

**Broadland Flood Alleviation Project:
Compartment 37 (Upton Dyke) - Piling Removal Works and the Installation of
Erosion Protection - Application for Discharge of pre-commencement
conditions linked to planning permission (BA2015/0364/FUL)
Report by Planning Officer**

Summary: This report provides Members with a copy of Broadland Environmental Services Ltd (BESLs) submission that seeks to discharge the pre-commencement requirements associated with the planning condition imposed on the consent granted for the removal of piling and installation of erosion protection in Upton Dyke (in Compartment 37).

1 Background

- 1.1 In November 2015, BESL submitted a planning application for pile removal on the south side of Upton Dyke (planning application ref BA2015/0364/FUL). This submission raised local concerns and the Navigation Committee considered the planning application at their meeting on 10 December 2015. At this meeting Members resolved to recommend that:

the Planning Committee refuses the planning application for the removal of piling and installation of erosion protection in Upton Dyke on the true right bank of the River Bure and request officers to discuss alternative options such as widening of the Dyke with the applicant.

- 1.2 Following this, further discussion took place with the applicant but no significant changes were made to the scheme. The application was subject of a Planning Committee Site Visit in January 2016 prior to determination by Planning Committee at their February meeting. At this meeting Members resolved to grant approval subject to:

conditions as outlined within the report including those covering the safeguards with an additional pre-commencement condition covering future management of the navigation area and the bodies responsible, specifically in relation to navigation uses and the environment.

- 1.3 Following this, BESL and Broads Officers engaged in further local discussion prior to the issue of the consent on 2 September 2016. This contained some 11 planning conditions of which 8 required the submission and agreement of details before works commence. These relate to:

- *Condition 2 – Construction traffic management plan*
- *Condition 3 – Wheel washing facilities*
- *Condition 4 – Erosion monitoring and mitigation strategy*
- *Condition 5 – Sonar monitoring*
- *Condition 6 – Temporary channel marking detail*

- *Condition 8 – Technique for removal of piles which fail to fully drive*
- *Condition 9 – Timescale of works*
- *Condition 11 – Management Plan to take action to remedy any failure of full compliance with approve scheme*

1.4 Attached as Appendix 1 is the detail submitted by BESL. It is considered that conditions 4, 5, 6, 8, 9 and 11 relate most closely to Navigation Committee considerations.

1.5 In view of the concerns raised previously regarding this proposal, the purpose of this report is to outline the submitted details to Committee Members and invite any observations at this stage (it is however not the opportunity to revisit the initial objections raised by Navigation Committee which we fully weighed by the Planning Committee in determining this application).

2 Summary of Officers Comments

2.1 The Access and Recreation Officer considers that the details submitted in relation to conditions 4, 5 and 9, which detail the approach of BESL to erosion monitoring (including sonar monitoring), mitigation should erosion occur and timetable for works, follow established methodology, protocols and timescales and are appropriate in relation to the works proposed in Upton Dyke. In relation to condition 6, channel marking, the Access and Recreation Officer is content with red painted timber posts as temporary channel markers but consider that BESL should be required to remove these once Officers consider their function has ceased and that particular care is taken in marking the IDB culvert in the dyke, where a hard piled edge is required to remain.

With regard to conditions 8 and 11, the Access and Recreation Officer has requested Members views are provided regarding the technique for pile removal and the Management Plan provisions.

Finally, the Access and Recreation Officer has confirmed that discussion with BESL is ongoing to ensure that all piles are driven to a sufficient depth to ensure these works will present no navigation hazard.

3 Recommendation

3.1 Members' comments are welcomed on these proposals.

Background Papers: Planning File BA/2015/0364/FUL

Author: Andy Scales
Date of report: 13 October 2016

Broads Plan Objectives: None

Appendices: APPENDIX 1 - Discharge of condition details submitted by BESL in letters dated 22 September and 27 September and accompanying Management Plan

Broadland Environmental Services Limited



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23 SEP 2016

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Our reference: WNCFSH/66.1/JLM/090

Date: 22th September 2016

Direct Line: 01603 430352

Please reply to: Jamie Manners

COMPARTMENT 37, UPTON DYKE PILING REMOVAL PLANNING APPLICATION CONDITION DISCHARGE (BA/2015/0364/FUL)

Dear Cally,

With regard to the conditions attached to the above planning permission, please find enclosed the relevant information to discharge these. The BACS payment of £97 has been requested and should be with you soon.

