DCCE0009/1595/F DCCE/091717/F - CONSTRUCTION OF A FLOOD RELIEF CULVERT FROM THE YAZOR BROOK AT CREDENHILL TO THE RIVER WYE, INCLUDING AN **ADJACENT** OFFTAKE WEIR TO CREDENHILL COMMUNITY CENTRE AND AN ENERGY DISSIPATION CHAMBER AND OUTFALL TO THE RIVER WYE ON LAND AT OLD WEIR FARM. AT LAND BETWEEN THE YAZOR BROOK **ADJACENT** TO CREDENHILL COMMUNITY CENTRE AND THE NORTH BANK OF THE RIVER WYE, SOUTH OF OLD WEIR FARM

For: ESG Herefordshire Ltd Per ESG Herefordshire Ltd, 3 Blackfriars Street, Hereford, HR4 9HS

Date Received: 20 July 2009 Ward: Credenhill Grid Ref: 344483,242270

Expiry Date: 19 November 2009

Local Member: Cllr R I Matthews

# 1. Site Description and Proposal

- 1.1 The site comprises a total of 10 hectares of land extending south from Yazor Brook at the southern edge of Credenhill directly south for a distance of around 1.4 kilometres to the northern bank of the River Wve, south east of Old Weir Farm. More specifically, the development site commences at Yazor Brook immediately north of Credenhill Community Centre and south west of small residential estate known as Waterside. The site then passes along the eastern edge of the Community Centre travelling south westward for a distance of around 190 metres parallel with Station Road, 90 metres east south east of Magna Castra Farm. At this point the site crosses the old Roman Road and then travels south east for a distance of around 560 metres through agricultural land along the western edge of former Stretton Sugwas Quarry to Public footpath KT9. The development site then kicks south westerly for around 250 metres to the A438, around 90 metres west of Old Weir Cottage at the western edge of Swainshill. The site then travels south across the A438 towards the River Wye for a distance of 160 metres across agricultural land and then turns due west down through a wooded dingle. At which point the development then travels south for a distance of around 160 metres to the River Wye.
- 1.2 The site in general including the surrounding land use comprises a mixture of predominantly agricultural pasture and arable land. Levels generally undulate across the development site with there being a general fall from Yazor Brook to the Wye.

The one exception is the section through the Dingle south of the A438 where a steep drop in levels of around 13 metres occurs. Immediately west of Magna Castra Farm is the Scheduled Ancient Monument of Magnis Roman Town and south of the A438 and west of the development site is the grade II listed Old Weir Farmhouse along with the brick dovecote to the south, also grade II listed. Land south down to the River Wye and west of Old Weir Farmhouse incorporating part of the development site is designated as New Weir Unregistered Historic Park and Garden. Parts of the site also fall within safeguarded sand and gravel reserve and the northern and southern ends fall within Flood Zone 3. The River Wye is designated as a Special Area of Conservation and Site of Special Scientific Interest.

- 1.3 Planning permission is sought for the construction of a 2 metre diameter plastic underground culvert to bypass waters directly from Yazor Brook into the River Wye at times of flood. The development known as the Yazor Brook Flood Alleviation Scheme (FAS) hereafter referred to as the FAS development will be operational when flows within the brook exceed a channel depth of around 400 millimetres and a flow rate of 0.5 cubic metres per second. It is estimated the FAS will be in operation twice a year.
- 1.4 In more detail, the proposed development comprises the following elements:

### The Off-take (Entry Weir)

- 1.4.1 Construction of an off-take structure known as the entry weir parallel with Yazor Brook, 20 metres north of the Community Centre along the northern edge of the car park. This entails constructing a concrete re-enforced chamber 21.85 metres in length faced with stone rising to a height of 3 metres at its highest point. Within the stone face are 8 grills known as trash screens through which the flood water would pass to then enter into the culvert. The brook will also be narrowed down stream of the entry weir through the construction of two angled stone faced walls known as a flume control with ground levels raised around this structure to marry in. Flows within the culvert can be controlled through a motorised barrier known as a Penstock.
- 1.4.2 To enable construction of this structure Yazor Brook will be temporarily diverted. A small fenced maintenance compound will be created around the access to the Penstock for future maintenance and operation purposes. Land immediately north and south of the entry weir will also be landscaped to include the creation of a fish refuge area.

#### The Long Section

- 1.4.3 The 2 metre culvert would then run from the entry weir down to the A438. Due to undulating levels, the culvert will vary in depth below ground between 1 metre and 3.5 metres. An existing portacabin alongside the Community Centre will need to be removed to facilitate the construction of a culvert and Public Right of Way KT9 will be temporarily closed and diverted to enable the culvert to cross under the footpath. The first of three potential construction compounds is proposed within the agricultural field immediately south of the Community Centre. The compounds would largely comprise a gravelled area enclosed within Heras fencing containing general offices and mess rooms for workers along with storage of equipment and building materials.
- 1.4.4 A further site compound area is proposed immediately north of the A438 and east of Old Weir Farm. The means of construction under the road is yet to be finalised but it is likely that traffic lights will be installed to enable the carriage

- way to be reduced to single lane. A separate otter underpass is also proposed again under the A438 alongside the culvert.
- 1.4.5 The next section of culverts runs from the A438 to the wooded dingle. Immediately east of the dingle and west of the culvert the third compound is proposed. From this point travelling northwards towards Credenhill for the full length of the culvert a temporary haul road is also proposed of around 3.5 metres in width.

#### River Wye Outfall

- 1.4.6 At the top of the dingle the culvert design changes to a rectangular chamber with internal dimensions of 3.9 metres in width by 2 metres in height known as a spillway. At the bottom of the dingle at the end of the spillway an energy dissipation chamber is proposed. This comprises of underground reinforced concrete chamber measuring 3.9 metres in width by 4.9 metres in height which effectively neutralises the flow of the water.
- 1.4.7 Following a further section of culvert for a distance of 38 metres the final outfall to the River Wye is then overland. The existing land will be re-graded to create a ridge and furrow system which will effectively channel water to a specific part of the river embankment. The embankment is then to be strengthened with new planting supported by a mattress of live willow brush. The exit point of the culvert will have a security screen surrounding by a stone faced wall with surrounding land re-graded to match.

