Agenda Item No: 8

BLOCK FEN / LANGWOOD FEN MASTER PLAN (SUPPLEMENTARY PLANNING DOCUMENT)

To:	**Cabinet**
Date:	**29 September 2009**
From:	**Executive Director: Environment Services**
Electoral division(s):	**Chatteris / Sutton / Forty Foot**
Forward Plan ref:	**Not applicable** *Key decision:* **No**
Purpose:	**To consider the Draft Block Fen / Langwood Fen Master Plan (Supplementary Planning Document)**
Recommendation:	**It is recommended that Cabinet:**

approve the draft Block Fen / Langwood Fen, Mepal, Master Plan (Supplementary Planning Document) for public consultation in February / March 2010

Note: Due to size and formatting the Block Fen / Langwood Fen Master Plan has not been included with the printed Agenda. Members can view it in the Members Lounge. It can also be accessed from the Web site from the Development Control Agenda report dated 10th September (item 4)

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1.0 BACKGROUND

1.1 Mineral extraction and waste management in the Block Fen / Langwood Fen area will make a significant contribution to meeting the objectives of the Cambridgeshire and Peterborough Minerals and Waste Plan. The development of these activities will also enable other very important strategic objectives to be achieved in the area, delivering more suitable flood management in the Cranbrook / Counter Drain area, and creation of a significant amount of lowland wet grassland which will enhance the Ouse Washes. (For further details please see the Cambridgeshire and Peterborough Minerals and Waste Plan item)

1.2 Through the Minerals and Waste Plan it is proposed that Block Fen / Langwood will:

- provide 1.4 million tonnes of sand and gravel from 2010 onwards
- recycle around 240,000 tonnes per annum of recycled aggregate
- dispose of around 0.5 million tonnes of inert construction waste (which will be used to create the new lowland wet grassland)
- create strategic flood storage bodies with capacity of around 10 million m^3
- create around 480 hectares of enhancement lowland wet grassland immediately adjacent the Ouse Washes
- provide for ancillary water storage and supply (or irrigation)
- deliver a strategic recreation afteruse coupled with navigational improvements through the sealing of the Forty Foot Drain

2.0 PURPOSE

2.1 The Block Fen / Langwood Fen Master Plan will provide detailed guidance on the development of this area to supplement the policies in the Minerals and Waste Plan. In April 2008 Cabinet agreed to progress the development of the Master Plan in parallel to the Minerals and Waste Plan, in order to enable this detailed guidance to be in place in a speedy manner following the adoption of the Minerals and Waste Plan.

2.2 It has proved necessary to prepare the Master Plan, and the background studies which have informed it, in order to ensure that what is proposed is sound and deliverable. This will need to be demonstrated as the Minerals and Waste Plan, which is in effect the ‘parent’ Plan, moves forward towards Examination by an independent planning inspector. In particular the following issues needed to be addressed:

- to quantify the amount and timescales of proposed mineral extraction and waste management operations
- to establish a robust methodology for the creation of wet lowland grassland
- to quantify the amount of flood storage which could be created (taking into account the hydrological regime and the water needs of the lowland wet grassland area)

- to establish a specification for the creation and operational regime of the flood management area
- to understand the soil resource
- to understand the traffic levels and movements of minerals and waste lorries.

3.0 PREPARATION OF THE SUPPLEMENTARY PLANNING DOCUMENT (SPD)

3.1 The Master Plan is being prepared as a SPD, which means that it will be a material consideration which must be taken into account when determining planning applications in the Block Fen / Langwood Fen area. The process of preparing the SPD is governed by planning regulations. This first stage is the preparation of a draft document. In accordance with the Government's emphasis on community involvement the draft SPD must then undergo a period of consultation.

3.2 It is proposed the Master Plan will be subject to six weeks public consultation and that this take place in February / March 2010. This is when the Pre-Submission consultation on the Minerals and Waste Plan is planned. Consulting at the same time will enable people to see how the two Plans relate, and will facilitate savings on the cost of public consultation.

