

SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

REPORT TO: Planning Committee

5th August 2009

AUTHOR/S: Executive Director / Corporate Manager - Planning and Sustainable Communities

S/2307/06/F - HAUXTON

**Demolition of Buildings (Including Nos. 90, 92 & 96 Church Road), Remediation of Land and Formation of a Development Platform
At Land to the East of the A10 Known as the Former Bayer CropScience Ltd Site**

Recommendation: Approval

Date for Determination: 2nd March 2007 (Major Application)

Notes:

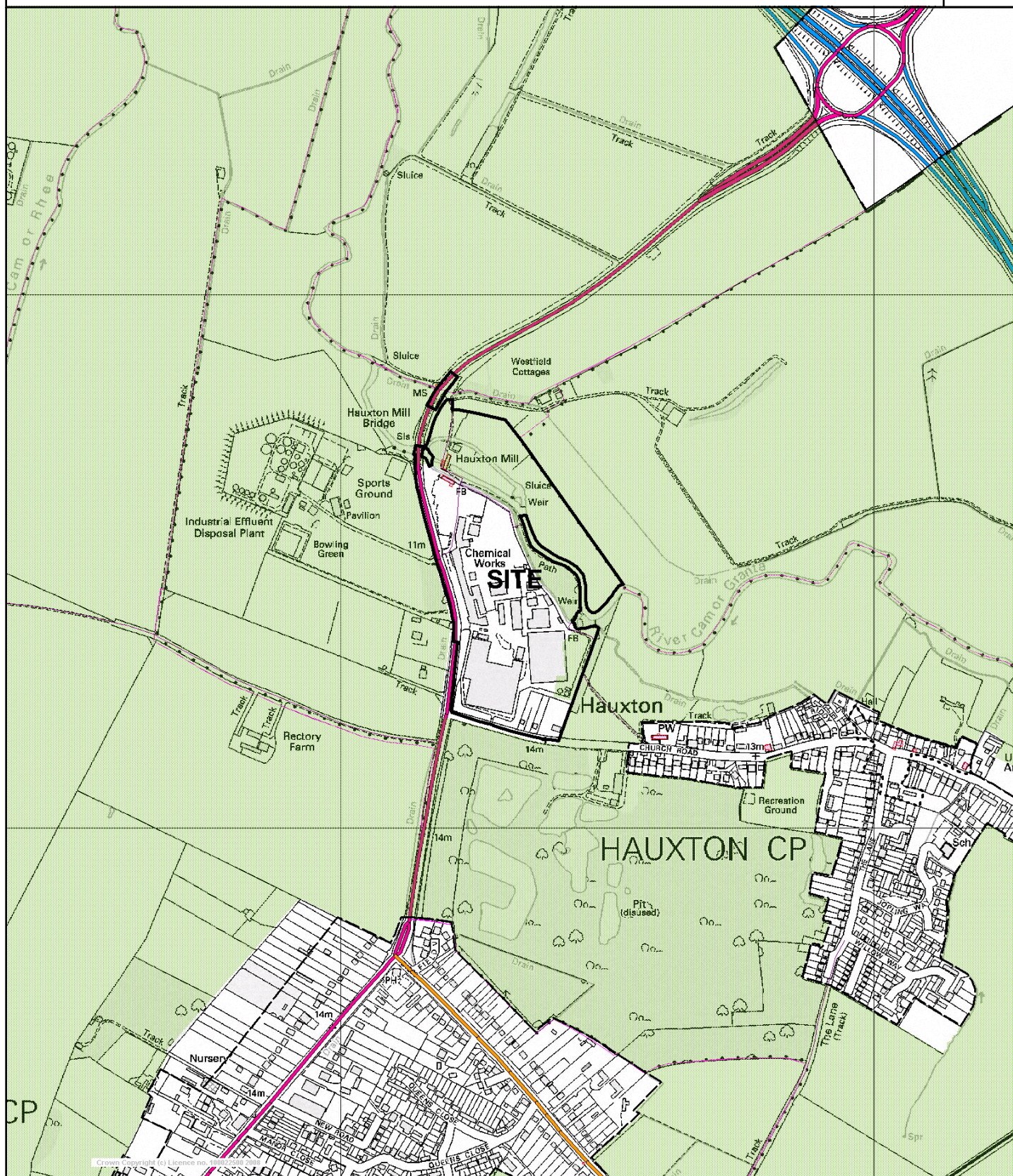
This Application has been reported to the Planning Committee for re-determination after planning permission dated 25th March 2008 was quashed.

Background

1. A Consent Order dated 6th October 2008 quashed the planning permission dated 25th March 2008. The Council conceded that it failed to consider whether the development, the subject of the application, fell within paragraphs 9 and 10 of Schedule 1 of the Town and Country Planning (Environmental Impact Assessment) Regulations 1999.
2. Development falling within Schedule 1 of the above-mentioned Regulations requires Environmental Impact Assessment (EIA). Paragraphs 9 and 10 refer to waste disposal installations for hazardous and non-hazardous waste respectively.
3. The Planning application has to be re-determined.

Site and Proposal

4. The 14.9 hectare (ha) application site is the former agro chemicals plant known as Bayer CropScience, which carried out the production and testing of agricultural related chemicals for over 65 years until its closure in 2003, together with land in the River Cam Corridor. The full Bayer site is divided into two by the A10 with the factory site located to the east side and the west side providing a mix of uses including associated sports facilities and the waste water treatment facility.
5. This current application relates to the main factory site (8.7ha) on the east side of the A10, which, due to its previous use, has pockets of high levels of contamination. Many of the former buildings on the site have been demolished, including 3 detached 2 storey dwellings fronting Church Road. The site also contains large areas of hard standing in the form of a 276 space surface car park and areas of internal infrastructure.



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August Planning Committee 2009

6. In addition to the factory buildings, the site also contains two listed buildings known as Hauxton Mill and the Mill House both of which are grade II listed buildings while to the north of the Mill is the new Mill house which although not listed in its own right is located within the curtilage of the listed Mill. A public footpath (number 5) cuts across part of the site which provides a loop route with footpath number 4, from the A10 through the site over the Riddy Brook and the River Cam past the Mill House and the Mill to reappear further along the A10 at the access point serving Westfield Cottages. A second public footpath (number 1) links with footpath number 5 at the footbridge over the Riddy Brook and provides a route partly along the western bank of the Riddy Brook before crossing it to run along the western bank of the River Cam to then re-cross the Riddy Brook and continue along the eastern boundary of the application site and onto Church Road.
7. The site is bounded to the west by the A10, to the north and east by a 2.5 metre high boundary wall, also along this part of the site and below the ground level a Bentonite wall installed around 1972, provides a structural barrier preventing contamination crossing from the site into the Riddy Brook. To the south the site boundary is formed by Church Road, which provides the main link into Hauxton village from the A10.
8. The application, registered on 1st December 2006, relates to two main issues: the first being the demolition of the existing factory buildings, along with the three dwellings fronting Church Road but not the Mill House, Hauxton Mill or the New Mill House; and secondly the application relates to the necessary remediation measures required to provide a platform for the redevelopment for up to 380 dwellings, employment units and open space provision. Details of the proposed redevelopment of the site are the subject of a second application S/2014/08/O considered elsewhere in this agenda.
9. On 19th November 2008 an Environmental Statement (ES) was received. This provides information on the likely significant environmental effects of the proposed development. It also describes the measures that are proposed to mitigate any adverse effects and provides a statement as to the significance of any predicted impacts both before and after mitigation. A copy of the Remediation Non-Technical Summary is attached as electronic Appendix 6.
10. The applicant on both applications represents a specialist company, which acquires this type of site, obtains outline planning permission for redevelopment, carries out the remediation work and then sells the 'cleaned' site to a developer.