### The Background

- The FAS has been developed in order to alleviate flooding within the area north of Hereford City Centre known as the Edgar Street Grid (ESG). The ESG comprises 43 hectares of land allocated within the Unitary development Plan for mixed use redevelopment. The northern section of the ESG area currently falls within a flood plain and the principal cause of flooding is caused by flows from Yazor Brook (leading into Widemarsh Brook).
- In order to alleviate this flood risk a package of flood mitigation is required both within ESG and off site. Following a number of technical feasibility studies exploring possible flood mitigation in early 2007 six options were identified which singularly or together had potential to reduce flood risk to an acceptable level. Following further evaluation of the six options the current Yazor Brook Flood Alleviation Scheme was pursued.
- 1.7 The application is supported by a full Environmental Statement under the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended). The Environmental Statement considers archaeology, terrestrial and aquatic ecology, surface water quality, hydrology, ground conditions and contamination, landscape and visual impact, air quality, noise and vibration, traffic and transport and waste. Also accompanying the application is a separate Flood Risk Assessment along with a Planning Statement incorporating a Statement of Community Involvement and Design and Access Statement
- 1.8 The development site area has been slightly enlarged in parts in order to accommodate all areas of work with the application site area defined by the red line. It should, however, be noted that the construction compounds are permitted development under Part 4 of the Town and Country Planning (General Permitted Development) Order 1995. As a result, a focussed re-consultation exercise has

being carried. At the time of writing, the time period for the re-consultation exercise has yet to expire

#### 2. Policies

### 2.1 National Guidance:

PPS1 - Delivering Sustainable Development
PPS7 - Sustainable Development in Rural Areas
PPS9 - Biodiversity and Geological Conservation
PPG15 - Planning and the Historic Environment

PPG16 - Archaeology and Planning

PPG24 - Planning and noise

PPG25 - Development and Flood Risk

# 2.2 Supplementary Planning Documents

**Biodiversity** 

Landscape Character Assessment Statement of Community Involvement

# 2.3 Herefordshire Unitary Development Plan 2007:

S1 - Sustainable development
 S2 - Development requirements
 S7 - Natural and historic heritage

S10 - Waste

S11 - Community facilities and services

DR1 - Design

DR2 - Land use and activity

DR3 - Movement
DR4 - Environment
DR6 - Water resources

DR7 - Flood risk
DR8 - Culverting
DR9 - Air quality

DR10 - Containinated land

DR11 - Soil quality

DR13 - Noise

TCR21 - Canal basin and historic core

T6 - Walking

LA2 - Landscape character and areas least reslient to change

LA4 - Protection of Historic Parks and Gardens
LA5 - Protection of trees, woodlands and hedgerows

LA6 - Landscaping schemes

NC1 - Biodiversity and development
 NC2 - Sites of International Importance
 NC3 - Sites of National Importance
 NC4 - Sites of Local Imporatnce

NC5 - European and nationally protected species

NC6 - Biodiversity action plan priority habitats and species

NC7 - Compensation for loss of biodiversity

NC8 - Habitat creation, restoration and enhancement

HBA4 - Setting of listed buildings

ARCH1 - Archaeological assessments and field evaluations

ARCH3 - Scheduled Ancient Monuments
ARCH6 - Recording of archaeological remains
W11 - Development and waste implications

# 3. Planning History

### 3.1 None relevant

# 4. Consultation Summary

# **Statutory Consultations**

# 4.1 Environment Agency:

It is noted that other options have now been discounted and the proposed scheme aims to deliver not only a flood risk solution for the ESG site but also offers flood risk protection benefits for the wider community of Hereford. It should be noted that the proposals do not completely alleviate flooding in the ESG area but we understand that further flood risk mitigation will be put forward to address residual flood risk.

The site predominantly lies within Flood Zone 1 and the parts that fall within flood zone 3 are water compatible. The hydraulic model to support this FAS option also represents the best available information. With regard to the proposed benefits, the impacts of climate change need to be fully considered.

Another important aspect of the scheme is the operation and maintenance of the development and discussions are ongoing with the Environment Agency. Potential developer contributions could also be sought through a Section 106 towards the cost to the relevant adopting and/or management company.

In terms of biodiversity and fisheries the final design of the screening to prevent fish access is required, a screen with a 10mm mesh would be appropriate. With this exception we have no objection to this part of the proposal subject to the mitigation being implemented and the necessary protected species licences obtained.

There may be opportunity for further enhancement on land between the final outfall and the River Wye in the form of a wetland area or swails to mitigate the inability to produce any open sections of channel and design.

I note that the route of the culvert is unlikely to encounter any historical contamination but appropriate conditions should be imposed

All waste should be disposed of in accordance with relevant waste management legislation with the waste strategy generally being to minimise waste and options for re-use and recycling utilised. Any stock pile waste should be located away from adjacent watercourses and the flood plain and an environmental permit or exemption may be required for any imported waste such as hardstanding.

In summary, we are generally supportive of the proposals but require clarification on some of the submitted detail. The additional information has been submitted to the Environment Agency and their further comments are awaited.

### 4.2 Natural England:

It is our view that either alone or in combination with other projects, the development would not be likely to have a significant effect on the important features of the River Wye Special Area of Conservation or any of the features of the Site of Special Scientific Interest. We therefore have no objection with regard to the Habitat Regulations Assessment.

In terms of protected species and wider ecology the surveys undertaken and the conclusions reached seem thorough and appropriate subject to biodiversity interest and the mitigation enhancement recommendations being secured through appropriately worded conditions. This includes protection as well as enhancement for otters, great crested newts, common lizards, grass snakes, slow worms and badgers which have all been found on or near the development site.

All vegetation must also be cleared outside the bird nesting season of March to September and any trees or hedges to be removed should be replaced on a like for like basis or where non native, by appropriate native species. We welcome the proposed fish refuge area.

The prevention of pollution of the River Wye and Yazor Brook is a fundamental given their conservation value and all works should be carried out in accordance with the Environment Agency's pollution prevention guidelines.

Further biodiversity enhancement as required by Planning Policy Statement 9 could be achieved through the installation of bat boxes, better management of hedgerows and a more naturalised outfall making use of open channel swails or wetland creation. Due to the complexity of the biodiversity issues, we recommend that the mitigation and enhancement is delivered through a nature conservation plan to include details of trash screens, timing of work, delivery and ongoing management of biodiversity.

In summary, Natural England has no objection to the development including the revised site area.

#### 4.3 Advantage West Midlands:

The agency fully supports the proposed Flood Alleviation Scheme. As part of the Edgar Street Grid redevelopment, the agency is making major investment into this area in partnership with Herefordshire Council. The FAS will significantly reduce flooding impact around the ESG and will have wider benefits in and around Hereford by alleviating the risk of flooding to infrastructure, residential and commercial properties.

# 4.4 Hereford and Worcester Garden Trust:

The Trust believes the application will damage the historic landscape at Old Weir Farm. The landscape between Old Weir and Old Weir Farm was originally laid out as parkland and formed part of a managed landscape. The creation of an intrusive outfall structure made in modern materials in the meadows below Old Weir is completely out of place in this important landscape.

The National Trust recently commissioned a historical study of the area to underpin a long term strategy of expanding public access. The wooded dingle provides an interesting and picturesque route down to the meadows and the proposal will

permanently damage the bottom end of the dingle and frustrate any future use as a pedestrian route. We urge ESG to return to the drawing board and provide a different less intrusive solution to the flooding.

#### 4.5 The Ramblers Association:

All works on the crossing point of the Public Rights of Way should be kept to a minimum possible so as the thoroughfare can be reopened at the earliest opportunity. The ground must be reinstated so there is no step change in levels in the vicinity of the Public Right of Way.

#### 4.6 Herefordshire Nature Trust:

No comments received.

# 4.7 Open Spaces Society:

No comments received.

# Internal Council Advice

### 4.8 Traffic Manager:

No objection subject to a condition requiring details to be submitted of the proposed crossing of the A438 and access to the construction compounds.

# 4.9 Public Rights of Way Manager:

The proposed development would not appear to affect the use and enjoyment of Public Footpath KT9 which passes over the culvert and therefore the Public Rights of Way Manager has no objections.