3.3 Representations that are received as a result of the consultation will then be considered and the Council must prepare a report saying what the main issues raised were, and how they will be addressed in the final document. The Council then makes the changes necessary and adopts the SPD. It is anticipated that adoption will be in June 2011, at the same time as the Minerals and Waste Plan is adopted.

4.0 THE EARITH / MEPAL STAKEHOLDER GROUP

4.1 In preparing proposals for the Block Fen / Langwood Fen area it has been necessary to go into considerable detail in order to ensure that they are deliverable. The Minerals and Waste Plan and the Master Plan have therefore been prepared with advice from the Earith / Mepal Stakeholder Group. This Group includes key stakeholders such as the Environment Agency, RSPB, the Middle Level and Sutton and Mepal Drainage Board, the minerals and waste industries and the relevant District Councils.

4.2 In addition a number of technical papers have been prepared which are background papers in the Minerals and Waste Plan. These were:

- An informal Earith / Mepal Master Plan – the precursor to this formal SPD which was published for background information
- Review of Restoration Proposals for Block Fen Quarry – This report considers the proposed restoration proposals set out for Earith Mepal in the draft Master Plan, with regard to the ecological value of existing conservation sites (Wildfowl and Wetlands Trust June 2008)
- Soil Resources Report – The purpose of this report was to provide broad soil information for the Block Fen / Langwood Fen area, and comment on restoration issues (Adams Land Management March 2008)
- Baseline hydrological information relevant to the planning and development of the Earith / Mepal Minerals and Waste Action Plan – this report provides baseline hydrological information to assist the planning of the Earith / Mepal Area (Gordon Spoor Associates November 2007)

- Hydrological impacts and possible opportunities arising from the adoption of Option E within Future Restoration Plans - this hydrological analysis aims to quantify in broad terms the possible opportunities that could accrue for water storage, flood relief and subsequent water availability, whilst ensuring sufficient water is available to meet the demands of the proposed wetland habitats (Gordon Spoor Associates December 2007)
- Earith / Mepal Traffic Study – this study of landfill and quarry related traffic was undertaken in order to inform the preparation of the Earith Mepal Area Action Plan and Draft Master Plan (Cambridgeshire County Council September 2008)
- Cranbrook / Counter Drain – Flood Risk Management Principles (Environment Agency 2009)

These background papers were published as part of the public consultation on the Minerals and Waste Plan Preferred Options 2 consultation (October 2008).

5.0 THE BLOCK FEN / LANGWOOD FEN MASTER PLAN

5.1 A vision which reflects the provision of the Minerals and Waste Plan has been developed, this is shown in **Map 1.** The Master Plan seeks to deliver this vision and supplements the Minerals and Waste Plan by providing additional guidance on the following:

i. The Phasing and Working of Mineral Reserves

5.2 The extraction of sand and gravel needs to be managed in order to husband the resource. This will achieved by phasing i.e. the planned gradual working of reserves. Phasing will ensure that material will not be released unnecessarily, but that there is a continuous supply to meet our needs, whilst securing progressive restoration of the worked out areas.

5.3 In order to help to control the release of the sand and gravel three 'production areas' have been defined, each with a production unit. These in part reflect the location of the existing quarry operations, but also have had regard to the following:

- three production units / production areas are sufficient to meet the forecast need for sand and gravel from the Earith / Mepal area
- the need to consider the deliverability of proposals by taking into account known land ownership and land options
- that all access must be taken from the existing Block Fen roundabout
- the need to reconsider and change existing restoration proposals in the context of the wider proposals of the Minerals and Waste Plan Core Strategy

5.4 **Map 2** shows the three Production Areas, and a breakdown for the working of reserves for each is set out in the table below:

Phasing for Working of Reserves

Production Area	Existing Permitted Reserves(million tonnes)	Working of new allocations 2006 to 2026	Working of new allocations post 2026
Area A	0.9	6.5	4.9
Area B	9.7	3.2	5.5

Area C	9.6	0.0	4.0
Total	20.2	9.7	14.4

5.5 The working of each production area must reflect the above phasing for the working of reserves. Planning applications must provide a detailed phasing diagram showing how the mineral will be worked and how the site will be progressively restored to the planned after uses. A list of requirements for planning application is set out in the Master Plan. Block Fen / Langwood Fen acts as a buffer for the Ouse Washes because it supports very few potential predators which may harm ground nesting birds, any phasing and restoration proposals will need to recognise this and ensure that the role of the area in this respect is not compromised.

ii. Waste Recycling and Disposal

5.6 Each of the 3 production sub-areas for mineral extraction will contribute to inert waste recycling by incorporating a facility for this purpose. These will produce recycled aggregate for–reuse.