Planning History

11. This site has a very long planning history with numerous planning applications for development.

Planning Policy

12. Local Development Framework (LDF) Core Strategy DPD (adopted January 2007) policies relevant to this application: **ST/1** Green Belt; **ST/3** Re-Using Developed Land and Buildings; **ST/6** Group Villages. The former factory site is a pocket of land excluded from the Green Belt.
13. LDF Development Control Policies DPD (adopted July 2007) policies relevant to this application: **DP/1** Sustainable Development; **DP/5** Cumulative Development; **SF/8** Lord's Bridge Radio Telescope; **SF/9** Protection of Existing Recreation Areas; **SF/12** River Cam; **NE/4** Landscape Character Areas; **NE/6** Biodiversity; **NE/7** Sites of Biodiversity or Geological Importance; **NE/8** Ground water; **NE/9** Water and Drainage

Infrastructure; **NE/11** Flood Risk; **NE/12** Water Conservation; **NE/15** Noise Pollution; **NE/16** Emissions; **CH/1** Historic Landscapes; **CH/2** Archaeological Sites; **CH/3** Listed Buildings; **CH/4** Development within the Curtilage or Setting of a Listed Building.

14. LDF Site Specific Policies DPD (submission draft January 2006) policies relevant to this application: Policy **SP/7** Bayer CropScience. This identifies an 8.7 ha site for a mixed-use development, including the remediation of all contamination caused by previous industrial uses of the site. Policy SP/10 identifies the former Bayer CropScience site for B1 employment as part of a mixed-use redevelopment.
15. Government Policies **PPS1** Delivering Sustainable Development; **PPG2** Green Belts; **PPS7** Sustainable Development in Rural Areas; **PPS9** Biodiversity and Geological Conservation; **PPG15** Planning and the Historic Environment; **PPG16** Archaeology and Planning; **PPS23** Planning and Pollution Control; **PPG24** Planning and Noise; **PPS25** Development and Flood Risk.
16. East of England Plan (May 2008) policies of relevance are: **CSR3** Green Belt; **ENV6** The Historic Environment; **WMI** Waste Management Objectives.
17. **Circular 05/2005** – Planning Obligations – states that planning obligations must be relevant to planning, necessary, directly related to the proposed development, fairly and reasonably related in scale and kind to the proposed development, and reasonable in all other respect.
18. **Circular 11/95**: The Use of Conditions in Planning Permissions – states that conditions should be necessary, relevant to planning, relevant to the development permitted, enforceable, precise and reasonable in all other respects.

Consultations

19. **Hauxton Parish Council**

Introduction

“Hauxton Parish Council identifies the Bayer Site (East and West of the A10) as a major complex problem requiring (i) remediation of the whole Bayer site and the surroundings that is effective in perpetuity and (ii) sustainable redevelopment that both funds the remediation and enhances the southern entrance to Cambridge City. The two planning applications (S/2307/06/F & S/2308/06/O) are for the largest developments of Hauxton in its entire history, doubling the number of households. The revised and new applications S/2307/06/F and S/2014/08/O are substantially similar to the former and can therefore be considered against the same criteria.

Hauxton Parish Council requests close participation in the deliberations of the planning authorities and the Environment Agency (for the remediation and the flood risk management) to ensure the complexity and extent of the remediation and development achieves suitable outcomes.

Hauxton Parish Council supports the planning applications S/2307/06/F & S/2014/08/O subject to resolution of a number of significant issues involving the developer, statutory consultees and Local Authorities and subject to satisfactory benefit to the village of Hauxton.

Demolition of the Factory Buildings and Nos. 90, 92 And 96 Church Road and Remediation of the Site (S/2307/06/F)

Hauxton Parish Council is seeking assurances that the Demolition and Remediation Strategy of the former Bayer CropScience site that is designated Contaminated Land under part 2a of the Environment Protection Act 1990 will be:

1. Robust in terms of Health, Safety and the Environment using best practice to limit the impact of noise, dust and smells on the Village and the Environment. To date demolition work has proceeded relatively smoothly with few complaints
2. Carried out using the "best practice" remediation methods. See Issues
3. Quantifiable for pollutants by location and type. The remediation method statement and associated documentation appear to cover this adequately for the extent known before the slab is broken out.
4. Sufficient to cover the full extent of the known pollution including ground water beyond the site boundaries.
5. Sustainable long term in perpetuity with a proper exit strategy that includes monitoring and continued treatment if necessary.
6. Carried out to a standard that reflects the ultimate use of the site for residential development.
7. Indemnifies owners and local stakeholders, who may take on responsibility for part of the land, against future problems relating to or arising from the pollution and remediation.

Items 4-7 have issues identified in the following comments. It also notes that replies to some of the issues raised have been made by Harrow Estates but for the record the Parish Council wishes to reiterate them in modified form against the revised application.

Key Issues

- (a) ·Hauxton Parish Council is seeking dialogue with the Environment Agency to understand the apparent ambiguity and imprecision at present in the planning documents so as to arrive at a robust, effective remediation programme under effective scrutiny by the Environment Agency under Part 2a of the Environment Protection Act 1990. We urge both South Cambs District Council and the Environment Agency to have the remediation plan account for the 'worst case'.

The Atkins documents gave recommended remedial targets. The remediation method statement appears to interpret these as "guides to work towards" and "however for the avoidance of doubt we do not believe these targets are achievable through the use of readily available and commercially viable remediation technologies or without significant export of materials off site". Reference is also made to using cost benefit analysis and Best Available Technology Not Entailing Excessive Cost (BATNEEC) and a plan to revisit the risk assessment model to "improve the recommended remedial targets" Likewise the statement apparently relates the degree of remediation to the end-use which unfortunately cannot be guaranteed in perpetuity e.g. the Land under the commercial areas may in the future be required for another use. Hauxton Parish Council urges both SCDC and the EA to recognize the stated complexity of the geological sequence and the complex ground water flow and so have the remediation plan account for the 'worst case'. For example the documents identify hotspots under structures that may well be mobilized by

demolition work. The possibility that materials may have to be exported from site should be recognised and suitably planned.

- (b) Hauxton Parish Council is concerned that redevelopment of part of the East Site prior to completion of remediation of the whole East Site could compromise remediation to a satisfactory standard.

Clean cover applied before completion of remediation of the whole east site runs a risk of being contaminated by migration up to the time the site is declared fit for purpose by the EA.

- (c) Hauxton Parish Council requests best practices throughout the remediation and strongly objects to any use of the imprecise weaker term 'reasonable measures'.

There is only a single opportunity for remediation (i.e. when the factory is demolished thereby providing access and while there is funding for the remediation). Therefore the clean up has to be effective in perpetuity. There must be no prospect of an adverse legacy falling on owners of the properties created, SCDC or Hauxton Parish Council.

- (d) Hauxton Parish Council is seeking dialogue with the Environment Agency on the extent of ground water contamination outside the Bayer site (both East and West of the A10). It also requires assurances from the Environment Agency that responsibility for this, if not with Harrow Estates, rests with those who caused the pollution or their successors either severally or jointly.

There is documentary evidence of the full history of the site and data on the contamination levels as measured. The maps showing levels of individual chemicals seem to show ground water contamination beyond the boundaries of the site. Furthermore there are some remarkably big numbers for pollutant levels i.e. >100,000 µg/kg. The method statement appears to show that where any possible pathways into or out of the site are identified they will be capped or stopped up. This in itself may well prevent natural flow of contaminated ground water back into the site as levels within are lowered. It is the EA's responsibility to formulate a plan to account for how this off-site contamination will be managed and funded.

- (e) Hauxton Parish Council seeks assurances that clean covering with a layer of unpolluted soil is not an acceptable substitute for remediation.

Hauxton Parish Council interpret the documents to say the remediation and redevelopment will include scraping soil off the north meadow to provide flood relief and putting that clean soil down on part of the factory site to raise the land as protection from floods - and raising the ground level one metre. The documents further states that it will be necessary "to provide suitable growing media within the garden areas". Accepting this to be the case, the fundamental principle that must operate is 'all and any materials returned to the ground must have a maximum contaminant level that represents no threat to either the public or any environmental receptor.' The covering layer should not be regarded as a remediation technique in itself.

- (f) Hauxton Parish Council is seeking dialogue with the Environment Agency on the long term ground water modelling including outside the Bayer site and on the monitoring programme short and long term.