#### 4.10 Conservation Manager – Historic Buildings

The proposals will have minimal impact on the built environment and we do not believe that this would be detrimental to the setting of the nearby listed buildings. The landscape around the listed buildings has changed over time and will continue to change. For example, structures such as the large agricultural buildings within the farm complex would appear to have more of an impact on the setting of the buildings than the outfall. The only requirement is to ensure that an appropriate stone and mortar mix is used for the new walls.

### 4.11 Minerals and Waste Officer:

The proposals identify the need for a haul road with passing places but limited information on this is available. Consideration is needed of the haul road at this stage including its construction width, type, depth and quantity of the imported construction materials and the impact of its construction on any existing trees and vegetation along with a full method statement for subsequent removal.

The site lies within an area of up to 2 kilometres either side of the proposed development identified as minerals reserve safeguarded for sand and gravel. The Environmental Statement does not consider whether any useable sand and gravel might be encountered by the excavations nor does it consider possible sterilisation of the minerals resource as required by Policy M5 of the UDP.

It should also be noted that historic excavations within Stretton Sugwas Quarry have taken place within and around 200 metres of the proposed development site. The

Environmental Statement does not consider whether any changes in Yazor Brook would affect water levels within the restored quarry.

The submitted materials management strategy identifies approximately 13,087 cubic metres of waste soil will need to disposed of off site during a nine month period. This figure may be an under estimation and it does not appear to take into account the bulking up that occurs when soil is excavated. This represents about 1500 20 ton HGV movements which is significant (750 each way). Although not significant in regional waste terms, none of the licensed landfills sites within the county are currently operational or able to receive further spoil. Planning permission will also be needed for any scheme that utilise the soil where this be for landfill or for environmental improvement. Further consideration should be given to this matter.

There is also no scope for disposal at existing quarries as a result of any restoration proposal and quarry permissions generally precludes such importation. Other areas of concerns related to the principle of a culvert as opposed to an open channel and concerns over future maintenance and management responsibilities.

The requested additional information has been provided and further comments are awaited.

# 4.12 Conservation Manager – Archaeology:

There are significant archaeological issues to consider in relation to this proposal. The northern part of the proposed culvert route passes directly through the eastern outskirts of the former Roman town of Magnis and crosses through the line of the principle Roman Road leading eastwards from this ancient town site. At the southern end of the route there are potential concerns relating to the former Roman crossing point (of the River Wye) close to this location. Further remains of Roman dates, and indeed from other periods, are likely on route.

The Archaeological Evaluation Report describes the initial archaeological findings in detail. It is clear that although the northern part of the route passes some distance from the east side of the Scheduled Ancient Monument, there is good preservation of important Roman remains in the areas that will be affected. However, given the very extensive background area over which the Roman activity is evident, and the comparatively small scale of the culvert against this background, the damage the culvert will do will be localised and in my view be capable of appropriate archaeological mitigation.

Accordingly I have no objection subject a condition requiring further archaeological excavations prior to any other site works. Potential will also need to be drawn to the site compounds which will need to be minimally ground evasive in both design and execution.

# 4.13 Conservation Manager – Ecology:

I note the presence of many protected species including kingfishers, bats, otters, great crested newts, reptiles and badgers. The Ecological Impact Assessment identifies mitigation for the species present as well as opportunities for enhancement. The mitigating and enhancement recommended for otters, newts, reptiles and bats in particular is welcomed.

Yazor Brook has been identified as having high ecological value and supporting a number of species. Works conducted in this area should therefore follow the Environment Agency's Pollution Prevention Guidelines. Licences will also be

required for progressing works affecting protected species or their habitats. In terms of bats, enhancement in the form of bat boxes will also be welcomed. A potential conflict may occur between clearing vegetation outside of the bird nesting season and disturbing hibernating reptiles such as great crested newts is recognised and the ecological recommendations followed. The proposed new planting shall be native species and trees and hedgerows that have been removed shall be replaced with native species of local provenance.

The inclusion of a fish refuge area is welcomed but the detailed design and future management should be clarified along with details of the trash screen. All works including enhancement should be included within a full working method statement. and an appropriate qualified ecological clerk of works is appointed to oversee the ecological mitigation.

### 4.14 Environmental Protection Manager:

There are no likely operational impacts associated with the proposal and any proposed mitigation measures should only be considered in respect of the construction phase.

I have no objection but it is recommended that a condition requiring an environmental management plan addressing issues with regards to dust and noise be required by condition along with restrictions on working hours.

With respect to contamination, there appears to be no significant contamination issues. However, clarification is required to the figures in the conception model.

### 4.15 Conservation Manager – Landscape:

The landscape and visual impact assessment contained in the accompanying 'Environmental Statement' is a fair and balanced study, which follows current accepted guidance. I can confirm that the application has correctly identified the general character of the landscape and has referred to the Council's Landscape Character Assessment, and other useful sources of information. I would generally concur with the findings of the study; that initially there will be a slight to moderate adverse impact on the quality and character of the landscape during and immediately after construction, but that this will become negligible within a short period after. Following careful assessment of the landscape and the route of the proposed development I would conclude that visual impact on the landscape will also be minimal.

The assessment fails to acknowledge the value and significance of the adjacent designed landscape at 'The Weir' and the associations with other nationally and internationally important cultural landscapes in the near vicinity; notably Garnons and Foxley, both particularly influential in the establishment of the 'Picturesque' landscape movement of the late eighteenth century. However, I would conclude that the potential impact of the proposed development would not result in any significant harm to either the visual quality of the designed cultural landscapes in the vicinity or our understanding of them.

Recycled fencing materials or the prior approval of the type and colour of proposed new materials should be used in order to minimise the visual impact of these features where no fencing currently exists. The proposed re-profiling of the flood plain meadow at the outfall of the proposed development, will have a minimal or negligible impact on the landscape, the need to stabilise the re-profiled floodplain needs

consideration. All landscaping and mitigation proposals should be implemented within the first planting season post development.

### 5. Representations

5.1 The proposed route of the development crosses three parish council areas and is adjacent to a fourth. The comments are set out below:

### Credenhill Parish Council:

The Parish Council agree in principle to the proposed application and the parish will liaise with the ESG to discuss minor changes to the proposals.

Kenchester Parish Council:

No objection.

Stretton Sugwas Parish Council:

The Parish Council is strongly opposed to the over engineered aspects of this project. We believe it is important to adopt a more natural greener softly engineered approach with significantly lower carbon footprint in the construction process. For example, the dingle was formed as a natural overflow channel in use until recent years, and should be reused.

We are not opposed to the principle behind the overflow scheme and believe it to be worthwhile. However, due to the considerable amount of money that has been spent on the Environmental Assessment it would be reckless to adopt some of the excesses of the construction at the outfall and elsewhere.

Neighbouring Parish – Eaton Bishop Parish Council:

The Parish Council supports the Yazor Brook Flood Alleviation Scheme proposal.

One letter of objection has been received from Chris Lambert, Land Use Planning Advisor for the National Trust along with a further e-mail asking questions about the scheme from Stone Cottage, Swainshill. The main points raised are:

The Trust objects to the impacts on the fabric and setting of heritage assets in its care and the details proposed fail to do enough to prevent, reduce and offset environmental effects.

#### Background

The Trust was founded in 1895 and has a unique power of being able to declare its property inalienable which it means it cannot be sold or mortgaged. The Trust therefore has a charitable and moral responsibility to maintain its property for present and past supporters. The Trust duties also include providing and enhancing public access to and appreciation of its property.

