideration by South Cambridgeshire District Council. Linton Parish Council have said that they *"...want a full investigation into the major flooding and pollution of the village, homes and the Protected chalk stream and a moratorium on all new development until that investigation has been held and all identified failures rectified in order to properly protect the village from flooding."*

Concerns have also been raised with me regarding a lack of compliance by the developer in relation to the principles upon which outline planning permission for the Land south of Horseheath Road was granted by the Planning Inspector. I am aware that these points have been raised with South Cambridgeshire District Council officials and I have enclosed an objection by a resident that has already been sent directly to the Planning Committee, which I wanted to ensure had been received and was being considered as part of today's Planning Committee meeting.

I understand that today's session of the Planning Committee will look at condition 12 (foul water drainage) of planning permission S/2553/16/OL, whilst the 13 October session will look at the condition 11 (Surface water drainage). Linton Parish Council have informed me that Anglian Water comments added to the planning portal on 6 September acknowledge that the foul water system in the village is taking surface water as well as foul water. It is therefore the Parish Council's view that these conditions should be considered together (preferably with the surface condition before the foul condition) as the foul sewer has to accommodate any excess.

Given the significant amount of technical concerns that have been raised in recent days, I believe that the District Council and the Planning Committee may want to consider whether it would be appropriate to allow more time to look at the evidence that has been shared with members and officials and also

whether there is merit to the view that has been strongly expressed to me by residents and the Parish Council that pre-commencement conditions 11 and 12 should not be considered in isolation and as such today's session which looks at condition 12 should be delayed until 13 October, when I understand condition 11 will be considered.

Representations from members of the public

17. Three representations have been received from local residents. A summary of the concerns is set out below. A full copy of the representations can be viewed on the Council's website.

18. **36 Lonsdale**

Concerns in relation to consideration of the foul drainage application at a different time to the surface water drainage application as they are linked and compliance of the scheme with the drainage principles agreed as part of the appeal.

19. **7 Lonsdale**

Concerns in relation to the capacity of the package pump system, venting of the system, health hazards from aerosol and other vented sewer gas, siting of the pump, noise, and lack of a health risk assessment. Alternative routing should be considered along with the need for additional sewer capacity.

20. **13 Lonsdale**

Concerns in relation to the method of foul drainage and siting of the storage tank and resulting noise and smells. More logical to drain direct to the south.

The site and its surroundings

21. The site is located outside the Linton development framework and in the countryside. It is situated to the south of Horseheath Road, east of Lonsdale and north of Martins Lane, Harefield Rise and Kenwood Gardens.

22. The site measures approximately 2.8 hectares in area and formerly comprised open agricultural land. The land falls north to south and east to west. Construction on the approved development of 42 dwellings and allotments has commenced.

23. The site is located in Flood Zone 1 (low risk). The land within the south western corner of the site and some properties in Lonsdale to the south west of the site are subject to the risk of surface water flooding.

The proposal

24. The proposal seeks to discharge condition 12 of planning consent reference S/2553/16/OL dated 14 March 2018 in relation to foul water drainage of the site.
25. The full wording of the condition is set out below.

No development shall take place until details of a scheme for foul water drainage have been submitted to and been approved in writing by the Local Planning Authority, and including arrangements for subsequent management, and the details shall be implemented as approved and in accordance with an agreed programme.

26. The foul water drainage strategy for the site is discharge from the dwellings via a network of sewers to a private foul pumping station on the northern part of the public open space on the south western part of the site and then to a manhole in Lonsdale and the main public sewer.

Planning Assessment

27. The key issues to consider in the determination of this application relate to impact of the method of foul drainage upon the foul drainage system in Linton and the impact of the method of foul drainage upon the amenities of existing neighbours and the occupiers of the new dwellings.

Foul Drainage System

28. The pumping station tank would be underground. It would have a total capacity of 24,480 litres and would accommodate 150 litres per person for 24 hours storage in accordance with Building Regulations Part H requirements. It would be pumped 2 to 3 times per day. A telemetry system would be installed which will provide the management company with a direct contact should a failure occur. The pumping station will be set to a rate agreed by Anglian Water at 5 litres per second.
29. The effluent will be then pumped through a rising main that will be laid within the footpath of the main estate road and pass between plots 33 and 34 and across land owned by SCDC before outfall to a break chamber and then to a gravity sewer that connects into an existing manhole (MH 1801) within Lonsdale. This will then connect to the existing main foul water sewer system on Bartlow Road.
30. Anglian Water has confirmed that there is adequate capacity within the system for the foul water flows from development at this site and the proposal would not be detrimental to the foul sewerage network or the local area. The method of calculation is based upon actual demand taking into account the development proposal, location of the connection point and proposed

discharge rates together with initial assumptions on the values derived from its observations of water consumption, occupancy, asset performance and volumetric loading over a given time. This is different to the calculation from the Parish Council's Drainage Consultant that has assessed the capacity with regards to the rate in the Sewers for Adoption document which produces a higher rate as it is based upon design uncertainties. This is explained further in the response to the Parish Council's Drainage Consultants report from Anglian Water in paragraph 10. It has also been confirmed that the combined impact of foul drainage from this site and the Bartlow Road site has been taken into consideration.