Hauxton Parish Council seeks clarification as to what the remediation will do precisely to which parts of the site. What will success be defined as in terms of measurements over a period of time in specified places at properly agreed depths for soil/substrate AND ground water. The Parish Council notes the rebound phenomena and notes that remediation procedures will temporarily drop the ground water levels but once the remediation stops the remaining reservoir of chemicals in the soil/substrate could rebuild the levels in the ground water back up and perpetuate their spread to and/or from the site. A suitable plan of on-going monitoring must be left in place to prove that this does not occur.

Hauxton Parish Council also note that the two deep boreholes on the Site are or will no longer be used to abstract water and will be de-commissioned. We would like the EA and the appropriate water authority which have approved this work to give reassurance that this will not have a long term adverse effect on the hydrology of the Site and surrounding area.

Bearing in mind the above issues Hauxton Parish Council believe that it is necessary to demonstrate that the remediation of the contaminated land is carried out to a degree that ensures the safety and well being of future residents of the site in perpetuity. To this end a liaison group should be set up that is led by a senior official of the Environment Agency and incorporates representatives of both the remediation Company and the local Community. By this mechanism hopefully it can be demonstrated openly and fairly, that the site is being remediated to appropriate final concentrations of residual contaminants and that adequate policing and controls are in place to ensure that it is.

The Parish Council is committed to help resolve issues arising wherever possible and believe a liaison group to be the best way that this project can be delivered and properly communicated to the local residents.

The River Valleys: Hauxton Parish Council was mindful that POLICY EN2 should also be a factor for the Developers and South Cambs District Council in their considerations.

(Extract from POLICY EN2: The District Council will not permit development which has an adverse effect upon the wildlife, landscape and the countryside character of the River Valleys of South Cambridgeshire. Where appropriate the District Council will consider the use of Article 4 Directions to protect this setting.)

The Parish Council supports in principle the Ecology Management measures as outlined to us at the October meeting at SCDC and would like to be party to their development as the plans for the River corridor and Mill environs expand.

Dialogue with the Developers and South Cambs District Council Planners

Hauxton Parish Council will continue to maintain the very valuable dialogue they have established with Harrow Estates, their Agents and SCDC Planning and will work to resolve any problems and issues that arise wherever possible.

Given that there is now a need to again determine the application, Hauxton Parish Council may well wish to modify or alter its responses in the light of future discussions and developments.

20. **Harston Parish Council**

"Harston Parish Council has been working closely with Hauxton Parish Council and supports and endorses the submission of Hauxton Parish Council for this application. To this end Harston Parish Council recommends **APPROVAL** of this planning application subject to:

- (a) The points itemised in Hauxton Parish Councils response being adequately addressed.
- (b) It is absolutely essential that the remediation of the contaminated land is carried out to a degree that ensures the safety and well being of future residents of the site in perpetuity. To this end a liaison group should be set up that is led by a senior official of the Environment Agency and incorporates representatives of both the remediation company and the local community. By this mechanism hopefully it can be demonstrated that the site is being remediated to appropriate final concentrations of residual contaminants and that adequate policing and controls are in place to ensure that it is."

21. **Environment Agency** accepts the Flood Risk Assessment and revised Hydraulic Modelling dated September 2007. In conjunction with the Council's Environmental Health Officer it recommends a number of conditions be imposed on any permission. (See recommendation).

22. **Cam Valley Forum (CVF)** has responded to the additional material submitted by the applicant:

- (a) CVF is pleased that the applicant has confirmed that no new building should take place until the entire site is remediated and validated as such.
- (b) Further monitoring should be undertaken by an independent consultant. Atkins cannot be viewed as independent.
- (c) The results of "significant sampling" should be made available to the CVF as a party interested in the welfare of the Cam and its tributaries.
- (d) "All areas on the site will be monitored" is welcomed. However, the phrase "there will remain the risk of unknown and unidentified contamination" is of concern.
- (e) CVF is relieved that all contractors' staff will be wearing Personal Protective Clothing.
- (f) It is hoped that the understanding of leachate chemistry is matched by practical techniques of stopping leachate reaching the Riddy and the Cam.
- (g) Given the statement:

"We are clear in our understanding that some treatments for some soils may not be wholly successful due to either the suitability of soils or nature of the contamination" it is suggested that ***specialists who know a lot more about***

pesticide breakdown, especially those developed some time ago, are brought in. Sites where pesticide and dyestuff chemical residues have built up over years have caused problems to those clearing the areas and also those who have lived near or on these sites, in terms of human health, plants planted in gardens and the local environment.

- (h) Use of words “only trace levels” in relation to some pesticide residues is also of concern. A trace of DDT can be all that is necessary to wipe out aquatic invertebrate populations.
- (i) CVF refer to Schradan (see comments from adjoining landowner in Paragraph 43).
- (j) The phrase ‘alternative means’ (for example, disposal from site) is often used. In practice it is likely to be a very last resort because of expense of transport in sealed containers and the enormous cost of dumping at specially registered sites. CVF would therefore welcome **disposal from site to be built into the plan rather than a contingency**, with estimates of quantities involved, registered sites approached and financial budgets spelt out.
- (k) CVF is happy that reasonable thought is being given to natural flooding of water meadows and weir construction.
- (l) CVF is very disturbed about the lack of assurances about the problems likely to be caused by the breakdown of the Bentonite Wall. It is old and is unstable. All contaminated material currently held behind the wall should be carefully removed using best efforts to prevent the breakdown of the wall. During this process there should be plastic sheeting plus straw bales or some other techniques to ensure no contamination reaches the river.
- (m) The developers suggest that some elements of SUDS are not particularly suitable for the site, such as infiltration and open storage ponds, as **these measures will involve breaching the cover system which will be designed to be protective of human health**. However they also claim they will remove all contamination to below health hazard levels and have generally denied that soil cover (i.e. imported fill) was designed to be part of the remediation strategy to cover over contaminated material. This needs clarification with the aim of ensuring effective remediation. All the toxic residues should be broken down on site or removed to a registered toxic waste facility. Covering the area with a cover system is not acceptable.

23. Natural England

“The application site is approximately 3.5km away from Barrington Chalk Pit Site of Special Scientific Interest (SSSI), and within 5km of Whittlesford-Thriplow Hummocky Fields SSSI, Thriplow Peat Holes SSSI and Dernford Fen SSSI. The site is immediately adjacent to the River Cam County Wildlife Site (CWS). A number of protected and notable species are known to occur in, or are likely to use parts of the application area including bats, badgers, barn owl and otter.

Based on the information provided, Natural England has no objection to the proposed development, subject to the inclusion of our recommended conditions and the proposal being carried out in strict accordance with the details of the application and any agreed mitigation strategy. The reason for this view is that we consider that the proposal is unlikely to have a significant direct effect on the interest features of the

above mentioned SSSIs, and provided that adequate mitigation is agreed with the local authority impacts to protected species should be minimal.

We are satisfied with the outlined mitigation and enhancement measures in the Environmental Statement. However, in order to ensure the long term maintenance and enhancement of the wildlife value at the site, especially with regard to the increased human activity in the area and potential pressures this will place on wildlife interests, we advise that these proposals should be detailed further and agreed with your Authority prior to any construction works taking place. As such we would wish to see the following points are assured through planning conditions / obligations:

Prior to any works starting on site, an Ecological Management Plan (EMP) for the entire site will be agreed with the LPA. This will include the full details of:

- (a) Mitigation during construction to ensure minimal impact to habitats and wildlife, such as timing and methodology of works;
- (b) Management measures including a work programme to maintain and enhance the value of the site for wildlife once the development is completed;
- (c) Sensitive planting plans including appropriate locally native species that will be of benefit to wildlife. This should include details for providing plants of a local provenance, ideally from seed collected from suitable habitats in the surrounding area;
- (d) Erection of specialist bird and bat boxes within the development area and in surrounding semi-natural habitats. Ideally we would wish to see more long-term mitigation for bats both on and off site, including provision for roosting bats and habitat enhancements for foraging and commuting. For example, we would encourage the provision of some access into roof voids of non-dwelling buildings, through the use of bat tiles. These would be particularly beneficial on buildings adjacent to any wildlife corridors (i.e. the river) or other known roosts (i.e. at the Mill);
- (e) Measures to enhance the Riddy Brook habitat and other wildlife corridors for bats, birds, mammals, invertebrates and fish;
- (f) Lighting control (construction and operational) around bat roosting sites and foraging areas;
- (g) An ecological monitoring programme to ensure that mitigation and enhancement is successful, and to guide future management of the site;
- (h) Details of commuted funds to enable the site to be managed to benefit wildlife in the long-term, and detail who will be responsible for carrying out this work.

