

Application for Determination

- Parishes:** Thurne, Repps-with-Bastwick, Martham & West Somerton
- Reference:** BA/2008/0378/FUL **Target Date:** 9 March 2009
- Location:** Compartment 7 – Thurne to West Somerton
- Proposal:** Improvement works for 11.4km of floodbank including on line strengthening, rollback and excavation of soke dykes (material sourcing) as well as temporary site compounds and associated engineering works.
- Applicant:** Environment Agency
- Recommendation:** Approve with conditions

1 Background

- 1.1 Members will recall considering a planning application for flood defence improvement works in this compartment on 15 August 2008. At the meeting the application, which included the proposal to retain (not maintain) piling used as Broads 24 hour mooring close to Potter Heigham, was refused on the following ground:

The proposal would result in the loss of short-term visitor moorings to the north of Potter Heigham bypass (A149) bridge to the south of the old Potter Heigham road bridge. These moorings represent an important component of the network of short-term visitor moorings by providing an important facility for visitors and residents and support the local and tourist economy of Potter Heigham and the surrounding area. The loss of these moorings would unacceptably harm the ability to enjoy the navigable water and would fail to provide adequate protection for the quality of recreation (and therefore navigation) in conflict with adopted Broads Local Plan (1997) policy INF5 and adopted Core Strategy Development Plan Document (2006) policies CS3 and CS9.

- 1.2 This application seeks to address this reason for refusal and other concerns raised by the earlier submission.

2 Description of Site and the Proposal

- 2.1 The proposal mirrors much of the previous application. The application site still extends along an 11.4 kilometre stretch of floodbank between Thurne Dyke and West Somerton Dyke. The application is again accompanied by a two volume Environmental Statement which addresses a range of environmental factors (in the form of a 158 page written statement and a second accompanying document containing plans, illustrations, drawings

and the results of pre-application consultations). Attached, as Appendix 1 is the non-technical summary that accompanies the Statement.

2.2 Within the compartment there are still a number of important features and considerations:

- Shallam Dyke Marshes, Thurne SSSI;
- large number of chalets/bungalows adjacent to the rivers edge (especially east and west of Potter Heigham bridge and close to Martham);
- the floodbank forms a continuous public right of way, part of which is a section of the Weavers Way long distance footpath;
- angling takes place from the floodbank;
- this area is well used for sailing and boating by both local residents and visitors;
- Broads 24 hour mooring is provided by the piling to both the east and west of Potter Heigham bridge; and
- other areas of piling are used for private and informal mooring.

2.3 The current flood defences comprise of earth floodbanks that are rated by BESL, in view of their profile, as being in poor to average condition. Erosion protection consists of reeded rond (55%) and piling (45%). The piling in the compartment is a mix of steel and timber and estimated to have an average residual life of 12 and 10 years respectively. BESL have indicated that 65% of piling in front of existing chalets and bungalows is maintained by the tenants and does not form part of the flood defences.

2.4 The proposals contained in this application are:

Maintain floodbank	1688m
Rollback floodbank	974m
Strengthen floodbank	8772m
Install Erosion Protection – asphalt matting	97m
Install sheet piling at Somerton Boat Dyke	326m
Install sheet piled retaining wall (behind holiday chalets)	230m

2.5 As part of this submission, this application proposes that the two lengths of piling used for Broads 24 hour mooring, close to Potter Heigham Bridge, will be maintained, not simply retained, by the project/Environment Agency. In these two areas, the Broads Authority has 87 years remaining on its lease which places it under an obligation to “keep the existing piling and staging on the premises in good and substantial repair and condition suitable for safe mooring and not to remove the same at the expiration of this lease”. Effectively this means that the Authority is responsible for maintaining the mooring path surface, posts and the capping and fendering on the piling.

2.6 BESL have outlined their proposal for the areas of existing piling. Whilst they also highlight maintenance responsibilities for each area in their Environmental Statement, the table below shows this reflecting the

obligation of the Broads Authority lease.

Change (Length)	Proposed Works	Responsibility
0-99 (99m)	Retain piles	Parish
99-296 (197m)	Retain piles	The Lion Inn
2311-2334 (23m)	Remove piles ¹	Landowner
4283-4432 (149m)	Maintain piles	BFAP & EA
4674-4800 (126m)	Maintain Piles	BFAP & EA
5710-6104 (394m)	Remove piles ¹	Landowner
9343-9428 (85m)	Remove piles ¹	Landowner
10904-11230 (326m)	Sheet pile	Parish ²

¹The piling will be removed once it becomes a navigation hazard and no longer provides effective erosion protection.

²The Broads Authority has expressed an interest in taking on the moorings possibly in partnership with West Somerton Parish Council.

- 2.7 Flood defence works consisting of the construction of strengthened floodbanks, roll back banks and the excavation of soke dykes to source the construction material will result in change to habitat, notably the loss of grazing marsh, including in the Shallam Dyke Marshes SSSI, as outlined below.