31. The Drainage Officer has advised that the method of foul water disposal is acceptable based upon the detailed information, drawings and calculations submitted for discharge to the foul pumping station and its connection to the main foul sewer.
32. The Drainage Plan shows the route of the system from the foul pump to the manhole in Lonsdale where it joins the existing system. The Drainage Statement Anglian Water Pre Planning document in the appendices shows the route of the existing system from Lonsdale towards Bartlow Road.
33. Surface water from the site has been subject to careful review (and multiple revisions) and is subject to a separate application under reference S/2553/16/CONDO.
34. Sudden rainfall that may discharge into the wider network is an existing situation and not as a result of the development.
35. Based upon the commentary and conclusions from the Councils drainage team and Anglian Water, officers consider that the foul drainage schemes impact upon the public sewers is acceptable and is not considered likely to adversely affect the quality of water resources.
36. The proposal would therefore comply with Policy CC/7 of the Local Plan.

Neighbour Amenity

37. The foul pumping station would be sited approximately 29 metres from the existing dwelling at No. 7 Lonsdale, approximately 32 metres from the existing dwelling at No. 9 Lonsdale, approximately 4 metres from the new dwelling on plot 31, approximately 17 metres from the new dwelling on plot 20, and approximately 23 metres from the new dwelling on plot 8. It would be sited approximately 14 metres from the boundary of the existing dwelling at No. 7 Lonsdale.
38. Whilst it is acknowledged that the pumping station would be situated closer to the dwelling on plot 31 than the 15 metres recommended if it was to be adopted by Anglian Water, the impact upon the amenities of existing dwellings and occupiers of the new dwellings has been considered. .

39. The Environmental Health Officer has not raised any significant concerns in relation to noise or odours as a result of the siting of the foul pump station and its management and maintenance. Concluding that noise from the pump would be limited given that it would be underground and encased by concrete that would provide appropriate attenuation measures.
40. The EHO officer also consider that odours from the pump are not likely to be septic given that it will be pumped 2 to 3 times per day and the waste would be diluted by wastewater. Whilst noting the concerns expressed about this issue, officers advised by the EHO team are therefore satisfied that The siting/location of the foul water pump and enclosure is acceptable and would not adversely affect the amenities of neighbours of the existing or new dwellings. The proposal would therefore comply with Policies HQ/1, SC/10 and SC/14 of the Local Plan.

Planning Balance and Conclusion

41. The concerns from the Parish Council and local residents in relation to the method of foul drainage and the impacts upon the foul drainage system and the amenities of existing and new dwellings is noted. However, for the reasons set out above, the Council's specialist advisors and statutory consultees consider the foul drainage scheme to be acceptable and it would not result in significant harm to the quality of water resources or adversely affect the amenities of neighbours of the existing or new dwellings.

Recommendation

42. Officers recommend that the Planning Committee accept the following foul drainage details but do not formally discharge the condition as the development has commenced.

Response to Condition 12 foul water planning consultation comments from Chris Gray on 08/09/2020 (REF:S/2553/16/CONDH)

E-mail dated 29 March 2021 from Croudace Homes

Drainage Calculations

Anglian Water letter dated 13 August 2020

Foul Pump Station details

Drawing numbers:-

| | |
|--------------------|-----------------------------------|
| 035/032 Revision G | Drainage Layout |
| 035/042 | Foul Water Pumping Station Detail |
| 035/345 | Drainage Maintaining Body Plan |
| 5.3-01 | Access Point (Type H) |
| 5.3-06 | GRP Inspection Chamber (Type J) |
| 5.3-07 | Manhole Concrete Ring (Type M) |

5.3-08
5.3-11

Manhole Concrete Ring (Type N)
Pipe Bedding Detail

Background Papers

Planning applications S/2553/16/CONDH, S/2553/16/OL, S/4418/19/RM and S/4418/19/CONDD.

Appendices

Appendix A: Linton Parish Council comments in relation to application S/4418/19/CONDD.

Appendix B: Linton Parish Council comments in relation to the Bartlow Road application.

Appendix C: Report from Linton Parish Council Drainage Consultant - Assessment of Foul sewerage facilities in Linton Village August 2016

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