Condition 2: A Construction Traffic Management Plan is enclosed.

Condition 3: Refer to the enclosed Construction Traffic Management Plan for details of wheel washing facilities.

Condition 4: The monitoring will follow the methodology outlined in the BESL Piling Removal: Erosion Monitoring Procedure document (18th January 2010), which has previously been agreed with the Broads Authority. This includes provision for regular photographic and hydrographic monitoring and producing a regular update for the Broads Authority. This will also be consistent with that outlined in the report submitted with the planning application. A regular series of wooden stakes painted red will be installed along the reprofiled bank to act as markers for the visual monitoring of erosion; these will be in pairs with one at the top of the river bank slope and the second 2m inland.

Erosion protection matting will be installed on the section between the staithe and the IDB culvert (Cross-section 1 on the submitted drawing WNCFSH/420/002) due to the ground conditions on this section considered to be more susceptible to erosion.

It is not proposed to install any erosion protection on the section from the IDB culvert to the river (cross-section 2 on the submitted drawing WNCFSH/420/002) because it is considered that no significant erosion is likely to take place here. Our experience of piling removal elsewhere, including on other reaches in the River Bure, has shown that reed growth is rapid and provides effective erosion protection.

Nevertheless it is acknowledged that monitoring is a necessary part of the procedure to ensure that there are no adverse impacts on either navigation or flood defence interests. If excessive erosion is identified and this is not stabilised by the reed growth, then the provision of soft erosion protection will be investigated.

The reed monitoring line will be in the same position as the existing line of piles along the edge of Upton Dyke. Before works commence, a GPS survey of the pile line will be undertaken and a record of this kept. A further similar survey of the current line of reed growth can be undertaken in the future

and this compared to the original survey of the pile line to ensure that there is no encroachment into the navigation channel as a result of the works.

Condition 5: A pre-works hydrographic survey will be undertaken before any pile works commence. A post-works survey will also be undertaken within 2 weeks of the completion of works. These monitoring surveys will be undertaken in accordance with the monitoring methodology referred to in Condition 3. Data will be supplied to the BA in the form of XYZ data; the method previously agreed and used.

Condition 6: As part of the erosion monitoring, wooden posts will be installed along the top edge of the sloping riverbank following piling removal works (see Condition 4). It is intended to use these posts to also act as navigation markers warning boats of the edge of the bank, particularly in times of high water when the earth river bank may be covered. These will be coloured red as Port Hand Markers.

The works have also been timed during the winter / early spring, so that the reed growth following piling removal will be rapid; this will form a visible mark to the edge of the channel very soon after piling removal has been completed. This is consistent with our observations from undertaking similar works elsewhere throughout the Broads. However, we will monitor vegetation establishment closely following the completion of works, and if this doesn't quickly achieve a suitable height above mean high water springs, then we will review the need for channel markers.

Condition 8: If some of the piles refuse to be driven to the correct level, then these will be removed using techniques developed on other BFAP compartments. That is, the ground will be reprofiled behind the in situ pile, then an excavator mounted grab will be used to grip the pile and pull it completely out. This will all take place using land based equipment, although a small boat / pontoon may be necessary to access the piles for preparatory works. Any piles removed will be taken from site by Wherry to an established yard at Acle Dyke for reuse or recycling. Please refer to the enclosed Construction Traffic Management Plan for details.


Condition 9: It is proposed to undertake the pile removal works starting from early November and completing any works on the dyke edge by late February. The progress and completion of this operation will be dependent upon the weather and ground conditions. If required, due to ground conditions, it will be necessary to undertake further reshaping works on the floodbank during June and July (outside of the main school holidays).

Condition 11: The riverside edge of the bank will be monitored according to the erosion monitoring procedure (see Condition 4) and the floodbank itself will be monitored as part of the annual condition surveys.