Habitat	Total Area (ha)	Shallam Dyke Marshes SSSI Area (ha)
Rond	0	0
Floodbank	+0.80	+0.03
Folding	+3.85	+0.46
Soke Dyke	+4.00	0
Marsh Dyke	-0.43	-0.03
Grazing Marsh	-8.69	-0.45

- 2.8 BESL have highlighted that the flood defence works will help restore the SSSI to a favourable condition, as required by Natural England. Furthermore as grazing marsh is a Biodiversity Action Plan (BAP) priority habitat, the Environment Agency intends to create replacement habitat (either through conversion of arable fields or improvement to poor quality grazing marsh) either locally or elsewhere in the region.
- 2.9 During the works, access to some areas of floodbank will need to be restricted. In terms of walking interests, other footpath links are available for use during periods when access to the floodbank is restricted. Angling will also be restricted, however not all the floodbank will be closed so fishing opportunities will still exist.
- 2.10 The applicant proposes to start work in Spring 2009 with completion in 2011. The main site compound is proposed at Ferrygate Lane, Martham, with a smaller pile storage compound, with welfare facilities at West Somerton. Working hours are proposed as 7.00 – 18.00 Monday to Friday and 7.00 –

13.00 Saturdays. Construction activities adjacent to Thurne bungalow/chalets are not proposed to start before 8.00 with no Saturday working.

2.11 As no set back of floodbanks is proposed in this compartment, no need for a permanent footpath diversion has been identified by BESL as part of this application.

3 Site History

BA/2008/0180/FUL	Flood defence improvement work including a line strengthening, rollback and examination of soke dykes	Refused 20/08/2009.
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4 Consultation

Thurne Parish Council – Construction work at the Parish Staithe should not take place during the holiday season, as this will restrict access for the tourist industry. Concern has been raised by businesses that trade may be affected if work is carried out during the main season. Given the current economic climate, careful consideration must be given to this.

Repps-with-Bastwick Parish Council – Refuse. It appears that the applicant has not considered the comments and concerns made by this Council in respect of the original application in July 2008. The Council therefore renews its original objections, points 1 to 5, and adds three further concerns.

- The area of car parking at the Parish Staithe, adjacent to the old bridge, the Phoenix Fleet mooring and the Bridge Pilot Office is currently too low to prevent flood water flowing onto the road at that point (4500). It is understood that the Environment Agency have complained that raising the level of the flood defence around this area would, in turn, cause the Pilot Office to flood. Their remedy is, apparently; to pump away the floodwater into the new drainage dyke. To do this is considered to be a waste of energy, as well as being potentially environmentally damaging as there is every possibility that, on a high tide, saline floodwater will be pumped into the fresh water drainage dyke. The Pilot Office is a commercial building which is not used throughout the year. The Agency should therefore be required either to re-locate the office, or arrange for it to be elevated so as to avoid flooding.
- At chainage 4600 there are various low points in the river wall near to the new road bridge. These works should be included in the plan.
- At chainage 3200 where the soke dyke returns to its original line between the weed screen and the pump at Staithe Road, the bank will require reinforcement with concrete or steel piles to correct its porous and weak status.
- At chainage 3930 (The Old Mill) the drain from the property in the south easterly direction is the main drain for the village and also the sewage system. To prevent backing-up and flooding this should be diverted when

- constructing new works.
- There is a general concern regarding the amount of construction traffic which will be using the narrow village roads. A policy statement on the impact of such traffic and any plans for re-instatement of verges etc, would be appreciated.
 - At chainage 2350 the new soke dyke between Thurne and Repps appears to have differing levels.
 - At chainage 4432 and 4674 it is noted that the word 'retained' has been changed to 'maintained'. An explanation would be welcomed.

The overall cut and fill of the proposed works is calculated to produce a surplus of material. The Council would welcome advice as to arrangements to be made for the disposal of this material.

Martham Parish Council – No comment.

West Somerton Parish Council – Awaited.

Ludham Parish Council – Need a condition to control glare/visual impact of any lighting to minimise light pollution.

Potter Heigham Parish Council – No comment.

Broads Society: Some matters of concern should be covered by specific condition if consent granted by Planning Committee:

- the removal of piles and rollback at Dungeon Corner should not take place and new piling (to a design to be agreed) installed and maintained to support this valuable casual mooring;
- the Broads Local Plan Policy INF 5 and Core Strategy Policies CS3 & CS9 should be strictly adhered to under the overall requirement for sustaining navigation and moorings;
- all matters referred to under Volume 2, Appendix 2, regarding the Broads Society comments and BESL responses should be carefully followed in regard to specific navigation, environment, access, ecology, construction and general management;
- in view of current concerns raised by the Broads community generally regarding the type of marker posts being employed by BESL at Rivers Chet and Ant after piling removal, this project should only have such indications of waterway boundaries defined by flexible lightweight (withies?) markers to obviate damage and safety risks to navigators, particularly in narrow river and dyke sections;
- the contractual liability of the Broads Authority under their current long lease from the Environment Authority for some riparian land within this compartment should be clarified to ensure that navigation and moorings are not prejudiced by the effect of this project;
- working times and dates for this project to be agreed to minimise interference with tourism, navigation and river traffic generally.

NCC Highways – Awaited.