The Trust has vigorously challenged that the proposed scheme is the least environmentally damaging or the only achievable solution to the flooding problems and remains unconvinced that the option proposed is the only solution. The Trust would prefer an alternative solution to the flood alleviation scheme proposed. If the principle is accepted further information and detail is required.

#### Landscape

The Weir is Grade II Listed Country House and the gardens are open to the public attracting 15,000 visitors annually. There is a planning programme to extend public access to the wider Weir Estate. Although the estate is not included in English Heritage's register of Historic Parks and Gardens, a landscaped park exists between The Weir and the Old Weir and the whole area between the road and the river should be regarded as a designed landscape. An estate plan has been produced and a phased restoration has begun which will eventually involve the whole estate. We consider the views from along the River Wye and the Roman Road and through the historic park should also be considered in the Visual Impact Assessment and assessed as high sensitivity receptors.

We also consider the design and location of the outfall structure including the ridge and furrow system will be an obvious engineering and artificial intrusion into the setting of the listed building and the designed landscape. Suitable planting along the outfall structure would be beneficial along with the opportunity to secure ecological gain through improved design should be explored.

We consider the application should not be approved until detailed consideration has been given to the impact on the designed landscape as a whole and this impact has either been prevented or reduced to a minimum with any residual impact offset.

# **Archaeology**

The Weir Estate has considerable archaeological interest particularly from the Roman period. The Trust's archaeologist suggests moving the energy dissipation chamber further south or south east to mitigate archaeological and landscape impact. The archaeological implications of the proposed ridge and furrow system and site compounds have also not been evaluated and needs to be assessed.

Further details are required of the compound in terms of height and materials stored, height and noise, ground compaction and contamination and disruption to existing farming operations in order that the impact can be fully considered.

#### Listed Buildings

The landscape impact identifies moderate adverse impact on the views from Old Weir Farm and therefore this aspect of the setting would be harmed. Other elements such as views to the buildings has not been considered. The application should not be approved until consideration of the impacts on the listed building has been given and that these impacts have been prevented, reduced to a minimum and offset.

#### Contamination

The Environment Statement makes no account of sediment load that may be deposited when the FAS is operational which could include contaminants from agricultural and other operations that would be deposited on the land between the outfall structure and the Wye. Detailed analysis of the base line sediment conditions in this area are required along with arrangements for future monitoring and remedial action as sediments build up and if any contamination arises. This should be established prior to any consent being given.

#### Other Matters

There are no details regarding risk of failure of the development including the risk of blockage or risk of sediment build up of at the outfall. This needs to be quantified and method of remediation along with details of access arrangements for general maintenance agreed.

5.3 The full text of these letters can be inspected at Planning Services, Garrick House, Widemarsh Street, Hereford and prior to the Committee meeting.

### 6. Officer's Appraisal

- 6.1 Due to the scale of the site area and to assist in the assessment of the development and potential impacts the proposal will be considered in three sections as set out below. The other matters relating to the scheme as a whole will then be assessed.
  - 1) Method of Assessment
  - 2) Other Options Considered
  - 3) The proposed off-take works in and around Yazor Brook known hereafter as *The Off-Take*.
  - 4) The section of culvert from agricultural land immediately south west of the Community Building to the top of the spill way at the wooded dingle hereafter referred to as *The Long Section*.
  - 5) The spillway energy dissipation chamber and final outfall to the River Wye hereafter referred to as *The Outfall*.
  - 6) Flood Alleviation
  - 7) Flood Risk and Other Potential Risks
  - 8) Construction Infrastructure
  - 9) Waste Management
  - 10) Future Operation and Maintenance
  - 11) Conclusion

### Method of Assessment

6.2 It is proposed to use the general methodology within the Environmental Statement to asses the planning merits of the development. This considers the current position and assesses the likely significant environmental impacts of the development against the baselines conditions. Significance is assessed through considering the strength of change, duration/frequency of change and the sensitivity of the receptor/resource to change. A conclusion is then drawn on the impact and categorised in terms of neutral or negligible, minor, moderate or major. The categorisation of effects can also be positive and negative i.e. minor, moderate or major adverse or minor, moderate or major beneficial effect. The significance of impact from here on in will therefore refer to this method of assessment.

### Other Options Considered

As required by the Environmental Impact Assessment Regulations, the applicants have identified the other options considered. A feasibility study identified and tested six possible options to achieve flood mitigation. These are:

Option A: Upstream off- take into the River Wye, diversion of flood flows from Yazor Brook into the River Wye, flood flows transferred south across agricultural land discharging into the River Wye.

Option B: Off-take into Sugwas Quarry, diversion of flood flows from Yazor Brook into Sugwas Quarry for flood storage.

Option C: Construction of a new flood storage pond at the livestock market.

Option D: Adaptive approach, deliver strategic flood mitigation in a staged approach to adapt to better catchment understanding and improved data collection this will require long term commitment and agreement from the Environment Agency and Herefordshire Council.

Option E: Off-take into the canal, diversion of Widemarsh Brook upstream of the flood alleviation scheme development site into the yet to be restored Herefordshire & Gloucestershire Canal.

Option F: Credenhill flood storage, provision of flood storage in addition to the existing natural flood plain storage up stream of Credenhill with the creation of two flood storage reservoirs.

- 6.4 The feasibility study assessed the economic, environmental, technical, and risk issues and impacts of each option. In addition, other options were considered and discounted at an early stage such as on site flood mitigation within ESG as it became clear that they would not achieve the necessary strategic flood mitigation. However, secondary flood mitigation in addition to this application proposal will be implemented including on site flood works.
- The options appraisal examines each option in some detail and it is accepted that based on the evaluation criteria, that the proposed option will achieve the best opportunity for a strategic flood mitigation and protection, has moderate environmental impact, generates wider economic benefits at a moderate cost with a low to moderate overall risk. Consequently it is also the most deliverable option in achieving a sustainable level of strategic flood mitigation.
- 6.6 Following identification of the preferred option a number of route alignment and design options were then explored to arrive at the current proposal including consideration of an open channel. However, due to the existing topography and depths that need to be achieved due to the crest height of the offtake, the scale of the channel would be significant due to the necessary shallow sides that would be required in order to create a natural appearance. This option was therefore dismissed.

### The Off-Take

- 6.7 This is effectively the means by which water is channelled from Yazor Brook into the culvert at times of flood and is described in detail at paragraphs 1.4.1 to 1.4.7. In summary, this comprises of a stone faced concrete reinforced chamber constructed on the south western bank of the brook known as the entry weir. Within the stone face of the weir will be a series of eight grills set at 400mm above existing bed level (known as the free board level) through which water would pass into the culvert. The brook will also be narrowed slightly down stream through the construction of a flume control structure to assist in channelling water directly into the weir and culvert.
- The only visible components of this part of the scheme will be the new stone faced wall running from the flume control structure to the existing culvert on Station Road. While this will introduce a hard engineered face to the brook, subject to the use of appropriate stone to match the nearby bridge, it is not considered that this will have a harmful impact on the visual or landscape quality of the area particularly given the

semi urban context of this area. Some of the existing vegetation will need to be cleared to facilitate the construction of this structure along with a small number of trees along the southern boundary with the adjoining agricultural field. This will be mitigated with new planting along with the regarding of some of the existing levels around the flume control and maintenance compound area to assist in assimilating this part of the development into the landscape context of the site.

