



North East Cambridge Area Action Plan

Chronology of the feasibility investigations of redevelopment of the Cambridge Waste Water Treatment Plant

July 2021

Introduction

The supporting text to the site allocation of the North East Cambridge area in both the South Cambridgeshire Local Plan (2018) and Cambridge City Local Plan (2018) state that:

“Exploration of the viability and feasibility of redevelopment of the Cambridge Water Recycling Centre within Cambridge City to provide a new treatment plant facility either elsewhere or on the current site subject to its scale will be undertaken as part of the feasibility investigations in drawing up the AAP.”

The purpose of this document is to provide a summary chronology of evidence that has assessed the feasibility of redeveloping the Cambridge Waste Water Treatment Plant (WWTP) either on the current site (through consolidation) or elsewhere. The chronology includes reference to the relevant development plans in place at that time or being prepared, including the Area Action Plan that is being jointly prepared by Cambridge City Council and South Cambridgeshire District Council, as well as any other relevant proposals.

Chronology

Cambridgeshire Structure Plan 1989

The Cambridge Northern Fringe (CNF) was identified as a reserve of land for future growth and redevelopment.

Early work to inform the Cambridge Local Plan 1996

At the beginning of 1992 Cambridge City Council, South Cambridgeshire District Council, Cambridgeshire County Council and landowners in the area commissioned a study of the Chesterton Sidings/Waste Water Treatment Plant area to look into the longer term development options. This study examined the possibility of developing major sub- regional shopping in the area as an alternative to the subsequently dismissed out of town proposals. The Feasibility Study also explored the possibility of accommodating a new Parkway Station, a major new Park and Ride facility, a new

sports stadium for Cambridge United Football Club and a high technology business park catering for essential need. The study concluded that whilst the area offered a unique opportunity for substantial and appropriate development, the cost of relocating the Waste Water Treatment Plant and possibly the Cambridge Business Park would result in the development not being viable at that time or within the plan period (1996 – 2011). Furthermore, agreement on access to the A14 remained to be reached with the Department of Transport.

Cambridge Northern Fringe Illustrative Master Plan 2003 - 2004

Commissioned by Cambridge City Council, a design-led master-planning exercise was carried out in 2003-04, in partnership with a consortium of key landowners including Network Rail and Anglian Water Group, and key stakeholders, namely South Cambridgeshire District Council and Cambridgeshire County Council. The consultant team included Llewelyn Davies on urban design, landscaping and ecology, Campbell Reith Hill on engineering and infrastructure, and Atisreal on property market assessment and viability appraisal. The masterplan sought to deliver housing-led regeneration of the area, in accordance with the area's identification in the Cambridgeshire Structure Plan, and to provide a framework for taking the site forward through the Cambridge Local Plan process.

The viability appraisal of Atisreal concluded there was a substantial deficit due to the high upfront costs of relocation, remediation, transport infrastructure etc, which was not conducive to bringing the site forward for alternative uses, as financially, the costs of doing so could not be covered by the site re-development. Alternative funding streams would therefore be required to cover the significant cost items identified.

South Cambridgeshire District Local Plan 2004

The area of Cambridge Northern Fringe falling within South Cambridgeshire - the rail sidings - was identified for 'sustainable mixed-use development'.

Cambridge Local Plan Inspectors Report (2006)

Through the hearing sessions on the Cambridge Local Plan, consideration was given to the option of developing a more compact and environmentally friendly waste water facility within the current site of the plant, enabling redevelopment on the remainder of the site. However, in the light of evidence from Anglian Water on operational risks and on the amount of land which could be released for development by a more compact plant, the Independent Planning Inspector concluded that the only realistic options were either complete relocation or retention of the current site. Through the public inquiry it was acknowledged that the redevelopment of the Cambridge Northern Fringe could not fully go ahead unless the Waste Water Treatment Plant was relocated.

Cambridge Local Plan 2006

The Waste Water Treatment Plant (WWTP) site was allocated in the Local Plan principally for residential uses, although the allocation included a proposal for a new railway station allowing an interchange with the Cambridgeshire Guided Bus and 6.0ha of land for mixed commercial uses. The allocation was dependant on the WWTP being relocated, to allow for an acceptable living environment on the site.