24. **Ramblers Association** expects existing rights of way to be kept open as development proceeds, if necessary by means of temporary diversions. It would be helpful if the RA were involved at the design stage to ensure best routes for any additional access.

25. **Highways Agency** - No objections.

26. **NHS Cambridgeshire**

“We reviewed this application, taking advice from the Health Protection Agency Chemical Hazards and Poisons Division, with respect to the suitability of the proposed remedial targets for contaminant remediation in light of the proposed use of the site for residential development.

We cannot comment on the approach to remediation of contaminated land or on the target levels proposed by the applicants as they state that they are subject to change during further site evaluation. However, in consultation with the HPA we should be able to confirm whether the site is fit for residential use from a human health perspective once remediation is completed.

The Remediation Method Statement incorporates a plan for a human health risk assessment on completion of remediation to ensure that the site does not pose a risk to human health. The findings of this assessment will need to be reviewed to determine suitability for residential use post remediation.

We did not have details of the original site survey showing the level of contamination. However, plans for dust monitoring need to be reviewed as the dust from the site may be equally contaminated. Similarly, further information is needed on plans for addressing noise, odours and volatile organic compound (VOC) emissions which may impact on human health.”

27. **Ecology Officer** has no objections. The production of the Ecological Management Plan (as requested by Natural England) will be the best means to address many of their points.

28. The Council’s **Environmental Health Officer** has been working very closely with the Environment Agency to produce draft conditions (see recommendation). In addition the Environmental Health Officer is fully aware of the detailed responses made to the application and has commented accordingly. The Officer’s response to the points made by Mr Brathwaite are attached as electronic Appendix 1.

Representations

29. Owners of the private nature reserve and wildfowl site to the south of Church Road and opposite the former factory comments on the following statement in the Flood Risk Assessment:

“There is a greenfield area (3ha) south of the site, on the opposite side of Church Road, which includes a few water bodies which would provide attenuation storage to any significant volumes of run-off from the area.”

The owners have not been contacted by Harrow Estates plc about such a proposal. They would not give permission for such run-off to be directed onto their property, where unclean and possibly contaminated water could do grave damage to the wildlife reserve. In any case, the ponds are sealed water bodies which could not take up excess water.

It is noted that the remediation processes proposed are likely to generate large amounts of dust (with up to 8ha of concrete and hardstanding to be broken up and crushed) and that much of the remediation actually works by releasing quantities of volatile chemical breakdown products into the air, particularly in warm weather, which

it will be very difficult to control with such large amounts of soil being processed over the next two or more years.

The unpleasant effects that such dust and malodorous, as well as possible unhealthy, air pollution will harm the enjoyment of their property, and indeed that of neighbours, as well as creating a very negative environment with regard to the organic food business that the owners' daughter runs on the site.

30. Mr P Elliott, the owner of land on one side and tenant on the other of land directly affected by the Bayer CropScience site objects. Whilst the writer wishes to see the site safely remediated, he considers the proposals are deeply flawed and geared to avoiding effective control and monitoring. They have fears for their family health, the security of their business, future potential of their land and the health and sustainability of the environment.

He believes the application should be refused so that all the unanswered questions can be scrutinised at a public planning inquiry.

Detailed comments are attached as electronic Appendix 2, to which Members are referred. In it the following matters are discussed (summarised):

- (a) Background to the farming enterprise growing high-value, high quality crops. Asparagus is grown on Church Meadow to the east of the factory site. The water meadows on the south side of the River Cam are used for hay production and sometimes for grazing horses.
- (b) The history of contamination of the Packhorse Field to the west of the A10 and on which alpine strawberries and other crops were grown. In 1999 a High Court Judge ruled that the ground water contamination emanated from the factory site. The field no longer grows crops.

Regulatory authorities (Environment Agency and South Cambridgeshire District Council) took no action to ensure a clean-up of the site, despite borehole ground water analyses demonstrating that chemical contamination had spread beyond the site (even beyond the Bentonite wall installed in 1973).

- (c) The particular problems of this application are:
 - (i) On going contamination of part of Church Meadow adjacent to the eastern boundary of the factory due in part to a lower ground water level and a gravel subsoil, which also extends westwards under the factory.
 - (ii) If remediation on-site fails to clean up contamination off-site, asparagus will continue to fail with continued financial loss on part of the meadow which will also be blighted for future development again with financial loss.
 - (iii) The remediation process (exposure and dewatering) is likely to generate odours and dust causing a health hazard to the writers' 3 year old daughter and her friends who play in Church Meadow and who rides horses in the adjacent meadow. Several activities are likely to generate vapours and potentially have a significant effect on air quality.

- (iv) Dust contamination of the asparagus crop has already occurred during demolition work. There would have to be some agreement to avoid a conflict between remediation and the asparagus season (March to approximately end of June).
- (d) The Appendix to the Methods Statement lists the properties of the dangerous contaminants on the factory site. There has been a long series of leakages of contaminated ground water into the Riddy Brook, via drains into the River Cam or else by malfunction of the Waste Water Treatment Plant.
- (e) The new Remediation Method Statement (RMS) for the remediation of the site prepared by Vertase echoes the problems foreseen by Biogenic Site Remediation Ltd in an August 2007 report for the applicants. This indicated that the remediation procedures (excavation and dewatering), in situ bioremediation and in site chemical oxidation) had serious defects and either wouldn't work or would not reduce critical contaminants to the necessary "stringent risk-based targets."
- (f) Concern is raised that remediation targets cannot be met. The RMS is still uncertain about what techniques will work or can be applied. It does not believe the original targets agreed between the Environmental Agency and Atkins are likely to be either technologically achievable or commercially viable. Reasons are being sought to lower the targets set. The use of capping material to cover material that "will be replaced at the site that does not meet the present generic criteria" is not acceptable. The contaminated layer is shallow (only up to 4m in depth) with impermeable strata below (ie within rooting depth) and buried incompletely remediated material will continue to contaminate ground water the site itself and surrounding areas.
- (g) In 1973 a barrier composed of Bentonite was implanted down to the impermeable gault clay along the boundary of the factory site and the Riddy Brook. There is evidence of seepage, particularly of solvents, through the Bentonite wall. An Enviro Report (2005) commissioned by Bayer indicated that the wall may be beyond the typical design life considered for barrier walls. A detailed investigation of both the integrity of the Bentonite wall and the off-site migration of contaminants should have formed an essential part of any Environmental Impact Assessment.
- (h) Breaching of the levee upstream of the weir will reduce the water level upstream and lead to less seasonal flooding and further drying out of water meadows upstream, accelerating their degradation and loss of biodiversity. The construction of the flood relief channel is not necessary if ground and finished floor levels are raised on the site. They suspect that a major purpose of the excavation is to provide "fill" for raising ground levels cheaply and conveniently.
- (i) There is a significant gap in the ES with regard to ground water flows beneath the factory site. Local geology and ancient river deposits laid down by a south to north flowing forerunner of the present east to west flowing River Granta acts as a conduit for ground water. Thus although ground water is mostly carried away to the Waste Water Treatment Plant (WWTP), contaminated ground water is also able to flow along a downhill hydraulic gradient to the east entering Church Meadow and to the west, across the A10, impinging on

to Packhouse Field. After 10 years fallow, this is still badly affected by contamination.

31. Roger Braithwaite of Zero Environment Ltd, acting for Mr Elliott, has submitted a detailed response to the ES and RMS. This is included as electronic Appendices 3, 4 and 5 to this report. He does stress that his role is as an Expert Witness and his comments should be taken as completely impartial and provided in the interests of the Council and the residents at large.