- 6.9 To facilitate the construction of the culvert Yazor Brook has to be temporarily diverted through the construction of a new channel with raised embankments either side on land to the north but these works will only be temporary for the duration of construction. The landscape and visual impact of this section is therefore considered moderate in the short term but minor or negligible in the medium to long term.
- 6.10 There is potential for significant archaeological remains in the area but these are likely to be concentrated more on the land immediately south of the Community Centre where less ground disturbance has occurred. This impact is therefore considered relatively low.
- 6.11 In biodiversity terms, there will inevitably be a direct impact on any existing ecology in and around the off-take construction area which includes foraging bats, aquatic invertebrates and otters nearby. However, this potentially moderate adverse impact will be temporary and it is proposed to mitigate as well as enhance any impact through biodiversity features within this area. In particular a fish refuge area is to be created on the existing paddock north of the brook. This will be connected to the main brook through an open channel and will be graded in order to ensure permanent water volume to avoid fish becoming stranded at low water levels. In addition, part of this area will be relatively wet all year round further enhancing the ecological value of this area. The Environment Agency requested further information regarding some of the design features of this part of the scheme such as the size of the grill on the trash screen to prevent fish from entering the culvert and their further comments are awaited. The impact on biodiversity will be moderately harmful in the short term and impact in the longer term will be negligible with potential for a low beneficial impact.
- Due to the close proximity of existing properties immediately to the north, there will inevitably some disruption arising from noise, dust and vibration during the construction. A portacabin will also be removed alongside the community centre and a replacement may be subject of a separate application. There will also be some disturbance and disruption caused to the children's nursery immediately east of the off-take. Subject to a robust environmental management plan including restriction on working hours and appropriate hoardings and security fencing, any harmful impact on the amenity can be minimised and will ultimately only be for a temporary period estimated at 9 months. Yazor Brook has been analysed as having good water quality. The environmental management plan will also need to address potential contamination of the water course as a result of the construction operations but again, subject to best practice being followed, it is not considered this issue will generate any harmful effects.
- 6.13 Some construction traffic will enter this site via the existing access to the Community Centre along with a secondary temporary access in the northern extremity of the site to facilitate construction on the northern side of the brook. However, the main construction access and construction traffic route will be directly off the A438 running along the length of the culvert up to the off-take area.

6.14 The general and technical design of this feature is supported by the Environment Agency and both Natural England and the Council's Conservation Team raise no objection to the potential other impacts. This is considered to be the simplest means of bypassing flood waters with the least environmental impacts

# The Long Section

- 6.15 This section runs from the southern edge of the Community Centre land across cultivated agricultural land in a southerly direction including crossing Public Footpath KT9 and under the A438 to the top of the wooded dingle near the River Wye. All of this section will comprise a two metre underground plastic culvert at a depth varying between one and three metres below ground. The proposed route of the culvert along this section has been aligned to avoid any significant hedgerow or tree removal. Sections of hedgerow will inevitably have to be removed where field boundaries are crossed and at the crossing of the Public Footpath and A438 but all hedgerows are to be reinstated upon completion of the works. Furthermore, the working areas are to be reduced in the vicinity of the existing hedgerows to minimise the amount of removal. As such, whilst there will be a relatively major visual impact during construction, the impact will not be discernible once works are complete and new planting establishes.
- 6.16 The northern end of the long section is perhaps the most sensitive area archaeologically as it lies immediately east of Magna Castra Scheduled Ancient Monument and during the preliminary archaeological investigations significant Roman archaeology was discovered. This is not unsurprising given the location of the Roman town of Magnis to the west. The archaeology in this area is considered to be significant and of high quality ranging from six phases between the 2<sup>nd</sup> and 4<sup>th</sup> Century. Extensive archaeological evaluation is however proposed within this area including excavation and recording of all archaeological remains by hand and assessment, analysis, reporting and publication of the results.
- 6.17 The Councils archaeologist confirms that given the extensive background area over which the Roman activity is evident and the comparatively small scale of the culvert against this background, the potential damage the excavation of the culvert will cause will be localised and capable of archaeological mitigation. Furthermore, the excavation and recording of the archaeological resources can be beneficial and justifiable where this produces of a well analysed sequence of findings and a material arising from the work is placed in a public repository and published.
- 6.18 Whilst there will be a moderate adverse impact on the existing archaeology in the area, the Council's Archaeologist is satisfied that this impact is mitigated through the proposed evaluation and recording works. Elsewhere along this section the archaeological interest is in general considered to be low although some Roman pottery was discovered on the sections immediately north and south of the A438. As with the more sensitive areas to the north, subject to appropriate evaluation and recording secured by condition it is not considered the archaeological interest of this section will be unacceptably harmed.
- 6.19 The biodiversity interest along this section amounts to predominantly reptiles including common lizard, slow worm, grass snakes and great crested newts along with use of the area for foraging bats and some badger activity towards the southern end near the wooded dingle. The general impact on the biodiversity within this section will be a minor adverse impact during construction with a more moderate

impact on reptiles and badgers particularly due to the creation of a temporary barrier across the potential habitat. However, post construction the impact is considered to be neutral as any vegetation, grassland or habitat that is removed is to be reinstated on a like for like basis with opportunities for enhancement. In particular, an otter underpass is to be constructed under the A438 to facilitate the safe movement of otters from their base at the River Wye to the south. Across the development site the timing of the works will be critical to avoid any disturbance to both nesting birds and hibernating reptiles in particular. This can all be secured through appropriate conditions requiring a full biodiversity working method statement to be submitted.

- 6.20 Works here will require the temporary diversion of Public Footpath KT9. The Public Rights of Way Manager raises no objection to this subject to an appropriate diversion order being sought and agreed. The main construction accesses will also be achieved within this section directly off the A438 to the north and south. This will entail the construction of temporary accesses and the signalisation of this section of the A438 to control traffic. The Traffic Manager raises no objection to this subject to the final design of the culvert under the highway being submitted for approval.
- 6.21 There will be increased disturbance for residents to the east particularly those within close proximity to the principal construction accesses but as with other areas, subject to considerate construction the impacts can be minimised and will be of a temporary nature. The amenity impact will therefore be adversely moderate during construction only. There is no significant ground condition or contamination issues within this section of the route. This section, with the exception of archaeology, has the least environmental impact and in terms of design and general impact has the full support of the statutory consultees.