NCC PROW – Awaited.

Environment Agency – No objection. Recommend an informative appended to any consent highlighting certain works will require the written consent of the Agency under the terms of the Water Resources Act and Land Drainage Bylaws.

Broads IDB – The affected land lies within the district of the Board, and the Board's Byelaws therefore apply. As well as privately maintained watercourses, there are a number of elements of the Board's maintained drainage infrastructure which will be affected by these proposals, and to ensure that the efficient working of this system is not adversely affected as a result of these works, the plans will require prior written consent from this Board. The Board's District Engineer has been contacted by BESL regarding these proposals, and will be dealing with both the EA and BESL as appropriate regarding the works and conditions which may be specified by the Board as part of any consent issued.

Natural England – Based on the information provided, no objection. It is our view that, either alone or in combination with other plans or projects, it would not be likely to have a significant effect on the important interest features of the Broads SAC, Broadland SPA or Ramsar site, or any of the features of special scientific interest of the Shallam Dyke Marshes or the Upper Thurne Broads and Marshes Sites of Special Scientific Interest (SSSIs). Our detailed reasoning behind this view is set out below:

- We understand that works are to be confined to the boundary of the flood compartment, away from the areas of key wildlife interest.
- As stated in our response to the planning committee on the earlier application (BA/2008/0180/FUL), we consider that this proposed development is essential to prevent saline intrusion into Shallam Dyke Marshes, thus benefiting the hydrology of the SSSI. This site is part of the Broads SAC and Broadland SPA and Ramsar Site. Six out of the eight units, covering approximately 60 hectares of this 70-hectare site, are currently in unfavourable condition because of saline intrusion, and the remedy identified to address this is the flood defence work proposed in this planning application. Without this work being undertaken the site will continue to deteriorate. As you will be aware, it is a Government target for all public bodies to ensure that 95% by area of all SSSI is in target condition by 2010, so these works are an important part of meeting this Public Service Agreement target. You will also be aware of the requirement in Section 28 (G) of the Wildlife and Countryside Act (as amended by Schedule 9 of the Countryside and Rights of Way Act) for all public bodies to further the conservation and enhancement of the features for which SSSIs are designated. There is a further obligation in Article 6 of the Council Directive 92/43/EEC (the 'Habitats Directive') that member states take appropriate steps to avoid the deterioration of habitats within SAC sites. You will also be aware from PPS 9 that the Government's objectives for planning are "to conserve, enhance and restore the diversity

of England's wildlife and geology by sustaining, and where possible improving, the quality and extent of natural habitat and geological and geomorphologic sites..."

- Only modest works are proposed adjacent to the Upper Thurne Broads and Marshes SSSI.
- The timing of works and other measures incorporated into the scheme will prevent significant disturbance/damage to designated wildlife.

RSPB – Awaited.

Norfolk Landscape Archaeology: No objection. The proposed flood defence improvement works lie close to archaeological remains of mainly medieval to post-medieval date. They include drainage mills and wind pumps, former brickworks, areas of peat extraction and flood banks. A section of post-medieval flood bank visible on aerial photographs has previously been recorded adjacent to Thurne Mill. There is also potential for previously unrecorded archaeological remains to be present along the valley floor. The proposed works, particularly the widening and construction of new soke dykes, will potentially have an adverse impact on these remains. We note that we have commented on the previous application for this section of riverbank works. Our recommendations remain the same. If planning permission is granted, we therefore ask that this be subject to a condition for a programme of archaeological work in accordance with Planning Policy Guidance 16, Archaeology and Planning (1990), para. 30. We suggest that the following condition be imposed:

No development shall take place within the site until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the local planning authority.

In this instance the programme of archaeological work will comprise occasional monitoring of ground works under archaeological supervision and control. If the section of historic floodbank adjacent to Thurne Mill survives as an earthwork, a topographic survey of this monument will also be requested. It appears from the plans submitted with the application that none of the works will impact directly on the existing drainage mill and wind pump sites, but we would request that due care is taken to avoid damaging these monuments. Norfolk Landscape Archaeology will provide a brief for the archaeological work on request.

GYBC EHO – Awaited.

Ramblers – Awaited.

The Navigation Committee considered a report regarding this application at their meeting on 26 February 2009. The officer report concluded the following:

'The proposal for the Potter Heigham moorings has been changed to maintain the piling and officers particularly welcome this amendment to the original proposals. Provided that the appropriate specifications are agree for piling, erosion protection and channel marking, officers consider that the other flood defence works proposed in this application will have a limited effect on the navigation. Officers also accept the need for the scheme and welcome the protection it will afford to the designated sites in the compartment. The potential for enhancements is also welcomed, as is the fact that the condition of the public rights of way in the Compartment will be significantly improved after flood defence works are carried out'.

Members will be updated at the meeting whether the Navigation Committee endorse the officer views outlined above.

5 Representations

Two letters have been received.