- If these surveys show any defect in the reprofiled river bank, then works will be undertaken by land based excavators to reshape the bank and remediate any underlying problems.
- A small amount of light boat damage is to be expected and usually causes no problems. However, if significant damage is found, then measures will be taken to regrade the slope using landbased plant.
- The significance and scale of any damage will be assessed and a remediation plan will be devised in proportion to this on a case by case basis. The Broads Authority will be informed of the remediation plan including timescales.

Please do not hesitate to contact us if you require any further information.

Yours sincerely,


Jason Parker
BESL Project Manager

cc Paul Mitchelmore, Environment Agency
Mike Falcon, BESL Land Agent

Enc: Construction Traffic Management Plan, WNCFSH/420/001 & 002

Construction Traffic Management Plan for Compartment 37 Upton Dyke Piling Removal

Traffic movements - Workforce

During the site induction all operatives are to be informed of the designated site access routes and site compound locations. All restrictions on the routes, such as vehicle size/weight/type, will also be made clear to all staff. They will be briefed on the need to be alert to the presence of pedestrians or cyclists that may be using the roads, particularly in and around the village of Upton.

It is expected that the workforce travelling to site will generate approximately 3 vehicle movements in the morning and approximately 3 in the evening. These will consist of 4x4s, light vans or cars. Vehicles will park in the staithe car park.

Traffic movements - Deliveries

A map containing the full delivery address, access routes and compound locations will be sent to suppliers as will a copy of the traffic management plan. Suppliers will be informed of permitted routes for their deliveries and working hours, which are 0700-1800 Monday-Friday and 0700-1300 on Saturday and told not to deliver outside of these times.

For large vehicles or low loaders, suppliers are requested to inform a member of staff by telephone at least one hour before they arrive on site so arrangements can be made to meet them at a suitable location en-route and escort them into the location of the offload.

Plant, such as excavators will be delivered by low loader at the start of the works and collected at the end of the works. These deliveries will be made from the A47 or A1064 via South Walsham Road (B1140), Church Road, Chapel Road, The Green and Boat Dyke Road to Upton Staithe. There will be 2-3 deliveries at the start and 2-3 at the end.

Please see enclosed drawing WNCFSH/420/001 showing access routes.

Any sheet piling that is removed (rather than driven down) as part of the works will be transported from site by river to Acle Dyke using barges. The materials will be stored in an established yard there for recycling or reuse within the BFAP.

Wheel Washing

Delivery lorries will be kept on hard standing material and the site will be managed in order to minimise the potential risk of mud and loose clay being in the area the lorries are operating. All access tracks and offloading areas will be maintained to be mud free. Therefore any wheel washing required is expected to be minimal. However, there will be a system of inspection before leaving site to ensure that any 4x4s or lorries do not have mud on their wheels or bodywork that could transfer to the highway. A portable pressure washer will be kept on site and if wheels are found to have picked up mud, they will be pressure washed before leaving the site and onto the highway. In the unlikely event that site traffic does cause mud to be deposited on the highway, a road sweeper will be deployed to clear up the affected area.

Signage

The photos below shows typical road signs that will be positioned in the road verge 100m in both directions from the access points, with a separate sign at the actual access point. Similar signage has been used to good effect in other compartments.



These signs will be used to clearly mark out the access routes to the working corridor and to prevent vehicles using roads not identified in the construction traffic management plan. Signs can be annotated to apply to specific vehicles or deliveries; e.g. "Low Loaders".



Condition Monitoring

A video survey of all tracks and minor roads on the access routes will be undertaken to record the pre-works condition of the roads and verges. These will be repeated at the completion of the scheme and can be used to assess if any damage to the highway has resulted from the works traffic. Private access tracks from the highway to all works areas and the site compound shall be maintained throughout the construction period. On completion of works they will be restored to at least as good a condition as was present prior to works.

In addition, a weekly drive through survey of all the routes will be undertaken by BAM Nuttall to inspect the roads, verges and the signage. Any necessary remediation work on the signage will be actioned immediately and any damage or issues with the roads will be reported to the highways authority immediately.