5.7 It is anticipated that the highest level of inert recycling will take place in sub-area A because this is the area where the majority of inert waste disposal will take place, which will help to form the enhancement habitat to complement the adjacent Ouse Washes. In this area capacity to recycle around 200,000 tonnes per year from inert waste will be created.

5.8 The other two facilities, in sub-areas B and C will make a lesser but still important contribution to recycling inert waste, in the order of around 40,000 tonnes per annum each.

5.9 In all cases the life of the inert recycling facilities will be limited to the life of the mineral operation and the associated restoration proposals.

5.10 The amount of space that will be created for the disposal of construction waste (principally inert waste) is linked to the location and depth of the sand and gravel extraction that will take place in the sub areas, and the restoration proposals to return the land to new lowland wet grassland adjacent to the Ouse Washes, or to agricultural land around the water storage areas.

5.11 In total around 480 hectares of land will be returned to lowland wet grassland and land around the water storage bodies will be returned to ground level, both creating capacity for the disposal of construction waste. It is estimated that 14 million cubic metres of void will be created, which will take around 21 million tonnes of inert waste. The table below shows the timescale for the creation of void and disposal of construction waste. This will make a significant contribution to addressing the need outlined above.

Provision for disposal of construction waste			
Timescale	**2011 to 2026**	**2026 to 2036**	**Total 2011 to 2036**
Waste Disposal Capacity	12.6 million tonnes capacity / 8.4 million m3 of voidspace	8.4 million tonnes capacity / 5.6 million m3 voidspace	21 million tonnes capacity / 14 million m3 of voidspace

iii. Enhancement Habitat

5.12 Any enhancement habitat must be located close to, and ideally immediately adjacent, to the Ouse Washes. When the creation of such habitat is being delivered through sand and gravel extraction its possible location is also influenced by the distribution of sand and gravel reserves. Fortunately in the Block Fen / Langwood Fen area economic sand and gravel reserves abut the Ouse Washes, which means the site offers a perfect location for the creation of new lowland wet grassland. The Block Fen / Langwood Fen site is also directly opposite Coveney which is a priority area for the Environment Agency's Habitat Creation Project. If both these areas were to be developed, they would complement each other and provide significant added value through the increased area of contiguous wetland.

5.13 The area where wet grassland will be created following mineral extraction is shown on Map 1. This totals around 480 hectares in the east and north east sector of the Block Fen / Langwood Fen area.

5.14 A methodology for the creation of lowland wet grassland has been drawn up and is set out in the Master Plan. In brief, following the extraction of the sand and gavel the base and sides of the void will be lined with compacted clay to an agreed specification, and filled with inert waste which will raise the land towards to its previous level. The inert waste will then be sealed in also using compacted clay. A ‘cell’ containing the waste will thus be formed. Subsoils will be placed on top of this cell, with peat forming the top layer to return to original contours. These soils will support the lowland wet grassland which will be created, and the water levels will be controlled by water carrying channels at the edge of the cell and a sump. This will enable the environment to be controlled and the grassland to be wetted and drained as required. A number of cells containing construction waste will be kept dry as part of the overall scheme.

iv. Water Storage

5.15 The extraction of sand and gravel in the Block Fen / Langwood Fen area will create voidspace which offers the opportunity for the creation of water storage bodies. The deepest sand and gravel on the site lies in the western side, reaching a depth of around 8 metres. The sand and gravel is underlain by stiff blue clay, which provides a suitable material for lining the void and ‘sealing’ the new water bodies from the hydrology of the surrounding area.