### The Outfall

- This comprises the final section running from the top of the wooded dingle south of the A438 down to the River Wye flood plain with the final discharge to the Wye. At the top of the dingle before the steep drop in levels the culvert design changes to a concrete rectangular chamber (spillway) 4 metres in width descending approximately 13 metres at a gradient of 1 in 5. At the bottom of the spill way the water flows will then enter an energy dissipation chamber which is a reinforced concrete structure that effectively defuses the speed of flows generated by the rapid dissent through the dingle. This is required to minimise the risk of scour and erosion of the flood plain and Wye embankment. From the energy dissipation chamber water then flows through another short section of culvert before final natural outfall across agricultural land with the water dispersed over a wider area through the creation of gentle ridge and furrow undulations within the flood plain.
- 6.23 This spill way, energy dissipation chamber and the final section of culvert will all be under ground although existing ground levels are proposed to be modified to achieve this around the energy dissipation chamber. The increase in levels, however, only amounts to around a metre at most. The only visible element when viewed from a southerly direction will be the face of the culvert which is to be stone clad. The proposed ridge and furrow final outfall design only necessitates changes in levels of around 300mm which will be no more discernible within the wider landscape than a ploughed field and visually, will have negligible impact.
- 6.24 The works in this area also require the localised vegetation and tree removal although it should be emphasised in the context of the scheme as a whole the

removal is minimal. The location of the spill way is such that all existing trees can be retained and protected with the exception of the lower part of the dingle where around 5 small and semi-mature trees will be removed. This will result in a moderate adverse impact during the construction and for the first year or two post completion but the landscape and visual impact for the design year (15 years ahead) will be negligible. This is largely due to the proposal for compensatory planting to mitigate the loss of the trees and vegetation removal including new planting along the River Wye embankment. The overall landscape and visual impact of this section is therefore considered moderate harmful during construction and minor to negligible at the design year.

- In making the above judgement, consideration has been given to the comments of the National Trust and the potential impact on the designed landscape associated with Old Weir and Old Weir Farm. This landscape is an important heritage asset reflected by its designation as an Unregistered Historic Park and Garden. Whilst the landscape and visual assessment fails to recognise the importance of this designed landscape, the assessment of visual impact is in accordance with current guidance and the use of Old Weir Farm as the principle visual receptor is appropriate. The landscape officer considers that the visual impact of the proposed development in this regard would be negligible and that it would not impair the public's appreciation or understanding of this landscape. Natural England also raise no objection. Therefore, notwithstanding the Trust's future plans to increase public access, it is not considered further landscape or visual assessment is required.
- 6.26 The Dingle in particular has potential areas of archaeological interest but as with other parts the development, the Council's archaeologist is satisfied that this impact can be satisfactorily mitigated with appropriate conditions requiring controlled excavation, analysis and recording. The archaeological impact of the final ridge and furrow system will be negligible as the geophysics indicate that this area has been affected by normal agricultural practices and covered by more recent alluvial deposits and therefore, there is limited risk of any archaeological remains of note being close to the surface in this area.
- 6.27 The National Trust have suggested that the relocation of the energy dissipation chamber further south would reduce its archaeological and landscape impact. As discussed above, the landscape impact would amount to no more than a small scale remoulding of the landscape to effectively cover the dissipation chamber. In terms of archaeology, the Council's Archaeologist has reviewed this option and concluded that any archaeological interest at the currently proposed location is not sufficient to necessitate the relocation of the energy chamber and any archaeological interest that may exist can be satisfactorily mitigated by condition. It is therefore not recommended that this structure be relocated.
- 6.28 With regard to the impact on the setting of Old Weir Farm which is grade II listed, this is around 170 metres away and in an elevation position. Whilst the development will be visible from the listed building, the scale and extent of works is considered to have negligible impact on the setting on the listed building. This view is supported by the Council's Historic Buildings Officer who further comments that setting has already been compromised by more modern agricultural buildings.
- 6.29 The biodiversity interest in this area is significant partly due to its location adjacent to the River Wye which is designated as both a Special Area of Conservation and Site of Special Scientific Interest. The ecological surveys have revealed a presence of various reptiles including common lizard, slow worm and grass snake, aquatic

invertebrate including rare beetles and dragonfly, otters, a badger sett, kingfishers and a habitat for bats to forage.

- 6.30 In terms of the River Wye, an Appropriate Assessment under the Habitat Regulations has been submitted and both Natural England and the Council's Ecologist are satisfied that there will be no adverse impacts on the River Wye and the species that make up its designations. To further reduce the risk of bank erosion new planting will be proposed along the northern bank of the River Wye to include natural willow matting which will create new biodiversity opportunities. The ridge and furrow system will be stabilised with a biodegradable geotextile vegetated mattress.
- 6.31 Biodiversity enhancement works include the removal of Himalayan Balsam from the river bank which is a relatively vigorously growing non native species, construction of a new otter holt along with the provision of bat boxes within the trees in the area. These measures will assist in mitigating any direct or indirect impacts of the development during construction and provide new opportunities for enhancing the ecological value of this area post construction. The development during construction will have a moderate adverse impact on the identified protected species and their habitat during construction but this will effectively be negligible once in operation as the biodiversity mitigation and enhancement opportunities are adopted.
- 6.32 The construction of this part will be more complex due to the structures proposed, the surrounding topography and proximity to the River Wye. As with Yazor Brook, the River Wye have been assessed as having good water quality and it is therefore sensitive to pollution. The Appropriate Assessment evaluates potential risk of pollution alongside the Environmental Statement. Both documents do not identify any significant risk of pollution or contamination as a result of construction operations or the scheme once in operation. This is subject to the use of good environmental practice during the construction including storage of fuel within bunded compounds, identifying dedicated areas for washing of wheels and equipment and the provision of spill equipment such as river booms on site to ensure that any pollution event can be quickly tackled. Both Natural England and the Council's Environmental Health Manager with responsibility for water quality support the view that the pollution risk is moderate and negligible post construction.
- 6.33 The other potential impact on water quality raised particularly by the National Trust is contamination in the culvert and the mobilisation of sediment at the outfall on the River Wye. As both water courses have the same level of water quality, discharge from one water course to the means the overall impact of the scheme once in operation on the watercourses in negligible. The energy dissipation chamber will reduce hydraulic flows into the Wye to a low level and consequently sediment may build up on the flood plain. This is an issue that can be addressed through appropriate management and maintenance regime secured by condition. Ultimately, Yazor Brook has final discharge to the Wye albeit in a different location and the overall impact on the Wye as a Special Area of Conservation and SSSI is considered negligible.
- 6.34 It is not considered that this part of the proposed development will have any adverse impact on the amenity of nearby properties as a result of noise, dust and vibration. Overall, this part of the scheme achieves a correct balance between minimising the visual and archaeological impact and safeguarding the ecological value of the area and water quality of the Wye.

### Flood Alleviation

- 6.35 The primary purpose of the proposed development is to provide flood alleviation for properties and land within Hereford City including the ESG area and along the route of Yazor Brook. The results of the hydraulic modelling identified that there is currently significant risk to existing communities down stream of the location of the FAS development as a result of flows from Yazor Brook. The communities at risk include residential, industrial and agricultural properties and buildings, open agricultural land, infrastructure and transport links including A roads and the A49 trunk road. As such the base line flood risk particularly for Hereford City is classed as high.
- 6.36 The hydraulic modelling exercise undertaken to support the flood risk assessment and the scheme generally assesses a before and after scenario. The assessment covers both the primary water courses (Yazor Brook and the River Wye) and secondary connecting water courses such as Widemarsh Brook and Eignbrook. Monitoring points are set up both up stream of the proposed FAS and down stream at various points along its length leading to and within the city. The monitoring assesses both maximum water levels and peak flow rates. The results of the hydrological assessment identify that the development will alleviate flooding associated with Yazor, Widemarsh and Eign Brooks downstream of the Yazor Brook off-take at Credenhill. The benefit will extend as far as the outfall of these watercourses into the River Wye at Broomy Hill and Eign Road, Hereford.
- 6.37 The development will operate approximately twice a year and will reduce flows immediately down stream at the off-take to the following:

1 in 20 year (5% Annual exceedance probability) frequency of flood from 6 cubic metres per second (m³/s) to 1.7 cubic m³/s,

1 in 100 year (1%) frequency of flood from 7.8 m³/s to 2 m³/s and

1 in 1000 year (0.1%) frequency of flood from 13.3 m³/s to 6.5 m³/s.