- a) Thurne Bungalow Management Company
We act on behalf of the above-mentioned company who hold the lease for 182 bungalows and plots on the River Thurne all of whom are affected by this proposal. The Directors of the company have studied the proposals in depth and would like to make the following observations:
- On behalf of all our owners we would like an assurance that all work will be carried out between the hours of 8.00am and 6.00pm on normal working days. That would preclude weekend and bank holiday working.
 - The proposals suggest that following the works our owners would be precluded from using the rear bank as their garden as they have done since the bungalow ownership were decided and before. Particularly it seems they will be precluded from 'green composting' as anyone would in their back garden. I understand the Environment Agency intend to cut vegetation on the bank once a year (and presumably remove the cuttings to avoid a double standard). The owners will have a 'green waste problem' that will have an 'on' cost. Effectively, by stealth, the owners back gardens are being taken away. The Environment Agency is the freeholder and will be interfering with the right to 'quiet enjoyment' and may be derogating from the original lease granted.

Please note that the company has previously agreed with Halcrow that existing boundaries will be earmarked after the change and that access to all the bungalows will be maintained at all times.

- b) Mrs Greatbatch (R56 Riverside)
Objects to the application on the following grounds:

"I am the disabled owner of Chalet R56. With my electric scooter I can just about manage to get to my property from Repps Staithe where I park my car. During the recent flooding of the path this November some parts of the path was under a couple of feet of water and it proved impossible for me to go from my property to access the local shops at Potter Heigham or indeed to get back to my car. I was well and truly stranded. The only option I had, aided by my walking sticks and companion, was to walk on the grass flooded bank adjacent to the path. This was extremely dangerous, however very slowly I made progress.

I am concerned that this planning application gives no thought to all those who are disabled. If local flooding occurs (which it does a couple of times a year) whilst the work is in progress or until flood bank is established with grass I will not have any alternative refuge for access to and from my property.

I believe before this application is approved, the existing path, which provides access to Thurne bungalows on Repps riverbank, should be widened and made free from water retention. I also believe that the new flood banks should be turfed and not seeded. This will provide firmer refuge walking than the proposed seeded soil banks."

6 Policies

Norfolk Structure Plan ('saved' policy)

Policy ENV 14 – Overall Strategy for the Norfolk Broads

Broads Local Plan ('saved' policies)

Policy INF 5 Broadland flood alleviation strategy

In considering the Environment Agency's proposed Broadland Flood Alleviation Strategy, the Broads Authority will seek to ensure that the following issues are fully incorporated:

- a) minimising the risk to people and property, both in the defended and the undefended areas;
- b) adequate protection for the natural resources of the area, including the water environment, the wildlife habitats and species;
- c) adequate protection for the quality of recreation and navigation in the Broads;
- d) adequate protection for grazing marshes to ensure the continued viability of farming within the Environmentally Sensitive Area scheme;
- e) investigation and implementation of opportunities for environmental enhancement, for example by habitat creation or river regeneration;
- f) investigation and implementation of opportunities for recreational and navigational enhancement;
- g) investigation and implementation of opportunities to enhance the visual amenity and landscape of the Broads, from land and water,

- having regard to local character;
- h) minimising any significant adverse impact on local communities and on the Broads landscape, wildlife and waterways from development required to implement the strategy;
- i) minimising any significant adverse effects on the residential amenities of occupiers in the surrounding area from development required to implement the strategy.

Policy C 3 Other areas of nature conservation interest

The Authority will seek to protect the wildlife interest of sites of local nature conservation importance.

Policy C 8 Piling and quay heading

Piling of banks will be permitted only where there is a need to prevent bank erosion by this method and it is for the following reasons:

- a) for navigation purposes;
- b) to meet flood defence requirements;
- c) where piling is required in association with development which has been granted planning permission.

Where appropriate, the Authority will seek a planning obligation from the developer.

Policy C 14 Development on drained marshland

Development will not be permitted on the drained marshlands, except for development which is essential for conservation management, agricultural or land drainage purposes and which cannot be located elsewhere.

Policy TR 2 Development impinging on the waterways

Development which would adversely affect navigation by impinging on or otherwise obstructing the Broads waterways will not be permitted.

Policy TR 27 Public rights of way and public access

When determining development proposals, the Authority will seek to safeguard public rights of way and to pursue opportunities for increased public access where appropriate.

Policy TC 6 Local Highway Network

New development served by a road forming part of the Local Highway Network will be permitted provided that any resulting increase in traffic would not have a significant adverse effect on:

- a) highway safety; and
- b) the route's traffic capacity; and
- c) the amenity and access of any adjoining occupiers.

In appropriate cases a Traffic Impact Assessment will be required to demonstrate that development proposals can be accommodated on the local

road network, taking into account any infrastructure improvements proposed.

Broads Core Strategy adopted September 2007

Policy CS 1 Development and changes in land use / management must ensure that all aspects of the environmental and cultural assets of the Broads distinctive landscape are protected, enhanced and restored.

Proposals should ensure opportunities for positive impacts on the following core assets have been addressed and adverse impacts avoided:

the defining and distinctive qualities of the varied landscape character areas formed by the built and natural environment
tranquillity and wildness as part of the Broads experience
the value and integrity of nature conservation interest and
the character, appearance and integrity of the historic and cultural environment

Opportunities to mitigate the visual impact of currently intrusive features should be sought.