5.16 The amount of water storage space that will be created is influenced by the form and number of the lakes that will be created. It is possible to form one very large water body, but whilst this may provide more storage capacity in the long term it also poses problems in terms of delivery, as different landowners and mineral operators are involved, and they will be extracting over different timescales. Equally in terms of design a large water body may be more prone to wave erosion and will require additional maintenance. Having this in mind the water storage will be provided by a number of smaller lakes. Whilst these may appear to be separate, these will be engineered so they are hydrologically linked, enabling water storage to undertaken in a strategic way.

5.17 It is proposed that six or more smaller water bodies will be formed, giving around 10 million m3 of water storage capacity. This water bodies will be created in a phased way, corresponding to the timing for mineral extraction, with progressive restoration taking place. This should give rise to the following capacity:

Creation of Water Storage / Supply Capacity				
Year	**2016**	**2024**	**2036**	**2050**
Cumulative water storage capacity million m3	1.1	4.4	8.0	10.0

5.18 The Environment Agency is also considering an alternative to the current proposed land restoration plans. The Agency would also seek to include a number of lakes within the restoration of the site. These lakes would again be maintained in continuity with the Internal Drainage Board system to provide a storage volume for flood events. The purpose of this would be to contain more frequent flood events, say 1 in 5 years to 1 in 10 year flood return periods, within the lakes. For the less frequent events there would be some over topping of the lakes within a defined and contained area. However, due to the infrequency of these events it is expected that the remaining land can have other uses i.e. complementary grassland.

5.19 A detailed hydrological study is to be undertaken by the Environment Agency. This will help to determine the most appropriate option to provide flood management.

v. Recreation and Leisure

5.20 Through the creation of water bodies and new lowland wet grassland recreational activities in the Block Fen / Langwood Fen area will be increased. Although it will not be possible to provide for recreation in areas where active mineral extraction and restoration is taking place, as development progresses and restoration is completed, recreational provision will come on stream.

5.21 With regard to the lowland wet grassland area, it is envisaged that will be completed by 2036. Access should be possible to this area throughout the year, although at certain times of the year direct access onto the wet grassland may have to be restricted as this would disturb ground nesting birds, but at other times more general access would be allowed for informal low key activities such as walking and bird watching.

5.22 Equally as the water storage bodies are completed other activities such as fishing, water sports, and walking could be extended into these areas.

5.23 The Master Plan also identifies a clear opportunity to address the issue of the Forty Foot Drain, which is currently navigable only part of the year, due to low water levels. Permitting mineral extraction south of the Forty Foot will enable the land to be ‘sealed’ through quarry engineering, perhaps in advance of mineral extraction, and will help to stop the current migration of water out of the Drain. This will address the lack of water in the Forty Foot Drain and will help to maintain adequate water levels to allow navigation at any time. This will contribute to the proposed new navigable link between the Forty Foot (Vermuyden’s) Drain and the Counter Drain (Old Bedford River).

v. Traffic

5.24 With an increase in mineral and waste activity in this area in response to the growth agenda, there will also be an increase in lorry traffic. Consideration has been given as to the feasibility of encouraging the use of more sustainable models of transport for the bulk movement of minerals and waste associated with operations at Block Fen i.e. water or rail, but they are not practicable or economically viable. The Master Plan endorses the Minerals and Waste Plan proposals:

- Further mineral extraction and waste recycling and disposal will only be permitted in the Block Fen / Langwood Fen area if access can be achieved via the existing roundabout junction off the A142 at Block Fen
- Permissions will be subject to securing the necessary improvements to Block Fen Drove
- binding agreements covering lorry backloading (this requirement will apply initially to 50% of lorries carrying waste, and increase over the Plan period.
- binding agreements covering routeing arrangements and HCV signage for mineral and waste management traffic to principally use the Primary Roads as defined by the Highways Authority.

5.25 In addition the Plan advises that the following wider measures should also be considered:

- haul roads
- overland conveyors
- delivery depots
- facilitate off-peak delivery
- retention of existing railheads for aggregate / waste use

5.26 Turning to the classification of roads, the Highways Authority are in the process of defining routes which are considered suitable for HCV movement. This is likely to be subject to pubic consultation later this year and finalised by the end of 2009. This HCV route network will therefore be available when public consultation on the Minerals and Waste Plan takes place in February 2010. A review of Primary Road network will then follow, taking into account the HCV routes. The review of the Primary Road Network will also determine whether any additional HCV restrictions are required. This work could influence any existing or proposed HCV routing or signage agreements in respect of mineral and waste management traffic.