Atisreal – Cambridge Northern Fringe (East) Financial Viability and Feasibility Assessment March 2006

Commissioned by Cambridge City Council to supplement their earlier appraisal. This time to be viability-led, discounting any constraints on quantum of development and varying the density and mix to determine whether and at what point the development becomes financially viable. The study concluded that land surrounding the Anglian Water (AW) land achieved a positive Residual Land Value (RLV) even at lower densities, but the cost of relocation rendered the area as a whole unviable – assuming the surrounding landowners were willing to accept modest Existing Use Value (EUV), and pool costs and receipts to ‘make up’ the deficit on the AW land. The consultants tested a range of densities up to 150 dwellings per hectare but the RLV stayed significantly negative. It concluded “*We would therefore consider there is*

scant chance of bringing forward this site for redevelopment without an alternative source of funding for the re-provision of the WWTP.” Note that the cost estimate for relocation of the WWTP given in the study was £135 million. The appraisal was run excluding the relocation cost and showed a positive RLV (£2 million/hectare) even at 40 dwellings per hectare, although noted higher densities would be required to incentivise landowners and when super-abnormal costs (such as £15 million for burying the powerlines) are included. Final appraisals then included reasonable level of S106 contributions and 30 percent affordable housing. Again, the consultants concluded that only by excluding the relocation costs could a positive RLV be achieved and then only with higher densities.

Draft Cambridge Development Strategy (Core Strategy) Issues & Options Report 2007

This Cambridge City Council document proposed that the Northern Fringe area should provide for a mixed-use development. However, the following further options were put forward to provide flexibility in terms of the relocation of Waste Water Treatment Plant (WWTP):

Option 5a: If the WWTP is relocated then this would allow a residential led form of development;

Option 5b: if the WWTP and the rail sidings are retained this will require an employment-led form of development.

Having regard to comments received, and taking into account the conclusions of the Roger Tym and Partners Viability of Planning Options Report (see below), the Cambridge City Council Development Plan Steering Group and the Executive Member for Climate Change and Growth resolved at its meeting of 13th May 2008 to pursue an employment led form of development on this site, which would retain the Waste Water Treatment Works (WWTW) on-site. Cambridge City Council ultimately did not take forward a Core Strategy but the work informed the preparation of the Cambridge Local Plan 2018 that started with Issues and Options consultation in 2012 (reflecting national changes in the plan making system) and a decision to prepare a joint Area Action Plan started in 2014 (see below).

Cambridge Northern Fringe East – Viability of Planning Options May 2008

Undertaken by Roger Tym & Partners on behalf of Cambridgeshire Horizons, Cambridgeshire County Council, Cambridge City Council, South Cambridgeshire District Council, Anglian Water and Network Rail, this examined the viability and deliverability of relocating the Waste Water Treatment Plant (WWTP). The report concluded that the previous reports by King Sturge and Atisreal were accurate - that even if it were practical to arrange the relocation of the WWTP within the Core Strategy plan period, redevelopment is patently not viable due to the £130 million cost of relocating the WWTP. As the WWTP will be retained, and strategic waste and minerals operations are present, including rail head uses, housing-led development on the remainder of the site was not considered viable. Redevelopment of parts of the area for employment uses was concluded to be deliverable. This report proposed an office led development for the area around the proposed new Chesterton Station (now Cambridge North Station), together with employment / depot uses adjacent to Cowley Road; including;

- Three land development parcels which could be implemented largely independently of one another, especially the park & ride/driving range site. The uses proposed for this site and Chesterton Sidings North would be compatible with the adjacent WWTP;
- Chesterton Sidings South for office development which could potentially assist in promoting use of rail or the guided bus for work journeys;
- Landscaping measures to ensure the area is attractive to office occupiers and contiguous with the 'quality' image of Cambridge Business Park; and
- Screening of the waste recycling and storage uses on the park & ride/driving range site.

Joint Area Action Plan Project Initiation 2014

Report to the Joint Strategic Transport and Spatial Planning Group meeting on the 6th February 2014 at which members agreed to:

“a) Agree the scope and approach for the Cambridge Northern Fringe East project, including early work on the preparation of the joint Area Action Plan (AAP) and overall approach to development planning and delivery;

A.1. Project Objectives (as set out in paragraphs 4.1 to 4.2)

A.2 Project Area Boundary (as set out in paragraph 4.3)

A.3. AAP Parties (as set out in paragraph 4.4)

A.4. Local Development Schemes (as set out in paragraph 4.5)

The report established that the two district authorities would lead the preparation of a joint AAP, while the County Council would be a key stakeholder through the AAP process rather than a formal partner. This was the start of the process of preparing what has evolved into the current AAP.

The above recommendations were then agreed by the respective authorities:

- South Cambridgeshire District Council at the Planning Portfolio Holder meeting of 11 February 2014;
- Cambridge City Council by the Executive Councillor for Planning and Climate Change at the Development Plan Scrutiny Sub Committee of 25 February 2014; and
- Cambridgeshire County Council at the Cabinet meeting of 4 March 2014.