Policy CS2 In the interpretation and implementation of the Core Strategy policies, full regard will be taken of the objectives of European and National nature conservation designations and adverse effects avoided.

Policy CS3 Navigable water space will be protected and enhanced through:

- (i) the design of flood alleviation/protection projects; and
- (ii) avoiding development and changes in land management which are detrimental to its use.

Policy CS4 The Broads landscape is partly man-made and is constantly changing. There will continue to be opportunities to create new environmental and cultural assets on any scale of development and these will be sought where they:

- (i) create new high quality land and water-based landscapes which reflect the essential Broads characteristics, offering biodiversity gains through habitat creation and opportunities to improve facilities for navigation and recreation;
- (ii) improve the quality of the built environment;
- (iii) involve, for all new developments, good quality design, the use of sustainable construction methods and the use of locally sourced materials;
- (iv) incorporate crime reduction measures in line with "Secured by Design";
- (v) protect, maintain and enhance the nature conservation value of the Broads paying attention to habitats and species;
- (vi) contribute to ecological networks and create habitat corridors,

- (vii) especially linking fragmented habitats of high wildlife value; and encourage and facilitate the development of alternative and more sustainable solutions to flood risk and alleviation, taking into account the likely changes as a consequence of climate change

Policy CS6 The archaeology of the Broads will be better understood, protected and enhanced by:

- (i) protecting existing archaeology from inappropriate development or change;
- (ii) raising awareness of potential archaeology through the identification of likely sites/finds;
- (iii) the adoption of methodology and procedures for the notification, recording and interpretation of unanticipated finds; and
- (iv) encouraging the interpretation of archaeology.

Policy CS9 The tourism base in the Broads will be supported, widened and strengthened by:

- (i) encouraging a network of tourism and recreational facilities throughout the system and protecting against the loss of existing services;
- (ii) protecting waterside employment sites to contribute to the local economy;
- (iii) incorporating employment uses in new schemes;
- (iv) supporting diversification of tourism where economically and environmentally sustainable; and
- (v) promoting low-impact tourism.

Policy CS14 The provision of a range of additional short and long-term visitor moorings will be encouraged in order to ensure that visitor moorings are available in appropriate locations and where they are most needed, where they contribute to the management of a safe and attractive waterway and in settlements where services and facilities are available.

7 Assessment

7.1 This application seeks to address the concerns raised by the previous submission. In view of the revised nature of the flood defence proposal, the comments received from consultees and the planning policy context (provided by the Broads Core Strategy and Local Plan), it is considered that the main issues relate to:

- (i) impact on boating and mooring provision;
- (ii) impact on ecology and habitat;
- (iii) impact on walking and angling interests;
- (iv) impact on amenity, archaeology and other considerations.

7.2 Impact on Boating and Mooring Provision.

7.2.1 As with the previous planning application for works in this compartment, this

proposal will provide flood defences in a more sustainable manner through the provision of roll back banks and the removal, in a number of areas, of hard erosion (piling) protection measures. Whilst this meets a key aim of Core Strategy DPD policy CS4, this approach does have the potential to impact on navigation and mooring opportunities, which Core Strategy DPD policy CS3 and Local Plan Policy INF5 seek to protect.

- 7.2.2 The existing piling in this compartment is predominantly used for private long and short-term or informal mooring in areas some distance from important gateways into the Broads. However close to Potter Heigham there are two lengths of piling used as Broads 24 hour mooring. These form an important component of the wider network of Broads 24 hour mooring. Whilst the previous proposal was to retain these two areas of piling, this revised proposal is to maintain this piling, securing in the long-term this Broads 24 hour mooring facility close to the concentration of services in Potter Heigham. Therefore, it is considered that this fundamental change in the proposal would satisfactorily protect this Broads 24 hour mooring, protecting the quality of recreation (and therefore ability to enjoy the navigable water) plus retaining the benefit this mooring provides to the local economy and businesses close by.
- 7.2.3 It is recognised that the proposal provides benefit by additional piling in the compartment with over 300 metres of new piling at West Somerton (which could be developed in a potential project as future Broads 24 hour moorings).
- 7.2.4 The Broads Society suggest that towards the eastern end of the compartment, a short area of piling at Dungeon Corner, close to Martham Broad should also be maintained (or new piling installed) as it forms an important casual mooring. BESL have indicated that this piling is no longer needed for erosion protection purposes and extensive new piling is being provided at West Somerton Dyke. Whilst this area may be used to moor at times, it has not been identified as an important area for mooring. Therefore it is not considered reasonable or justified to require the maintenance of this hard erosion protection when a soft, more sustainable solution, can be used. Furthermore the planning drawings show that this section of piling will be retained in the short term until it deteriorates and becomes a hazard. It will therefore continue to be available for casual mooring during this period.
- 7.2.5 Concern has been expressed regarding the nature and form of navigation markers that should be used in this compartment. Broads Navigation Officers work closely with BESL to agree the most appropriate specification of marking to be used. In addition, BESL have confirmed that the use of alternative markers is being discussed in relation to the River Ant, following concerns expressed by some river users. It is considered unreasonable to specify the precise type of marker post to be used throughout the compartment at this stage. However it will be important that this matter is addressed by planning condition, to ensure the most appropriate form of marking is used based on the width of river and type if hazard to be identified.