5.27 The Minerals and Waste Plan requires all development proposals to demonstrate that opportunities for the use of sustainable transport have been evaluated, and that the most appropriate has been pursued. In practice the use of alternatives to road are limited in this area, particularly as the transport of aggregate by rail is only economic over longer distances.

vi. Sustainable Use of Soils

5.28 The Earith / Mepal area is known to contain some of the best and most versatile soils in the Country, and this is reflected by part of the land being graded under the Agricultural Land Classification Scheme as Grades 1 and 2.

5.29 National planning policy seeks to protect high quality land and prevent its loss, and where it is going to be developed for an alternative use, it requires a scheme for the sustainable use of soils for the longer term.

5.30 A package for the sustainable use of soils can encompass a range of different aspects. This can include for example:

- ensuring land can be put back into agricultural use if required
- relating restoration proposals to the soils resource
- considering the wider benefits of proposals on the soil resource
- securing appropriate long term management of the restored land and associated soils

- using surplus soils to improve areas of poor soils in the area

6.0 HABITATS REGULATION ASSESSMENT

6.1 A Habitats Regulations Assessment (including a full Appropriate Assessment) has been carried out on the Master Plan. This work follows on from the initial screening and scoping assessments produced previously, which were published as part of the Preferred Options 2 consultation in 2008. Consultants RPS, who have taken the documents through a full Appropriate Assessment, including an in-combination assessment of the proposals, have carried out this further work. They have assessed the content of the plans to ensure there is no potential impact on the integrity of European Sites (namely those sites classified as Special Protection Areas, Special Areas of Conservation, and Ramsar sites). The outcome of this work has been that subject to some minor amendments to the content of the Master Plan, it passes the HRA and does not cause any harm to the integrity of a European site, either alone or in combination with other plans or projects. This work has ensured we satisfy Articles 6(3) and (4) of the Habitats Directive and meet the requirements set out in part VIA of the UK Habitats Regulations.

7.0 MEMBER CONSIDERATION

7.1 The draft Master Plan has been considered by Members of the Development Control Committee, and the Environment and Growth Policy Development Group. Both meetings considered that the Master Plan should go forward for consultation in February / March 2010.

8.0 SIGNIFICANT IMPLICATIONS

Resources and Performance

8.1 The Council is committed to the progression of the Master Plan through the adoption of the Cambridgeshire Minerals and Waste Development Scheme, which has been submitted to and approved by the Government Office.

Access and Inclusion

8.2 See paragraphs 5.24 to 5.27

Statutory Requirement and Partnership Working

8.3 This SPD is being prepared to support the Cambridgeshire and Peterborough Minerals and waste Plan. The SPD and the Minerals and Waste Plan are being prepared jointly with Peterbrough City Council.

Climate Change

8.4 These proposals such at Block Fen / Langwood Fen will deliver more sustainable flood management and large scale habitat creation (which also acts as a carbon sink) is being sought, in association with minerals and waste development.

Engagement and consultation

8.5 The SPD will be the subject of public consultation for a six week period in February / March 2010. Public consultation must conform to the Council's adopted Statement of Community Involvement which sets out a range of consultation activities to be included in any consultation. These include:

- consulting / informing all statutory consultees

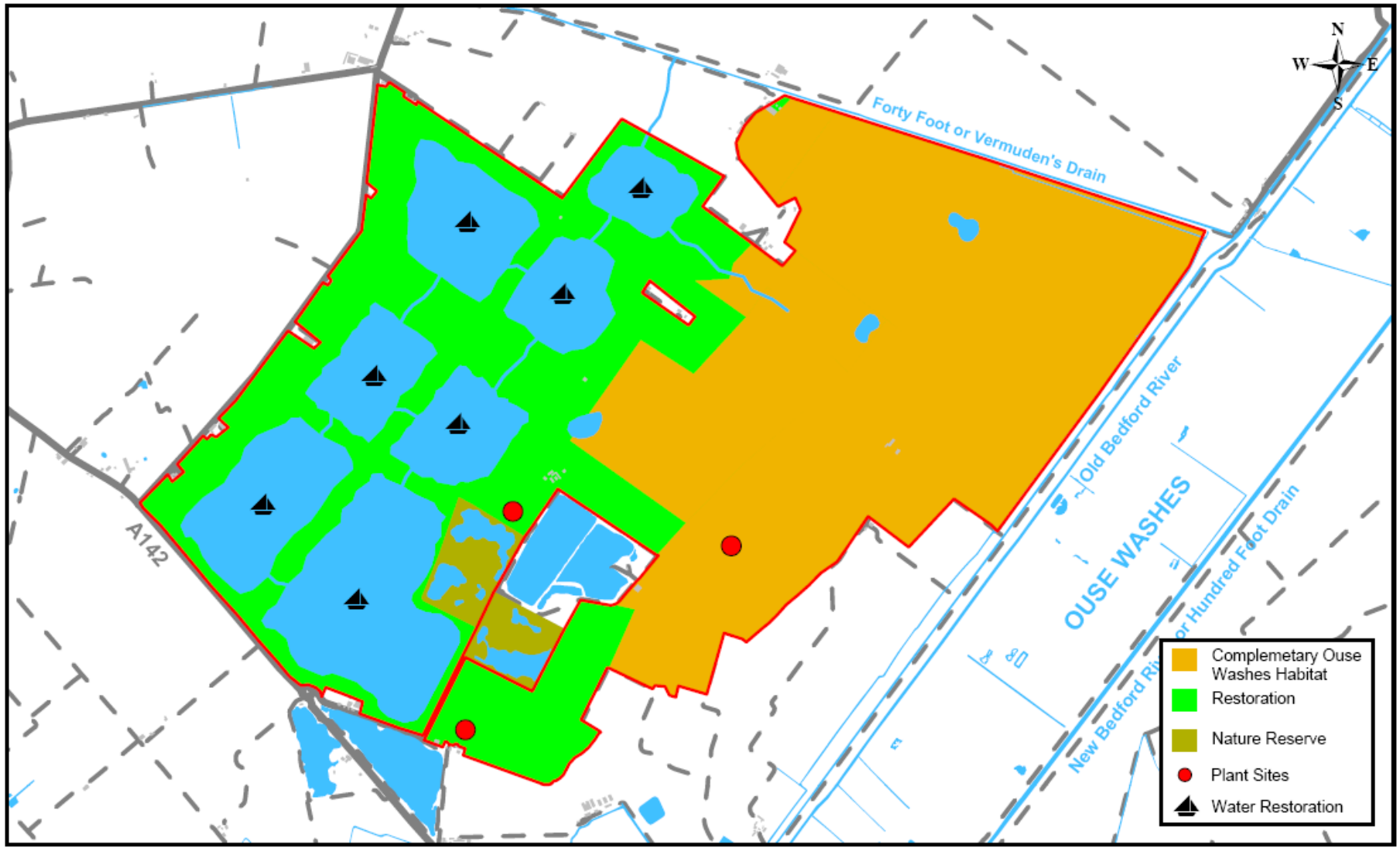
- consulting / informing all other relevant parties, including the public
- placing proposals on the web site
- placing documents on deposit at Councils offices and other locations (normally main libraries)
- displays and exhibitions
- press releases / media interviews
- attending town and parish council meetings (on request)
- attending mineral and waste liaison forums

8.0 CONCLUSIONS

8.1 The Master Plan will provide a detailed land use planning framework for the planned mineral and waste management operations for the Block Fen / Langwood Fen area. It sets out in more detail how and when development will take place, and guides the restoration of the area. This enables all stakeholders to see more clearly the vision for the area and how it will develop. It will influence the form of planning applications that come forward, and aid in their determination.