Local Development Scheme 2014

Local Development Schemes of both the City and South Cambs were revised and adopted to include the intention to prepare a joint Area Action Plan for this part of Cambridge (at that point it was referred to as Cambridge Northern Fringe East).

Cambridge Northern Fringe East Area Action Plan (AAP) Issues & Options 2014

The draft AAP Issues and Options report was considered by the Joint Strategic Transport and Spatial Planning Group (JST&SPG) for consideration and comment.

The views of JST&SPG were then reported to and considered by Cambridge City Council's Development Plan Scrutiny Sub-Committee on 11 November 2014 and at

South Cambridgeshire District Council's Planning Portfolio Holder's meeting on 18 November 2014. Both authorities approved the Issues & Options 2014 document for public consultation, which was held 8 December 2014 to 2 February 2015.

Recognising the challenges and feasibility involved in relocating the Waste Water Treatment Plant (WWTP), the Issues & Options 2014 set out four potential options for the future development potential of the area:

Option 1: Lower Level of Development that sought to focus on the regeneration of areas of more easily available land, allowing the existing businesses and the WWTP to stay, whilst creating a new area for business.

Option 2: Medium Level of Development that again sought to retain existing businesses and the WWTP but provided for new housing and a local centre near the proposed (at that time) railway station, and improvements to the area south of Cowley Road to integrate with the new station, including options to change Nuffield Road from industrial to office and residential use.

Option 3: Higher Level of Development would see the WWTP retained but reconfigured onto a smaller site, with more indoor or contracted operations, subject to technical, financial and operational deliverability. This would enable larger scale employment redevelopment and a mix of other uses. Option 3 also included the potential to explore a phase redevelopment to achieve the objective of an early gateway to the proposed new railway station. Under this option, Nuffield Road industrial area was proposed for entirely residential development, with existing industry relocated north of Cowley Road.

Option 4: Maximum Level of Development proposed that the WWTP would be relocated off site, subject to identification of a suitable, viable and deliverable alternative site being identified. This option would provide the opportunity to comprehensively address the development potential of the entire area, whilst exploring the option of early gateway development around the new station

The consultation also proposed the potential of expanding the Area Action Plan boundary beyond the Local Plan site allocation to include the Cambridge Science Park, to ensure development across the area was coordinated.

Interim Sustainability Report of AAP Issues and Options November 2014

Section 3 of the report identified the Waste Water Treatment Plant (WWTP) as a significant existing site constraint, noting it occupied around 40% of the total proposed area of the Area Action Plan (AAP) at that point in time, was an important infrastructure providing service to the City, and was currently undergoing a £20 million upgrade to meet Cambridge's planned growth needs to 2031. Odour and insects as a result of the WWTP had an impact on local amenity. With respect to opportunities, there was acknowledgement of the high level of housing need in the Cambridge area. The report suggested opportunities for housing on Cambridge Northern Fringe East (CNFE) were limited, due to constraints such as odour and land contamination, but considered the area could still make a valuable contribution to overall housing supply. It accepted that the scale of development at CNFE would be determined by a range of factors including demand, viability and transport constraints.

Section 4.3 detailed the assessment of the four strategic development options alongside the 'do nothing' option.

Section 5 provided the conclusions of the assessment. It highlighted that there were a number of uncertainties (such as type and location of contamination, potential air quality and noise impacts, and adverse impact on biodiversity as a result of redevelopment of a part of the Chesterton Sidings) that were common to all four strategic development options. As a result, Options 1-4 performed similarly against some of the Sustainability Objectives, however, overall Options 3 & 4 outperformed Options 1 & 2 against the full suite of Sustainability Objectives. But the report highlighted that Option 4 promoted the highest intensity of development and therefore could pose the highest risks of adverse impacts occurring in relation to townscape, traffic, air quality, noise and ecology.

The report also acknowledged Option 4 proposed the relocation of the WWTP, and that a site for the relocated plant had not been identified but would be outside the AAP area and subject to a separate planning process. The impacts on the

sustainability objectives of the relocation were uncertain as the report noted it would depend on the location and nature of the chosen relocation site. It concluded by stating that the potential indirect and cumulative effects of relocation would need to be considered in more detail should this option be taken forward.

Anglian Water Response to the 2014 Issues & Options consultation

Anglian Water commented that they did not object to the relocation of the Waste Water Treatment Plant (WWTP) in principle but stated that the funding to relocate the facility would have to come from the proceeds of redevelopment rather than Anglian Water customers. It recognised that there was considerable uncertainty regarding the viability of the relocation of the WWTP. A development option that included the relocation of the WWTP would need to demonstrate that it was technically feasible, viable and deliverable.