The ES considers the highly complex remediation of one of the most contaminated sites in the country which is going to take, potentially, several years to complete. The writer's summary is as follows:

- “(a) The applicants are submitting a low cost remediation strategy, seemingly to try to fit within a budget.
- (b) The potential impact of airborne pollution as a result of the remediation process has been dismissed as minor. There has already been a significant impact on surrounding land as a result of demolition processes carried out illegally without the benefit of planning permission. Both volatiles and particulates have the capacity to form a serious risk to both human and property receptors. It is not acceptable to merely state they will not form a risk, as long as the job is done properly.
- (c) What is being proposed will not work, ie remediation targets cannot be met.
- (d) There is no consideration of how metals will be remediated.
- (e) There has been no consideration of dioxin contamination. Pesticides manufacture is a known significant source of dioxins.
- (f) There seems to be no targets for soil gases.
- (g) Non Aqueous Phase Liquids (NAPLs) have not been considered at all. This is key to success of the project, as Atkins have previously suggested.
- (h) It needs to be made clear which contaminants will not respond to the treatments proposed and how they will be dealt with, eg removed from site or other (more expensive) treatments.
- (i) There has been no consideration of the volumes of material which may have to be removed from the site. If this were only 1/10th of the 250,000 m³, if we take 1m³ to equal approximately 2 tonnes, that would involve 2,500 twenty tonne lorry movements.
- (j) There is no finalised/confirmed site layout for the final end use to inform the conceptual model. This is essential to identify where the biggest risks lie, eg in private gardens.
- (k) There is no mention of foundation design. This is similarly essential as piling could create new pathways to deeper bodies of ground water in the major aquifer below the site.
- (l) There is no mention of cap design. This could require the importation of potentially thousands of tonnes of material to replace that taken off site, and to

raise platform levels. Again involving hundreds, or thousands of additional lorry movements.

- (m) The Bentonite cut-off wall has failed. Protection of the water courses and the future of the cut-off wall needs to be considered and agreed **before** the commencement of the remediation process.
- (n) There is no clear hierarchy of responsibility for the safe development, secure occupation of the site, or future liability, should the remediation fail. This needs spelling out as simply as possible so there is absolutely no confusion here.
- (o) The environmental statement underestimates the potential environmental impact of the development.
- (p) No formal Emergency Plan has been developed in association with the authorities.”

The representations (see electronic Appendix 5) from Mr Braithwaite include a very detailed technical critique of the RMS Revision 5 (November 2008), the statement to Planning Committee on 3rd October 2007 and an addendum suggesting the possible use of a planning obligation to require the developer to provide sufficient funds to allow an independent observer to be appointed to oversee the remediation and any post remediation conditions. The matter is covered in PPS23.

Representations from the applicants

32. The applicants have submitted by letters dated 22nd June 2009 further material in response to consultation comments and discussions. It comprises:
- (a) An addendum to the Ecological Assessment incorporating further ecological site investigation work carried out in February 2009, in relation to bats and otter and water vole survey;
 - (b) An ES addendum. The amendments are summarised in the ES addendum as follows:
 - (i) “Clarification that as it is considered likely that only a small amount of waste, if any, would have to be disposed of off-site during the remediation process and that any associated vehicle movements would be limited and not have a significant environmental impact the Environmental Statement does not assess the transport effects associated with the proposed remediation of the site.
 - (ii) Correction of appendices references.
 - (iii) Further ecological site investigation work was undertaken on 19th February 2009.”
 - (iv) Minor amendments to the Remediation Method Statement for the site have been made following further review of procedures and receipt of consultation comments. The Remediation Method Statement is now Revision 6 (2009) rather than Revision 5 (10th November 2008) as included in the original Environmental Statement in November 2008.

These amendments have also necessitated continuity amendments in parts of the Environmental Statement.

(c) Lengthy responses to the following consultation responses:

- (i) Cam Valley Forum
- (ii) Mr R Braithwaite
- (iii) Environmental Agency

33. In addition, the applicant has responded to the suggestion (Para 31 above) that there should be an obligation for independent monitoring of the remediation process. To summarise, Vertase FLI is the proposed contractor for the remediation of the site. The Company carries an Environmental Permit for the technologies proposed and this is registered with the Environment Agency. In addition, Atkins has been employed by the applicants as environmental consultant to monitor that the works are carried out to the standard required to meet the remediation requirements. Whilst Atkins is employed by the applicants, it is placing its worldwide reputation, stock market status and Professional Indemnity Insurance on achieving the successful remediation of the site. Harrow Estates believes that any additional monitoring would be an unnecessary duplication of roles and is not necessary. Additional financial burdens could also result in the need to reduce the extent or range of contributions that could be delivered by the proposals for the site to maintain viability.

Representations in response to additional material submitted by the applicant

34. The owner of the nature reserve and woodland nursery on the south side of Church Road is pleased that the proposal to divert surface water drainage on to his land has been dropped. However, concerns remain that a much larger quantity of surface run-off is anticipated because the 'green' plans for rainwater collection have been abandoned. All surface run-off will be disposed of directly into the River Cam by the A10 road bridge. This will require filtering, which will need regular and expensive maintenance by either the Parish or District Councils. It would also jeopardise work to improve and safeguard the river and its environment in the new Trumpington Meadows Country Park.
35. Concern is expressed that any disturbance of the soil below 1 metre is liable to cause a public health risk by disturbing some kind of protective barrier material. This will be intolerable to future householders.
36. Given that the Environment Agency is the Statutory Regulator of the site, a representative from the Agency should be invited to attend the Planning Committee to answer questions where requested.
37. There is still concern about the release of noxious odours and dust affecting the writer's land and business, given the scale and timetable of the proposed operations.
38. Mr Elliott, the owner of The Little Manor and land adjoining to the east of the site does not believe that the applicants are capable of remediating this site to a standard fit for residential development. The remediation strategy relies on a physical barrier of imported fill to cover contaminated material. Any disturbance of this seal would create a public health hazard.
39. The applicants have denied that there is any contamination of surrounding land. The remediation proposals would not solve problems in this surrounding land, where, in part, crop production has been banned.

40. The applicants no longer deny that contaminated groundwater was getting into the Riddy. Recently there has been a more serious seepage, which the Environment Agency has not inspected. The Riddy is not in a good state of health as it is inhabited by the American Signal Crayfish, a very tough crustacean, that has proved resistant to various methods of control.
41. If during remediation there is a serious pollution event for the River Cam, the Council, the Environment Agency and the Developers will have to take the environmental and financial consequences.
42. The proposed flood relief channel is an excuse to quarry material cheaply for raising the site levels. Raising the weir would breach the security of the writer's meadows. This structure is also partly on his land. Moreover, the level of the water at the weir is irrelevant. Flooding of the Riddy will continue.
43. Schradan is one of the most dangerous pesticide products to human health. This was manufactured at Hauxton. Evidence suggests that, although banned, stocks were maintained on the factory site into the 1990's. The writer knows that his land is also contaminated by Schradan, as well as by a range of herbicides. This, amongst other chemicals, will be very difficult to eliminate on the factory site - and would explain the proposal not only to cover the entire site with imported 'fill', but the necessity for this layer to remain unbreached.
44. It would be impossible to maintain such a protective layer and to build a large housing estate on top of such dangerous ground.
45. The applicant welcomes the need for an independent analyst to monitor progress, efficiency and success of monitoring. But the use of Atkins, who are the main consultants to the Developers, would not be appropriate. Monitoring should be paid for by Harrow Estates Ltd but carried out by a reputable firm on the recommendation of an appropriate independent professional body.
46. Mr Braithwaite, Environmental Consultant, stands by all his previous submissions. He wishes to highlight the following matters:

The remediation statement is nowhere near significant enough for a site of this nature, where no area will be contaminated with just one chemical or even a simple group of chemicals. It is unique and difficult to handle. The chemicals are very hazardous. They have to be made safe and will be treated by various means to render them safe, or safer. The dangerous 'stuff' left (the residues) following treatment, will be disposed of - as **waste**. Some of the bulk will also be disposed of as **waste** either because no-one wants it, or it is not safe enough. That is a lot of **very hazardous waste**, either 'dealt with', and/or 'disposed of' in or from, Hauxton.