7.2.6 As with other BESL applications, if Members are minded to approve this application, it is considered that the following additional conditions are reasonable and necessary to be imposed in relation to navigation matters:

- PD rights removed for piling removal;
- all details of new piling and details of repair/maintenance to be agreed;
- navigation markers to be installed, where necessary, including linked to roll back (to a design to be agreed with Broads Officers);
- erosion protection to be agreed prior to works being undertaken; and
- phasing/timing of works to be agreed.

Based on these factors, it is considered that the application does meet the key tests of policies INF5, C8 and TR2 of the Broads Local Plan and CS3, CS9 and CS14 of the Broads Core Strategy.

7.3 Impact on Ecology and Habitat

7.3.1 The proposal will provide significantly enhanced defences protecting wildlife and agricultural land in the compartment, extending to 630 hectares. This includes the Shallam Dyke Marshes SSSI which is currently in an unfavourable condition. This proposed floodbank work will provide an improved and appropriate level of protection for this area restoring it to a more favourable condition. These factors represent very positive benefits of the scheme.

7.3.2 The proposal will however result in the loss of 8.6 hectares of existing grazing marsh as a result of floodbank strengthening, rollback and the excavation of new/widened sokedykes. This will include the loss of 0.48 ha of important habitat, mainly grazing marsh, in the SSSI. The replacement habitat of folding, floodbanks and sokedykes to be created would have more limited biodiversity interest. The change in habitat and loss in grazing marsh, whilst regrettable, is not considered to represent such a significant impact to outweigh the significant benefits of enhanced flood defence, the additional protection of the SSSI from saline intrusion and the conservation of grazing marsh. This is a view endorsed by Natural England. In these circumstances the proposal does accord with the general nature conservation provisions of policies INF5, C3 and C14 of the Local Plan and the sustainable development aims promoted by the Core Strategy Policies CS1, CS2 and CS4.

7.4 Impact on Walking and Angling

7.4.1 The proposals require works to the existing floodbank both in terms of strengthening and roll back of existing banks. This will require access to the floodbank to be restricted during works. However in view of the number of bungalows/chalets accessed from the footpath, BESL have indicated only parts of the floodbank will need to be closed during works, with access to chalets/bungalows retained. Where areas of floodbank are to close, alternative routes using existing footpaths are available to maintain links and

walking opportunities, limiting any impact on walking interests. Notwithstanding this, it is considered that a planning condition is justified and necessary to control the duration and timing of footpath closure and its signage (to cover both the closure and the alternative footpaths routes available for use). A local resident has raised concerns regarding disabled access at the rear of chalets / bungalows. Following works, a more consistent quality of floodbank crest will be provided which will be a long-term benefit for walkers and provide enhanced access along the floodbank footpath. It is considered that the benefits of enhanced flood defence works and improved footpath outweigh short-term inconvenience and the proposal does not conflict with the recreation aim of policies INF5 and TR27 of the Local Plan.

- 7.4.2 Angling will also be restricted during works to the floodbank. However angling facilities will be improved following the completion of works. Two planning applications have recently been submitted for the installation of new, and repair of existing, platforms at Martham and Potter Heigham (BA/2009/0021/ FUL and BA/2009/0022/FUL) to coincide with flood defence improvements.

7.5 Impact on Other Considerations

- 7.5.1 BESL have sought to limit impact on amenity by proposing more restrictive hours of working close to residential properties. The proposed hours of working, away from residential properties of 7.00 – 18.00 Monday to Friday and 7.00 – 13.00 on Saturdays are reasonable. However the more restrictive hours of working of 8.00 – 18.00 Monday to Friday only is welcomed close to chalets and bungalows and should be conditioned accordingly. The BESL proposal to ensure working close to Thurne Parish Staithe will be outside the peak boating season is also welcomed. Based on these factors, it is considered that works will satisfactorily limit impact on amenity and visitor activity, meeting the aims of policy INF5 of the Broads Local Plan.
- 7.5.2 The compartment contains a number of features of historic interest, in particular Thurne Mill. The proposal seeks to ensure flood defences close to these features protect their fabric and setting. In view of the considerable historic interest, Norfolk Landscape Archaeology have recommended a condition is imposed to identify and record any interest. This condition is justified and subject to its imposition, this would meet the requirement of policy CS6 of the Broads Core Strategy.
- 7.5.3 Whilst the view of the County Highway Authority is awaited, construction traffic using the main site compound will pass Martham Primary School. This could lead to potential conflict between heavy vehicle movements and pedestrian safety at school drop off and pick up times. To address this, a condition should be imposed to control heavy vehicle movement at school drop off and pick up times. In addition it is also recommended a condition is imposed to limit vehicle routing and to reinstate any damage to the highway caused by construction traffic. These conditions would be consistent with

policy INF 5 and TC 6 of the Broads Local Plan.