Consideration of responses to Issues and Options 2014 Consultation

Responses were reported to the following meetings:

- Joint Strategic Transport and Spatial Planning Group (JST&SPG) - 16 November 2015
- South Cambridgeshire District Council's Planning Portfolio Holder Meeting - 17 November 2015
- Cambridge City Council's Development Plan Scrutiny Sub-Committee – 17 November 2015

The reports recommended a review and refinement of the four redevelopment options down to two main options, referred to as Option 2A and 4A within the report.

JST&SPG "agreed two revised options those being options 2A and 4A for the potential range of development for the purposes of;

a) Testing the potential environmental and infrastructure impact and the economic viability of the emerging AAP proposals;

b) Informing the preparation of other ancillary assessments required to ensure the deliverability and soundness of the draft AAP; and

- c) Guiding further conceptual urban design work that will inform the ultimate preferred development approach
- d) Officers to investigate a phased approach from option 2A to Option 4A.”

The minutes of the South Cambridgeshire District Council’s Planning Portfolio Holder meeting records that the Portfolio Holder also agreed the above recommendations of the JST&SPG, as well as “*an addendum to the Local Development Scheme with the revised timetable for the Cambridge Northern Fringe East Area Action Plan*”.

The minutes of Cambridge City Council’s Development Plan Scrutiny Sub-Committee record the decision of the Executive Councillor for Planning Policy and Transport was to only agree to revised option 2a (development with the WWTP remaining on site) for taking forward for further consideration in developing the Area Action Plan. The reason given for this decision was that, while the results from the consultation indicated a strong preference for variations of Options 2 and 4, City Council members considered the cost and challenge of relocating the WWTP under Option 4 was unfeasible at that time, rendering the option a non-starter.

North Cambridge Station 2015

Planning permission was granted on 19 August 2015 by the Joint Development Control Committee (JDCC) for a new railway station at North East Cambridge. A similar scheme was previously approved by the same Committee on 18 December 2013.

Housing Infrastructure Fund Bid Submission 2017

At its Board meeting of 27 September 2017, the Combined Authority determined to prioritise the bid to cover the cost of relocating the Waste Water Treatment Plant as the only expression of interest to be put forward for the Cambridgeshire and Peterborough area for the Government’s Housing Infrastructure Fund.

Local Plans Adopted 2018

The individual but aligned district plans, which started out with issues and options consultations in 2012, submission in 2014, and examination hearings that concluded in 2017, were found sound by independent inspectors and adopted in 2018. These plans form part of the current development plan for the area. Both plans include a policy allocating their respective parts of the north east of Cambridge area (East of Milton Road): in Cambridge (Policy 14) and South Cambridgeshire (Policy SS/4). The Cambridge Local Plan policy identifies an 'Area of Major Change' and South Cambridgeshire Local Plan policy a 'Major Development Site'. The policies allocate the area for the creation of a revitalised, employment focussed area centred on a new transport interchange, with a high-quality mixed-use development, primarily for employment with a range of supporting uses, with the precise amount of development, site capacity, viability, timescales and phasing of development to be established through the preparation of a joint area action plan for the area.

Odour Impact Assessment Study 2018

The study, commissioned by the two councils, assesses the level of odour impact risk posed by the current Waste Water Treatment Plant's operating conditions on the surrounding area to inform the council's ongoing and future planning decisions and policy. It included dispersal modelling that indicated the odour exposure levels in the area immediately surrounding the plant. It concludes that areas exceeding the C98, 1-hour = 3, 5 and 6 ouE/m³ odour impact criteria would be unsuitable for residential use due to the risk of odour impact.

Housing Infrastructure Fund Bid Successful 2018

The City Council and Anglian Water business case that informed the Housing Infrastructure Fund (HIF) bid supported by the Combined Authority (see above) assessed the option of consolidating the Waste Water Treatment Plant (WWTP) for retention on site. The assessment concluded that construction of a new consolidated WWTP facility on-site would not be technically feasible due to the need to maintain the existing operational facility (switch-over only possible once commissioning of the new plant has been completed). Further, consolidation would require construction of

new elements of plant which would be complex and would not deliver efficient reduction in land take. Given the complexity of the construction work and extended period over which it would need to be sequenced, the cost would be of a similar order to that assessed for relocation (albeit without the tunnelling costs of off-site).