The writer values his reputation as an independent expert witness and not biased because his client is 'an interested party'. The use of Atkins, by the applicants, suggests that their employers will not be an 'interested party'.

No planning permission has been granted for any process to date. The permission that was granted and subsequently quashed had no less than 10 conditions relating to the demolition and the potential impact it may have. Despite this, substantial demolition has taken place and caused a substantial nuisance in the process. The asbestos has also been removed.

As a consequence leaks were visibly evident out of the Riddy bank. The adjacent landowner has been able to prove that chemicals were escaping from the factory and entering the brook above the water line resulting in emergency, "temporary mitigation measures" being taken.

The applicant's statement that the only acceptable method of ascertaining the integrity of the Bentonite wall is physical excavation adjacent to the wall is refuted.

Pollution from the site continues to run into the brook unabated.

47. Hauxton Parish Council comments

"Hauxton Parish Council (HPC) note the additional requirements from the EA in particular '*The required duration of groundwater monitoring post remediation will be dependent on the results of monitoring and the estimated travel time for contaminants to migrate across the site.*' This is reassuring.

HPC welcome Harrow Estates (HE) statement that '*Harrow Estates agrees that there should be no development until the site is remediated and validated as such.*'

HPC still held reservations about the use of the clean cover layer, was appreciative of HE's comments regarding the use of materials for flood alleviation but sort from HE further clarification of the following;

- (a) That the site in totality will be subject to one set of remediation targets. It is understood that this is will be the case and that wherever the target levels vary for soil and ground water the lower level will be used.
- (b) No concessions will be given for variation in these targets based on current proposed land use within the boundary.
We understand that the only concession might be to utilise materials that whilst satisfying the criteria for human health in adults might, for reasons of detectability at threshold levels, be possibly unsuitable for 0-2 year olds. These, with EA, approval might be located under the commercial area or failing that removed from site.
If the former were the case any future use of the commercial area would have to be subject to a new planning application and assessment as to suitability. HPC believe it would be better to avoid this scenario if at all possible.
- (c) That the maximum allowable concentration of any contaminant prior to 'capping' is below the threshold of adverse human health effects.
We understand that the target levels for human health are based on two main criteria that for a 0-2 year old child and for an 18-65 year old adult any of the areas where the former will have access will be remediated to that standard i.e. all the residential and amenity areas.
- (d) That 'capping' is for the purpose of (i) flood prevention, and (ii) providing fertile growing material for gardens etc, and for no other reasons.
We understand that in addition to the above capping has a secondary role as a preventative barrier between the remediated soil and the clean fill. It acts as a back-up and is designed to eliminate physical contact with the former. It is not however in any way to be considered a substitute for remediating the land below the cap to the appropriate standard. We understand that owing to a virtual total lack of topsoil on the site this will need to be imported from a certified source.

With the above in mind it is thought not appropriate to have the inclusion of 'open storage ponds' on site at the conclusion of the remediation.

(e) Flash Flooding

HPC expressed a concern that in light of the recent extreme rainfall, that once the concrete slab is broken up and remediation excavations started, flash flooding could compromise the integrity of the site and cause pollution beyond the boundaries.

We are given to understand that a system of temporary lagoons will be put in place on the East Site to assist with the remediation and de-silting of the liquid phase prior to pumping to the waste water treatment plant and that one will be kept available as a contingency. We also understand that the actual areas of site under treatment at any one time relative to the whole will be small and sufficient pumping capacity will be held on site to cope with these being inundated.

We were also informed that close monitoring of the weather patterns is an essential part of the remediation process.

In the light of its long association with the Site, HPC would strongly recommend that if the lower car park areas are to be used for access in and out of the Site and there is any risk of contamination on this hard stand measures are put in place to prevent overspill of excess rain water into the Riddy and incursion into the area of flood water from the Riddy or River.

(e) Off-site ground water

HPC is still concerned that the EA appear to regard the pollution of ground water off-site as not causing an unacceptable risk and therefore there is no requirement to remediate the land beyond the Part IIa boundary which is contiguous with the Site Boundary. HE allow that the remediation methodology whilst not specifically designed to clean up off site ground water will contribute to it as it is drawn back into the site but again that there is no requirement to address areas beyond the boundaries. Hopefully this will prove to be the case. However an earlier Enviro study based on actual off-site sampling indicated significant levels of pollution in certain areas, this begs HPC to ask the question should this prove in the future who is responsible for cleaning it up?

HPC continues to support the Remediation Planning Application and encourages SCDC the EA and other regulatory bodies to work towards resolving any outstanding problems so the work can get underway this season."

Planning comments

Demolition

48. Most of the extensive area of buildings on the site, including warehouses, office blocks, production buildings, storage towers and tanks have already been demolished as part of the decommissioning process. Three former vacant houses on the southern part of the site fronting Church Road have also been demolished. Demolition has been undertaken only to the top of the concrete slab. That and foundations will be removed as part of the remediation works.
49. None of these buildings made a positive contribution to the appearance and character of the area. Indeed the commercial buildings had a negative impact on the surrounding Green Belt.

50. The loss of the factory buildings is not considered to be unacceptable. The removal of large areas of hardstanding around the curtilage of the Mill House will help to improve the setting of this Grade II listed building. The houses on Church Road were not listed buildings nor the subject of any special control.

Remediation

51. Chemical manufacturing operations in the past have contaminated the land and the ground water on the previously developed site. Government Policies on Planning and Pollution Control within PPS23 (Planning And Pollution Control) states in paragraph 8 “any consideration of the quality of land, air or water and potential impacts arising from development, possibly leading to an impact on health, is capable of being a material planning consideration, in so far as it arises or may arise from any land use.” Paragraph 15 continues by stating “Development control decisions can have a significant effect on the environment, in some cases not only locally but also over considerable distances. Local Planning Authority’s must be satisfied that planning permission can be granted on land taking full account of environmental impacts.” Paragraph 23 states: “In considering individual planning applications, the potential for contamination to be present must be considered in relation to the existing use and circumstances of the land, the proposed new use and the possibility of encountering contamination during development. The Local Planning Authority should satisfy itself that the potential for contamination and any risks arising are properly assessed and that the development incorporates any necessary remediation and subsequent management measures to deal with unacceptable risks, including those covered by Part IIA of the Environmental Protection Act (EPA) 1990. Intending developers should be able to assure Local Planning Authorities have the expertise, or access to it, to make such assessments.”
52. Paragraph 25 states:
- “The remediation of land affected by contamination through the granting of planning permission (with the attachment of the necessary conditions) should secure the removal of unacceptable risk and make the site suitable for its new use. As a minimum, after carrying out the development and commencement of its use, the land should not be capable of being determined as contaminated land under Part IIA of the EPA 1990.”
53. The PPS concludes (Para 26) that “opportunities should be taken whenever possible to use the development process to assist and encourage the remediation of land already affected by contamination.
54. The ES and the addendum (June 2009) to it assesses the likely environmental effects of the remediation of the site. The Non-Technical summary, incorporating revised Chapter 3 is attached as electronic Appendix 6.

In summary:

55. “The overriding strategy to achieve the remediation of the site is to excavate all materials at the site to ensure that uncertainty regarding contaminants and geological conditions are removed. This will entail excavation of approximately 250,000 m³ of materials across the Main Site area. This material will be segregated, classified and treated as appropriate, returned to the site and validated. It is envisaged that 90,000 m³ of materials will require formal treatment. Ground water will be separated, treated and disposed of from the site under discharge consent. Following remediation, the

soils will be replaced at the site and a clean cover system will be imported to provide finished levels.” (Para 3.28 addendum).

It will involve a number of phases:

- (a) Preparation works including upgrading the Waste Water Treatment Plant (WWTP) to the west of the A10;
- (b) Remedial Treatment works using a variety of techniques and technologies on site working in 3 zones. Para 3.31 of the Non-Technical Summary describes the phased techniques that will be adopted.