6.38 Many parts of the urban area of Hereford adjacent to the brook corridors will see reduced risk of flooding including housing and commercial/employment areas, public open space, allotments and areas of car parking including that serving the County Hospital. Transport links within the city including the A438 and A49 trunk road will also benefit. Up stream, large areas of agricultural land and scattered property will also benefit. Within the ESG area there will be significant reduction in the extent of functional flood plain. The flood alleviation benefits are quantified below.

1 in 20 year flood

93% (115 of 124 residential and commercial properties) that are currently affected by flooding will no longer be subject to this level on flood risk when the development is in operation. The residential areas around Millbrook Street, Nolan Road and Edgar Street will particularly benefit.

1 in 100 year flood

71% (165 of 231 residential and commercial properties) will have their flood risk removed within this probability of risk.

6.39 It can therefore be seen that the development will significantly reduce the degree and extent of flood risk for large parts of the city including the ESG area. The development is therefore considered a strategic flood alleviation scheme rather than an ESG flood alleviation scheme based on the number of properties and land that will

benefit from reduced flood risk. The assessment of the impacts is therefore considered majorly beneficial.

### Flood Risk and Other Potential Risks

- 6.40 The development must also be assessed to establish whether there are any increased flood risks as a result of the proposed infrastructure or increased outfall to the River Wye. Both the off-take structure and final outfall fall within Flood Zone 3 but are classified as water compatible development within Planning Policy Statement 25 and therefore are acceptable in principle. The physical works have been designed so as not to impact on the function of the flood plain or increase flood risk for the immediate areas and properties.
- 6.41 The scheme will inevitably increase flows directly into the River Wye and therefore has the potential to increase flood risk. Taking the extreme scenario where peak flows within Yazor Brook, peak flows through the FAS development and peak flows within the River Wye all coincide, the flood level within the Wye would increase by 20mm. In perspective, this contrasts with the flood level within the Wye already around 2 metres above top of bank and water depth within the river channel of around 8.5 metres for a 1 in 100 year event. As such, the rise in levels represents an increase in flood level of 0.02% (in channel) and 0.01% (flood plain). Therefore the sensitivity of this change means the adverse impact on the flood risk will be negligible. It must also be emphasised that the chances of all peak flows coinciding is very low given the different characteristics of the catchment areas for Yazor Brook compared to the River Wye.
- 6.42 The other potential risk of FAS the development when in operation is a reduction in flows down stream within Yazor Brook. This could have an impact on the hydrological, geomorphologic and ecological characteristics of Yazor Brook. Flows within water courses are generally characterised by that which occurs for at least 95% of the time (referred to as Q95). The current Q95 flow for Yazor Brook is 0.016 cubic metres per second. This is therefore what is required to retain and maintain the physical and ecological characteristics of the water course. As the FAS development will not become operable until flows exceed 0.5 m³/s, the development is unlikely to impact upon existing flows within the brook with the exception at peak times and as such, the characteristics and biodiversity of the brook will not be harmed. The analysis also indicates that the impacts on levels within the adjacent restored Sugwas guarry are also considered to be negligible.
- 6.43 The risk of blockage either of the entry weir or of the culvert itself has also been considered. The entry weir is positioned parallel with the water course rather than perpendicular to the direction of flow and therefore the risk of blockage is considered to be relatively low. Nevertheless, two scenarios (25% and 50% blockage) have been modelled and the results identify that even with a 50% blockage, the performance of the culvert will only reduce by 12%. Whilst this would increase flows down Yazor Brook into the city, the flows would still be significantly smaller than currently exist.
- 6.44 The blockage within the culvert is highly unlikely due to the trash screens and security grills at either end. Maintenance manholes have been positioned along the length of the culvert to allow maintenance and inspection and the manholes have been positioned that in the unlikely event of a blockage, any water surcharging over land would not impact on people or property. Alongside regular routine maintenance,

water levels would also be digitally monitored and therefore any abnormality in levels will become apparent very quickly. The risk of blockage is therefore not considered to present a danger in flood risk or public safety terms.

### Construction infrastructure

- 6.45 The scale of the development site is large and therefore to facilitate construction it will be necessary to construct a haul road from the proposed new access on the A438 in a northerly direction for the full length up to the Credenhill Community Centre. In addition, at least two construction compounds are proposed one immediately south of the Community Centre and one immediately south of the A438 with a possible third compound immediately north of the A438.
- 6.46 Both the construction compound and haul road will comprise stripping back the initial layer of top soil and installation of a geotextile membrane with 200mm of crushed stone above. The visual impact of the haul road and compounds will be significant during the course of the construction but the works and impact will be reversible as the stone will be removed following completion of the works and the top soil reinstated and seeded. The Minerals and Waste Officer has concerns regarding the re-use of the stone following completion of the development. This matter can be satisfactorily controlled by condition.
- 6.47 The construction compounds will be of a similar format but enclosed with Heras fencing and contain various portacabins for offices, mess rooms, toilets, etc along with storage facilities for equipment and tools as well as site operative parking. The Environmental Statement also considers the impact of the haul road and storage compounds including considerations of archaeology, ecology, amenity and pollution. The archaeological impact will be minimal as the depth of the excavation will be no more than 300mm whereas the majority of the archaeological remains in and around the compound areas are likely to be of a depth of a metre or more. The geotextile membrane will limit ground compaction.
- 6.48 The construction process as a whole including the compounds and associated haul road will inevitably have an impact on localised amenity in terms of noise and dust in particular. Although it is not possible to remove the likelihood of noise, vibration nuisance and emissions entirely, through a robust environmental management plan which can include measures such as acoustic enclosures around site compounds and noisy plant within close proximity to residential properties, the construction impacts cane be satisfactorily mitigated. Other potential impacts identified within the environmental statement can be controlled by condition such as foul drainage, minimising the lighting and controlling timings so as to not to impact on ecology and storage of polluting substances within impervious bunded containers or compounds. Subject to these measures the impacts of the construction compounds and haul road will not be harmful.

#### Waste Management

6.49 The construction process will generate a significant amount of waste comprising primarily subsoil. Approximately 13,087 cubic metres of spoil will arise from the development. Whilst some spoil can be reused on site for additional landscaping and earth works it is likely that the majority will have to be disposed of off site. The final site for disposal of the waste has not yet been confirmed.

6.50 The Minerals and Waste Officer has identified that there is no ability to dispose of this at historic landfill sites within the County and quarry permissions generally preclude the importation of spoil for reclamation purposes. Planning permission will be required for the disposal of any waste on an unlicensed location and therefore controls will exist through with the need to secure any appropriate permissions. Notwithstanding this, a condition is recommended requiring details of the strategy for waste disposal to be agreed including the extent and detail of any material reused on site and quantities and quality of waste disposed off site along with the final location. If required, Wye Valley Reclamation at Rotherwas who are licensed to take spoil of the type generated by this development have confirmed that they would have capacity to accommodate all of the waste from this development. A condition will also be required to control the location and height of any on-site storage prior to offsite disposal. The development will or has a potential to sterilise part of the safeguarded mineral reserve and further information has been provided on this matter which the minerals and waste officer is currently considering.