Source Documents	Location
Cambridgeshire and Peterborough Minerals and Waste Plan, (Submission Plan) Draft Block Fen / Langwood Fen Master Plan – Supplementary Planning Document	Member Lounge, Shire Hall

Block Fen/Langwood Fen 2050



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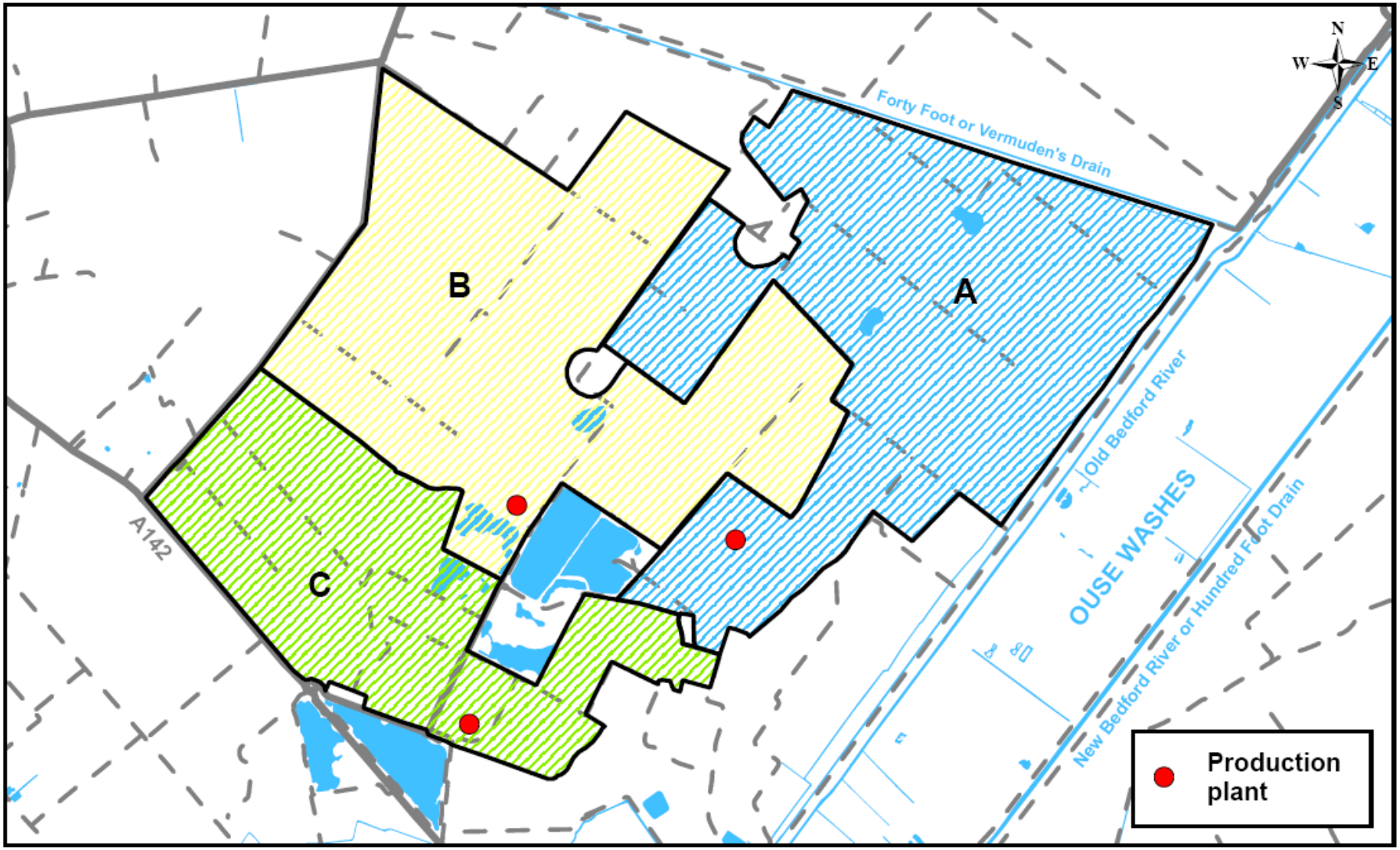
By: fp423

Block Fen/Langwood Fen Production Sub Areas

Cambridgeshire County Council



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