Emergency Contact

BAM Nuttall Foreman for Compartment 37, Neil Bower, at Norwich Office - Telephone: 01603 435054 or Hardley Compound – Telephone: 01508 521924.

BESL
8th September 2014

Broadland Environmental Services Limited



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Date: 27th September 2016

Direct Line: 01603 430352

Please reply to: Jamie Manners

COMPARTMENT 37, UPTON DYKE PILING REMOVAL PLANNING APPLICATION CONDITION DISCHARGE (BA/2015/0364/FUL) – ADDITIONAL INFORMATION

Dear Cally,

Further to our letter dated 22nd September, please find some additional information relating to the following conditions.

Condition 4: A copy of the survey of the original line of the piles will be supplied to the BA to act as a baseline for the position of the reed monitoring line.

In addition to this, wooden posts will be placed to act as a transit, visually marking the position of the reed monitoring line. One post will be placed at the downstream end of the staithe moorings (which will also mark the end of the moorings) and two further posts will be placed on the section of retained piling by the IDB structure. Two of these posts can be visually lined up to quickly assess if reed is encroaching beyond the monitoring line.

Condition 5: A pre-works sonar monitoring survey will be undertaken before any pile works commence. A post-works survey will also be undertaken within 2 weeks of the completion of works. These monitoring surveys will then be undertaken in accordance with the monitoring methodology referred to in Condition 4. Data will be supplied to the BA in the form of XYZ data on request; the method previously agreed and used.

Condition 11: See the enclosed management plan.

Please do not hesitate to contact us if you require any further information.

Yours sincerely,

Jason Parker
BESL Project Manager

cc Paul Mitchelmore, Environment Agency
Mike Falcon, BESL Land Agent

Enc
Management Plan

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Group Limited**

● Marsh Harrier - *Circus aeruginosus*

Upton Dyke Piling Removal: Management Plan

This management plan has been prepared to address the concerns referred to in Condition 11 of the planning permission and ensure that there are no adverse effects on the riverbank or boat dyke during or following the piling removal works. The following points refer to the respective sections of that planning condition.

1. It is proposed to undertake the pile removal works starting from early November and completing any works on the dyke edge by late February. The progress and completion of this operation will be dependent upon the weather and ground conditions. If required, due to wet ground conditions, it will be necessary to undertake further reshaping works on the floodbank during June and July (outside of the main school holidays) to ensure that a satisfactory finish to the floodbank and footpath surface can be achieved.
2. It is not expected that any riverbank movement or slumping will occur following piling removal; indeed, erosion protection matting will be installed in the area where ground conditions are likely to be most vulnerable. However, erosion monitoring surveys will be undertaken and if these show any defect in the reprofiled river bank (particularly if these encroach into the main channel beyond the reed monitoring line), then works will be undertaken by land based excavators to reshape the bank and remediate any underlying problems. This will ensure that there are no lasting impacts on the navigation channel or the flood defence bank.
3. A small amount of light boat damage is to be expected and usually causes no problems. However, if significant damage is found, particularly if there is any encroachment into the navigation channel beyond the reed monitoring line, then measures will be taken to regrade the slope using land based plant. Monitoring would then continue to ensure no long term impacts.
4. The coir matting is intended to provide temporary protection from erosion until a fringe of reed establishes and the coir matting degrades over time. If the matting is damaged before reed has grown, then repair or replacement will be undertaken. Once the reed has grown, damage will only be repaired if it is necessary for erosion protection or if it is causing a hazard to navigation. The measures in Section 3 above will be implemented, as well as the timescales in Section 5 below.
5. The significance and scale of any damage will be assessed and a remediation plan will be devised in proportion to this on a case by case basis. If a report of damage is received, BESL will inspect the site within 1 week and propose a course of action to remediate the damage within a further week (2 weeks total). The time taken to effect a repair will depend on the scale of the problem. It is expected that the following timescales will be likely: 1 month for minor damage and 3 months for major damage.
6. BESL will retain responsibility for the maintenance of the river bank until 2021, when responsibility will be transferred back to the Environment Agency. This is in line with the other responsibilities of the BFAP.