# **Future Operation and Maintenance**

6.51 If planning permission is approved and subject to final landowner agreements being in place the development will be delivered by Herefordshire Council and it is likely that the Environment Agency would ultimately be the asset owner as part of its wider responsibilities for Yazor Brook as a critical ordinary watercourse and the River Wye as a nationally important river system. The operating and maintenance role however is likely to be Herefordshire Council's responsibility although this is yet to be decided. It is considered that both the Environment Agency or Herefordshire Council will ultimately achieve the required operating and maintenance standards and the final agreement is being jointly prepared by the Council and the Environment Agency and secured by condition.

# Conclusion

- 6.52 Whilst further comments are awaited from some consultees in respect of additional information provided, the proposal is in a form that can now be recommended for approval. The scheme will deliver significant reductions in flood risk for large parts of Hereford City and outlying areas with negligible permanent adverse environmental impacts. Where there is going to be a low or moderate harmful impact, all of the statutory consultees are satisfied that any impact can be acceptably mitigated and these impacts are largely during the construction phase.
- Delegated authority is therefore requested to enable the final minor details to be agreed and the expiry of the reconsultation period on the amended site area. Subject to no objections been received that raise new material planning considerations in response to this re-consultation and the additional information provided, the application is recommended for approval.

## **RECOMMENDATION**

It be recorded that the Environmental Statement and associated documents including the consultation and other responses received on the Environmental Statement and

the associated documents have been taken into account in making this recommendation.

Subject to no further objections raising additional material planning considerations by the end of the consultation period, the officers named in the scheme of delegation to officers be authorised to approve the application subject to the following conditions and any further conditions considered necessary by officers:

- 1 A01 Time limit for commencement (full permission)
- 2 C01 Samples of external materials
- 3 C06 Stonework laid on natural bed
- 4 D02 Approval of details
- 5 E03 Site observation archaeology
- 6 E04 Submission of foundation design
- 7 G01 Earthworks
- 8 G02 Retention of trees and hedgerows
- 9 G04 Protection of trees/hedgerows that are to be retained
- 10 G10 Landscaping scheme
- 11 G11 Landscaping scheme implementation
- 12 G14 Landscape management plan
- 13 H21 Wheel washing
- 14 H27 Parking for site operatives
- No development shall commence until scaled plans of the temporary construction access points on the A438, the engineering details of the culvert construction under the A438 and the means of securing safe crossing of the A438 by construction traffic during the course of the development have been submitted for the approval in writing by the local planning authority. The development shall be carried out in accordance with approved details.

Reason: In the interest of highway safety and to confirm with the requirements of Policy DR3 of the Herefordshire Unitary Development Plan.

Prior to commencement of the development a construction traffic management plan including a scaled plan identifying the principle route of construction traffic including the route of all traffic associated with the off-site waste disposal shall be submitted for the approval in writing of the local planning authortiy. Development shall be constructed and waste material disposed of in accordance with the agreed traffic management agreement.

Reason: In the interests of highway safety and to safeguard local amenity and to comply with Policies DR2 and DR3 of the Herefordshire Unitary Development Plan.

- 17 I16 Restriction of hours during construction
- Prior to commencement an Environmental Management Plan shall be submitted for the approval in writing of the local planning authority and shall include measures to minimise the extent of dust, odour, noise, vibration and risk of pollution arising from the construction process as set out, but not limited to paragraphs 13.71 and 14.20 of the Environmental Statement dated July 2009. The construction shall be carried out in accordance with the approved Environmental Management Plan.

Reason: To safeguard the residential amenity of surrounding properties and to comply with Policy DR2 of the Herefordshire Unitary Development Plan.

- 19 K2 Nature Conservation site protection
- 20 I55 Site Waste Management

- **K4 Nature Conservation Plan Implementation**
- 22 The proposed site compounds and temporary haul road shall be in accordance with drawing no. CS02394-TRA-05 Rev P1 and the accompanying briefing notes unless otherwise agreed in writing with the local planning authority.

Reason: To safeguard the character and amenity of the locality and comply with Policies DR1 and DR2 of the Herefordshire Unitary Development Plan.

23 Prior to commencement of development, details of the post construction operation and maintenance requirements in the form of a manual including confirmation of the authority/agency with responsibility for future operation and maintenance shall be submitted for the approval in writing of the local planning authority. The Flood Alleviation Scheme shall be operated and managed in accordance with the agreed details and agreement thereafter unless otherwise agreed in writing by the local planning authority.

Reason: To minimise flood risk as a result of the Flood Alleviation Scheme failing and to comply with Policy DR7 of the Herefordshire Unitary Development Plan.

Prior to the commencement of the development, details shall be provided of the method, location height of waste material to be stored on site and the site for the re-use and/or disposal of waste material off site shall be submitted for the approval in writing of the local planning authority. All waste shall be stored and disposed in accordance with the approved details.

Reason: To ensure appropriate storage and disposal of all waste and to comply with policy W11 of the Herefordshire Unitary Development Plan.

- 118 Foul and surface water drainage (Site Compounds) 25
- Prior to the commencement of the development, the details including scaled plans of the trash screens on the entry weir and security grill on the outfall structure shall be submitted for the approval in writing of the local planning authority. The screens and grills shall be installed in accordance with the agreed details.

Reason: To safeguard the biodiversity of the site and security of the development and to comply with policies and NC1, DR1 and DR2 of the Herefordshire Unitary Development Plan.

### **INFORMATIVES:**

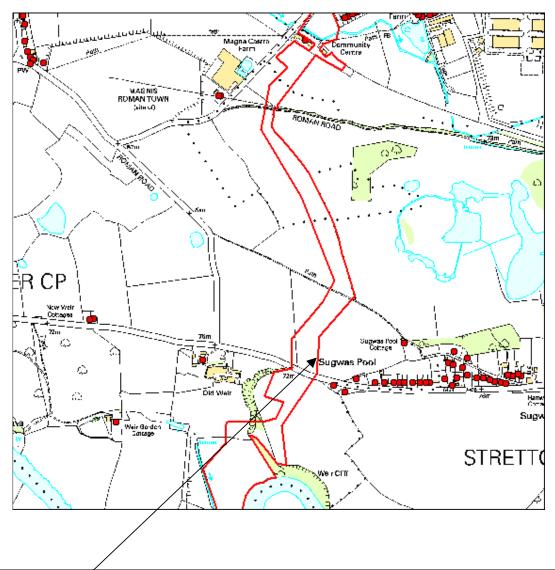
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- **HN05** Works within the highway 2 N15 Reason(s) for the Grant of PP/LBC/CAC
- 3 N19 Avoidance of doubt - Approved Plans

| Decision: | <br> | <br> | <br> |  |
|-----------|------|------|------|--|
| Notes:    | <br> | <br> | <br> |  |
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# **Background Papers**

Internal departmental consultation replies.



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APPLICATION NO: DCCE0009/1595/F DMCE/091717/F

SITE ADDRESS: LAND BETWEEN THE YAZOR BROOK A, SOUTH OF OLD WEIR FARM

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