It was assessed that if consolidation into the north eastern portion of the existing site could have been achieved, at best, this would release circa 40% of the existing operational area. However, the area released would be constrained by operational needs and odour safeguarding, resulting in only 16 hectares of potentially developable land. Due to the odour constraints, development of the released land would only be suitable for industrial or commercial use and the overall quantum enabled would be minimal. Further, the re-positioning could impact on the acceptability of the mixed-use scheme being promoted on the land adjacent to the Cambridge North Station. The assessment concluded that, without potential for housing, the redevelopment would not attract HIF type funding and would render the consolidation option unviable. The announcement that the HIF bid had been successful was made by the Chancellor in his speech of 13 March 2019.

Greater Cambridge Shared Planning Local Development Scheme 2018 and updates in 2019 and 2020

The Local Development Scheme for Greater Cambridge was revised in October 2018 (alongside the Local Plan adoption) and again in 2019 and 2020 (to account for the Development Consent Order programme for the WWTP relocation). It continues to include the Area Action Plan as a Development Plan Document to be prepared jointly.

North East Cambridge Area Action Plan Issues and Options 2019

Following the making of the Housing Infrastructure Fund bid for the relocation of the WWTP and engagement of landowners, community representatives and members, a further Issues and Options report was produced that considered the opportunities for comprehensive regeneration of the area should the WWTP relocated. The 2019 Issues & Options report was prepared on the basis that the strategic options put forward were predicated on the WWTP being relocated.

The Issues and Options 2019 report was considered at the following Council meetings prior to finalisation and consultation:

- South Cambridgeshire Scrutiny and Overview Committee – 18 December 2018
- South Cambridgeshire Cabinet – 9 January 2019
- Cambridge Planning Policy and Transport Scrutiny Committee - 15 January 2019

The minutes of all three meetings show the committee members of both authorities approved the Issues and Options 2019 report for Regulation 18 public consultation.

A six-week public consultation on the Area Action Plan Issues and Options 2019 report took place between 11 February and 25 March 2019.

Response to Consultation on the 2019 AAP Issues and Options and Emerging Evidence Base Studies

During the period from the Summer of 2019 to Spring 2020, a series of presentations were held with the members of all three authorities (City, South Cambs and County Council) as well as landowners, community representatives and local ward members to discuss the comments made in representations to the AAP Issues & Options consultation and to the findings of emerging evidence base reports (including biodiversity, landscape character and visual appraisal, typologies, a Community and Cultural Placemaking Strategy, facilities audit and transport study). It also included the evolutions of the spatial framework for the area informed by masterplanning workshops held over the summer 2019 with the design teams of the landowners, the community forum and delivery partners, such as the County Council transport team. Such engagement informed how the councils would take forward the comments received to the Issues and Options 2019 consultation in the drafting of the preferred development option for the Area Action Plan (the “draft North East Cambridge AAP”).

Draft North East Cambridge Area Action Plan 2020

The draft North East Cambridge Area Action Plan and supporting documents were considered at the following meetings:

- Joint Local Planning Advisory Group – 2nd June 2020
- South Cambridgeshire Scrutiny and Overview Committee – 9 June 2020
- South Cambridgeshire Cabinet – 29 June 2020
- Cambridge Planning Policy and Transport Scrutiny Committee – 30 June 2020

The minutes of the meetings record that the members of the Planning and Transport Scrutiny Committee at the City and Cabinet at South Cambridgeshire agreed the recommendation to publish the Draft Area Action Plan for Regulation 18 consultation, with an extended 10-week period running from 27 July to 5 October 2020 due to the COVID-19 pandemic.

Conclusions

The chronology shows a long-held ambition by both local authorities to bring forward the land on which the current Waste Water Treatment Plant (WWTP) sits, and surrounding parcels of land, for comprehensive mixed-use development, recognising that it is a brownfield site within the urban area of Cambridge and close to the Cambridge North Station.

Various studies, in support of proposed masterplans or development plan allocations, have examined the viability and deliverability of redevelopment of the WWTP area, either through consolidation of a new WWTP onto a portion of the existing site or relocating the WWTP off-site. The studies conclude that consolidation on-site is not feasible and that neither option is viable in the absence of significant external grant due to the relocation costs.

At the time when the current 2018 Local Plan policies were prepared and examined, there was no evidence that redevelopment of the WWTP was viable. However, the subsequent securing of HIF has now made relocation a viable proposition. The draft AAP is predicated on the WWTP being relocated and available for redevelopment. In terms of the feasibility of relocation of the WWTP, that process is being tested through a separate Development Consent Order, the outcome of which will inform the proposals submitted in the joint North East Cambridge Area Action Plan.