The preferred remediation options identified in the ES comprise a combination of:

- (a) Pump and Treat ground water. This involves the installation of wells across the site and injecting water at pressure. The water is extracted from the site using the existing WWTP. The current pump and treat facility in the southern area of the site would be retained to de-water the site area, and a filter pond would be incorporated to reduced suspended solids prior to entering the WWTP.
- (b) Chemical Oxidation of the saturated zone through installation of a number of injection points across the site area and the injection of a chemical reagent to neutralise the contaminant.
- (c) Bio-treatment of soils and ground water. This comprises an injection of air under various pressures and flow rates into an injection well screened at the base of the contamination area. This allows and encourages the natural bacteria to react with the contamination to reduce it to an acceptable condition.

56. In response to concerns regarding the condition of the Bentonite wall, the applicant has indicated that

“An investigation to determine the current condition of the Bentonite wall will be carried out by Vertase in the first few weeks of the remediation programme, following which it will be considered whether to leave the wall in place, remove it and reuse the material or dispose off site, or repair and improve the wall if necessary. The Remediation Method Statement produced by Vertase F.L.I. states that the site will be remediated adequately to satisfy requirements under the EPA 1990.”

57. The applicant has set aside a period of 12-18 months to allow for the remediation and regular monitoring of the site. During this period the verification of the works will include sampling of soil, and a period of ground water quality monitoring including the River Cam and Riddy Brook upstream and downstream, all of which will aim to demonstrate the effectiveness of the remediation works.

58. As part of the remediation process the applicant has confirmed that site levels across the site will be changed with the use of ‘clean’ cover over the development site. This material, which is likely to be sourced from the provision of a shallow swale and removal of the artificial levee, both within the north meadow, is not however viewed by the applicant as the primary method of remediation for the site but as a consequence of the requirement to undertake land raise to accommodate the flood risk issue. The applicant continues by explaining that the use of a layer of ‘clean’

material will be further protective of human health and is a sound sustainable re-use of materials.

59. Proposed final levels suggest varying increases in height of the site. The most noticeable increase will be at the north west end near The Mill House, where there will be an increase of up to 1 metre. In a small part of the centre of the site there will be a similar increase but elsewhere it will be less. The land will slope up from north to south from 11 metres to 13.5 metres.

Flood Risk

60. As the application site is located within an identified area of flooding due to a common boundary with the Riddy Brook and the River Cam the applicant has submitted a detailed flood risk assessment (Final Report November 2008). The Environment Agency has considered this assessment and finds it acceptable subject to conditions to ensure no material is deposited or stored in the floodplain nor any ground raising within the flood plain, submission and approval of a surface water drainage scheme and provision, implementation and maintenance of the flood relief channel.
61. The site has some history of flooding. In October 2001 flooding occurred within parts of the surface car park in the north of the site, the Old Mill House, the island and adjacent field. The applicant's information advises that this flooding was due to high water levels in the River Cam upstream of the main weir elevating the water level in the Mill Race and increasing the volume of flow into the Riddy Brook. The construction of the main weir in the River Cam has also resulted in the flood storage capacity of the field to the north of the river being under utilised. Furthermore the field to the north east of the River Cam is currently fallow and floods as a result of the high levels in the River Cam but due to the artificial rising of the riverbanks this has restricted access for floodwater into the field from the river.
62. In order to improve the situation the applicant proposes to create a shallow swale in the field to the north of the site to act as a flood relieve channel and hence why the applicant has restricted this north meadow as an area of ecological enhancement with no public access. Any floodwater will enter the field area via an engineered breach in the levee, to be located within the channel of the River Cam upstream of the main weir. This will ensure that in the event of high water levels within the River Cam the excess water will breach the levee to allow the overflow weir to the Riddy Brook, which will be refurbished and raised to suit the engineered breach of levee, to function as normal but limiting the amount of upstream water levels by allowing this excess flow to be stored within the field. The applicant is of the opinion that these proposals will minimise the risk of flooding to the development and in other areas in accordance with Policy NE/11 of the LDF.
63. Under the current situation all ground water and surface water from the site is collected and pumped to the WWTD located on the west side of the A10 where it is treated prior to the discharge into the River Cam. As part of the remediation measures on the clean-up of this site the applicant proposes to retain this method in order to clear any contaminates out of the ground and surface water on the site.

Listed Building

64. The Mill House was previously used by Bayer CropScience as an office building and as such the interior has been significantly altered with partition walls, false ceilings and fire regulation doors although the wooden frames on the windows have been retained. With regards to Hauxton Mill, this has not been used for many years and the

interior retains a number of original features. Unfortunately due to the lack of use the interior is in poor state of repair with many of the floorboards and staircases unsafe for use. The building does however have a large area of floor space and occupies a prominent position at the head of the River Cam, Riddy Brook and the North Channel as well as being clearly visible from the River Cam Road Bridge.

65. The applicant is committed to facilitating and delivering sustainable future uses of the listed Mill and Old Mill House but state that third parties are not willing to enter into agreements on potential uses until certainties regarding the remediation and redevelopment of the main site are resolved. There are planned changes to the site levels and in particular to the levels of the footbridge located close to the Mill House linking the main site with that of the Mill Island. Although full details of the work around the listed buildings have not been provided the applicant is committed to the satisfactory upkeep of the listed buildings on the site and specific contracts have been let for appropriate monitoring and maintenance work to be carried out including cleaning the guttering.
66. The applicant has indicated that it will utilise Mill House as an operational site office for the duration of the remediation works and validation process for a period of up to two and a half years and as such will continue to ensure that this building and those other listed buildings are properly managed and maintained.

Section 106 Agreement

67. A Section 106 Agreement has been the subject of lengthy negotiations for a considerable period of time. It relates primarily to the application for redevelopment. However, there are elements within it material to the remediation application:
 - (a) Flood mitigation plan - annual visual inspection of and, if necessary or required, the repair and maintenance of flood relief channels and weirs. North Meadow shall not be used for any purpose other than flood mitigation.
 - (b) Management Company to undertake management and administration of the Flood Mitigation Plan.
 - (c) Approval by the Local Planning Authority of a River Corridors Ecology Management Plan.
 - (d) Establishment of a Local Liaison/Consultative Committee to monitor progress of the development and to provide a means to consider matters of local concern. The initial aims and objectives of the Committee are set out with a Schedule of the Agreement.
 - (e) The Owner shall secure agreement from Atkins or other consultants with the necessary Specialist in Land Condition (SiLC) qualifications and approved by the Local Planning Authority that it will agree to act as an impartial and independent expert to produce a report confirming their role in monitoring and that the proper remediation of the site consistent with BS10175 (2001) Code of Practice for the Investigation of Potentially Contaminated Sites has been achieved and that the site is suitable for the development. The owner is not to commence development until such a report has been issued.

Section (e) is supported by the Environment Agency, subject to the addition of a reference to PPS23.

Conclusion

68. The case provided by the applicant in support of this application has demonstrated that with the removal of the industrial use and the cleaning of the site the proposal would represent an improvement to this part of Hauxton. Furthermore this improvement works would also allow for further ecological enhancements and flood relief within the area and allow for the opportunity to provide an enhanced appearance to the edge of the Green Belt and the approach to Cambridge.
69. Due to the level and type of contamination on the site this application represents a real opportunity to not only improve the site but also the appearance of the immediate area. This improvement work to the site will therefore allow for the redevelopment of this Brownfield site. However it must be noted that the development could only proceed on the basis that the site is cleaned to a satisfactory level with the removal of unacceptable risks to allow the redevelopment.
70. Following the receipt of very detailed comments from consultees, the applicant has responded very fully including submitting an addendum to the Ecological Assessment, an addendum to the Environment Statement, revised RMS and detailed responses to comments made by The Cam Valley Forum, Mr R Braithwaite and the Environment Agency. Moreover, the Environmental Health Officer has responded in detail to Mr R Braithwaite's comments.
71. I am satisfied that, subject to the imposition of appropriate conditions, the application can be approved.