- 7.5.4 Ludham Parish Council have raised concern regarding lighting the potential for glare and visual intrusion and suggested a planning condition should be imposed. Lighting for the scheme is generally linked to the site compound facilities. On previous applications for flood defence works, a planning condition has not been imposed. Furthermore light pollution has not generally proved to be a problem with other BESL sites as a result of their effective site management practices. BESL have confirmed that they will ensure that care will be taken to limit lighting and glare and it is considered that a planning condition is not justified in this case.
- 7.5.5 Repps-with-Bastwick Parish Council have raised concerns regarding BESL's failure to satisfactorily address their concerns raised in the original submission. However in pages 18 and 19 of the Environmental Statement, BESL respond to the Parish Council concerns previously raised, showing the manner in which the initial scheme has been modified to address the issues raised on the original application:
- With regard to the Pilot Office, BESL will now locally raise levels surrounding the Pilot Office; this won't prevent flooding at times of exceptionally high flood events but it will reduce the frequency of flooding to the road.
 - Low points on the river wall will be addressed and included as part of the scheme.
 - The scheme now shows piles close to chainage 3200.
 - Discussions are ongoing with IDB regarding the drain at chainage 3930 regarding water management in this area.
 - Care has been taken to find the best routes for construction traffic. The use of residential roads through Bastwick has been avoided and BESL also aim to avoid using roads through Repps; however, there is a need to keep option open. BESL will be able to track vehicles along the floodbank and cross Staithe Road close to the Staithe, through it must be appreciated that there is a need to allow to plan for other scenarios. Large traffic using local roads will be minimised by keeping our machinery on the floodbank for as long as possible.

8 Conclusion

- 8.1 As with the previous application, the proposal would deliver clear benefits of enhanced flood defence of an extensive area of grazing marsh and help improve the condition of the SSSI. However in this case, the scheme also safeguards the long-term future of the Broads 24 hour mooring either side of the Potter Heigham bridge, by providing the commitment to maintain, not simply retain, this piling. Therefore subject to the conditions outlined in appendix 2, the scheme is acceptable and meets the key test of planning policy contained in the Broads Local Plan and Core Strategy.

9 Recommendation

Subject to no substantive representation/comment being raised from the outstanding consultees, this planning application be approved subject to the following conditions:

- standard time limit condition;
- permitted development rights removed;
- landscaping/planting;
- temporary footpath closure signage;
- archaeological investigation;
- site access/delivery route;
- navigation hazard markers;
- restoration of site compound after use;
- restoration of working/mitigation measures;
- hours of working;
- phasing of works to flood banks;
- erosion protection to accord with details agreed with Broads Authority;
- details of new piling/repair to be agreed; and
- timing of construction traffic movement close to Martham Primary School.

The following informative be specified on the decision notice of the planning application:

- The permission shall be granted in the context of the Memorandum of Understanding between the Broads Authority and the Environment Agency on 25 April 2003.
- Works may need separate consent under the Land Drainage By-Laws.

Reasons for Recommendation

The application is considered to meet the requirement of the Broads Local Plan and Core Strategy DPD policies, in particular Policy INF5 (Broadland Flood Alleviation Strategy) and would not materially conflict with other policies in the Plan and Strategy. The proposal is considered to represent an appropriate design of development associated with flood defence work in this location.