Recommendation

72. Subject to the prior completion of the S.106 Agreement, Approve subject to the following conditions:
1. The development must be begun not later than the expiration of 3 years beginning with the date of this permission.
(Reason - To prevent the accumulation of planning permissions; to enable the Local Planning Authority to review the suitability of the development in the light of altered circumstances; and to comply with Section 51 Planning and Compulsory Purchase Act 2004.
 2. Remediation approved by this planning permission shall be carried out in accordance with the Remediation Method Statement April 2009 - Revision 6 and the remedial targets contained within the Statement. No changes to the agreed target concentrations shall be accepted without full justification in the form of a Quantitative Risk Assessment being submitted to and agreed in writing by the Local Planning Authority.
(Reason - To prevent the increased risk of pollution of the environment or harm to human health.
 3. No spoil or material shall be deposited or stored in the floodplain, nor any ground raising allowed within the floodplain, until the flood relief channel referred to in Condition 7 has been implemented or unless expressly authorised in writing by the Local Planning Authority.
(Reason - To prevent increased risk of flooding due to impedance of flood flows and reduction of flood storage capacity.)

4. As soon as remediation commences, progress reports shall be submitted to the Local Planning Authority and the Environment Agency at monthly intervals. These should include all monitoring results detailed within the Remediation Method Statement and **weekly** ground water level contour maps. (Reason - To protect the environment and prevent harm to human health by ensuring that the site is being reclaimed to an appropriate standard.)
5. No works shall be undertaken on the Bentonite wall, other than investigative works to establish its condition. Upon the conclusion of such investigations a method statement including an options appraisal shall be submitted in writing to the Local Planning Authority detailing proposals for a long-term solution for the Bentonite wall. Once approved in writing by the Local Planning Authority such works as proposed shall be carried out in strict accordance with the method statement.
(Reason - To prevent the increased risk of pollution of the environment or harm to human health.)
6. No raising of ground levels shall take place until the Flood Relief Channel referred to in condition 7 has been constructed and is fully operational.
(Reason - To ensure no loss of flood storage due to the proposed development.)
7. The physical dimensions of the Flood Relief Channel, Inlet Weir and Outlet control shall be strictly constructed in accordance with drawing nos. 17657/R/CVD/002/B and 17657/R/CVD/003/A and modelling report dated September 2007 (see informative below) unless otherwise agreed in writing by the Local Planning Authority. Any changes in these dimensions will require further modelling in order to ensure no increased flood risk elsewhere and shall be agreed in writing by the Local Planning Authority.
(Reason - In order to ensure the Flood Relief Channel is operational, as designed, during times of flood.)
8. Other than development connected with the remediation works no development shall commence until the completion of the remediation process and approval of the validation report. Upon the completion of the remediation works a validation report shall be submitted to and agreed in writing by the Local Planning Authority that confirms that the required works regarding contamination have been carried out in accordance with the approved Remediation Method Statement. The validation report shall include details of the post remediation surface water drainage, management and maintenance and such provision as agreed shall thereafter be provided to the satisfaction of the Local Planning Authority. Post remediation sampling and monitoring results shall be included in the report to demonstrate that the required remediation has been fully met. Future monitoring and reporting shall also be detailed in the report.
(Reason - To ensure that appropriate steps have been taken in respect of the remediation and acceptable levels have been achieved in the interests of environmental and public safety.)
9. During the implementation of the works, hereby approved, should any unforeseen contamination be encountered during the development, the Local Planning Authority shall be informed immediately. Any further investigation, remedial, or protective works shall be carried out to agreed timescales and approved in writing by the Local Planning Authority.
(Reason - To ensure the presence of contamination is detected and

appropriate remedial action is taken in the interests of environmental and public safety.)

10. Any soil materials brought on to the site shall be subject to appropriate sampling and analysis by a suitably qualified person. Details of the sampling and analysis shall be submitted to the Local Planning Authority for approval in writing within one month of the soils arrival on site and in the Validation Report.
Please note that sampling and analysis certificates submitted by the supplier of the soil material will not be accepted.
(Reason - To ensure that any materials brought on to the site are not contaminated.)
11. Sampling of material imported on to the development site should comprise random sampling for every 90m³ of soil from a single source (see soil definition below). The required sampling frequency may be modified by the Local Planning Authority when the source is known.

Soil Source - the location of which the soil was loaded on to the truck prior to delivery at the site.
(Reason - To check the quality of soils and materials being imported on to the site.)
12. Prior to the commencement of development, excluding demolition, details of an independent accredited laboratory, to be used during the works, shall be submitted to and approved in writing by the Local Planning Authority.
(Reason - To ensure soils and ground water from the site, as well as soils imported on to the site are analysed.)
13. No soils or materials shall be exported from the site other than in accordance with a scheme, which shall include the provision of wheel washing equipment, which has been submitted to and approved in writing by the Local Planning Authority.
(Reason - To protect the amenity of local residents and businesses and in accordance with the proposals in the Method Statement.)
14. The details of an emergency telephone contact number shall be displayed in a publicly accessible location on the site, and shall remain so displayed unless otherwise agreed in writing by the Local Planning Authority.
(Reason - In the interest of local amenity.)
15. No work or other activities involving the use of heavy plant and equipment shall take place on site on Sundays or Bank Holidays, and all work and other activities involving the use of heavy plant and equipment on other days shall be confined to the following hours 8.00 a.m. until 6.00 p.m. Monday-Friday and 8.00 a.m. until 1.00 p.m. Saturdays.
(Reason - To safeguard the amenities of nearby residents during development.)
16. No works shall take place within North Meadow, except for the Flood Relief Channel referred to in condition 7 unless otherwise agreed in writing with the Local Planning Authority.
(Reason - To ensure the floodplain of the River Cam is protected.)

17. Prior to the commencement of flood relief works an Ecological Management Plan for North Meadow shall be submitted to and approved in writing by the Local Planning Authority. The Ecological Management Plan shall include details on:
- (a) Mitigation during site preparation and construction of the flood relief works to ensure minimal impact upon habitats and wildlife, such as timing and methodology of work;
 - (b) Management measures including a work programme to maintain and enhance the value of the site for wildlife once the flood relief works are completed;
 - (c) Sensitive planting plans, including appropriate locally native species that will be of benefit to wildlife, to include details for providing plants of a local provenance, ideally from seed collected from suitable habitats in the surrounding area;
 - (d) A monitoring programme that establishes appropriate baseline information on species, including fish and aquatic invertebrates, in order to ensure that mitigation and enhancement is successful, and to guide future management of the site against agreed objectives for key species and habitats;
 - (e) The appointment of an Ecological Clerk of Works to ensure that all staff working on-site are familiar with appropriate Environmental and Wildlife legislation and are suitably briefed on the site's sensitivities.
- (Reason - In the interests of safeguarding the long term benefits of the local wildlife at the site and in accordance with advice within PPS9 and the Wildlife and Countryside Act 1981.)
18. Prior to the importation of materials, if required, details of the supplier and confirmation on the source(s) of any soil material should be supplied to the Local Planning Authority. The soil should be free from metals, plastic, wood, glass, tarmac, paper and odours associated with contaminated soils as specified in BS 3882: 2007 - Specification for Topsoil and requirements for use. A description of the soil materials should be forwarded to the Local Planning Authority based on BS5930 Code of Practice of Site Investigations. (Reason - To ensure that no contaminated materials are brought onto the site.)
19. The development, hereby permitted, shall be carried out in accordance with the Site Waste Management Plan incorporated within Appendix S of the Remediation Method Statement April 2009 - Revision 6 unless otherwise agreed in writing by the Local Planning Authority. (Reason - To ensure that waste is managed sustainably during the development in accordance with the objectives of Policy DP/6 of the Local Development Framework Development Control Policies adopted July 2007.)

Plus Environment Agency Informatives.

Background Papers: the following background papers were used in the preparation of this report:

- Government Policy Guidance referred to in Para 15.
- Local Development Framework Core Strategy and Development Control Policies adopted 2007; Site Specifics Policies DPD submission draft January 2006.
- Circulars 05/2005 and 11/1995.
- East of England Plan May 2008.
- Planning Application reference S/2307/06/F.

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