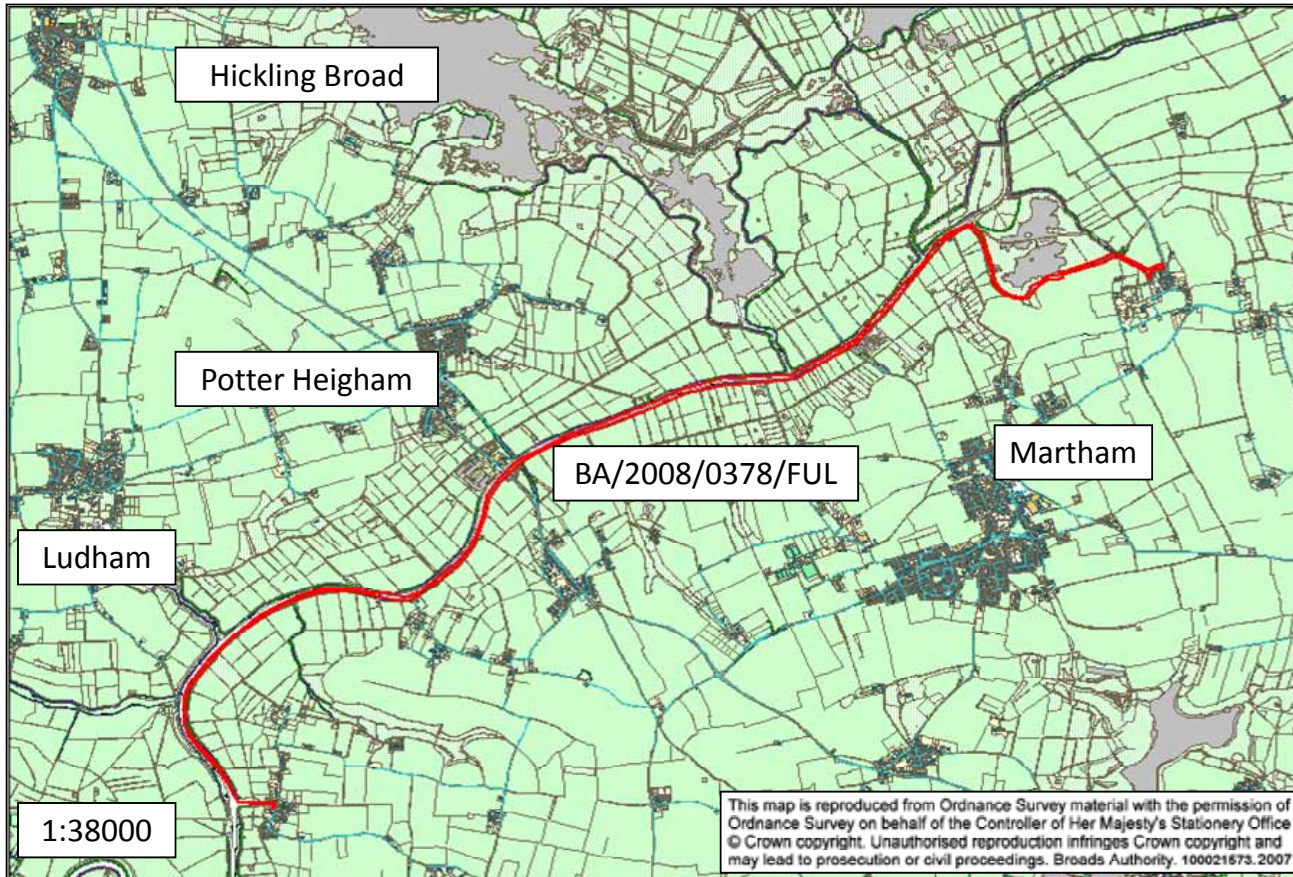
Background papers: Application File BA/2008/0378/FUL

Author: Andy Scales
Date: 16 February 2009

Appendices: APPENDIX 1 – Location Plan
APPENDIX 2: Environmental Statement
APPENDIX 3: Draft Conditions

APPENDIX 1

BA/2008/0378/FUL - Compartment 7, Thurne To West Somerton
Improvement works for 11.4km of floodbank on the River Thurne between Thurne and West Somerton



Non-Technical Summary

Introduction

Broadland Environmental Services Limited (BESL) is working on behalf of the Environment Agency to carry out a programme of flood defence improvements and maintenance in Broadland. This work forms part of the Broadland Flood Alleviation Project (BFAP), a long-term 20-year programme of sustainable flood defence improvements in the area.

As part of this long-term project and in line with its recently updated Strategy, BESL is proposing flood defence improvements along an 11.4km stretch of floodbank between Thurne and West Somerton along the left (southern) bank of the River Thurne.

The proposed improvement works need planning permission from the Broads Authority. To comply with planning legislation BESL has prepared an Environmental Statement in order to inform the public and decision-makers of the likely environmental effects of this scheme. This shorter report has been prepared as part of the Environmental Statement as a non-technical summary.

A planning application (reference BA/2008/0180) for this scheme was originally submitted in May 2008. However, the application was refused at the Planning Committee on 15th August 2008 because:

"the loss of moorings would unacceptably harm the ability to enjoy the navigable water and would fail to provide adequate protection for the quality of recreation (and therefore navigation) in conflict with Broads Local Plan Policy INF5 and Core Strategy Policies CS3 and CS9" (Committee minute).

The concern related to the fact that the proposal for the length incorporating the Broads Authority 24-hour moorings upstream and downstream of Potter Heigham bridge was to rollback the floodbank and not maintain the piling. The riverbank and piling, leased from the Environment Agency, would not be "maintained" (i.e. piling replaced) by the BFAP. There was disagreement between the Broads Authority and the Environment Agency about the terms of the lease and who was responsible for any future replacement of piles or provision of alternative mooring structures.

This revised application includes provision for the piling that is used for 24-hour moorings to be maintained by the BFAP (see Recreation and Navigation below).

Need for the scheme

Flooding within the Broadland river system is caused by extreme water levels in response to either tidal surges or high fluvial surges, resulting in overtopping of low-lying floodbanks. Where floodbanks are in poor condition overtopping can lead to collapse and breach of the floodbank and flooding of the land behind.

The protection provided by floodbanks along the Broadland rivers is continually reducing because of settlement, deterioration over time, insufficient maintenance in the past and sea level rise. The flood defences directly protect a number of residential properties and businesses as well as part of the A149 Great Yarmouth to North Walsham Road. Furthermore the marshes lie within the Broads Authority Executive area, part of a nationally important landscape that is valuable for wildlife, agriculture, cultural heritage, the local economy and people's recreational enjoyment of the area. The total area of land protected is 630ha.

Public consultation

As part of the planning and design process for these proposed works, BESL carried out a pre-application consultation exercise with key stakeholders, local interest groups and landowners. This included early dialogue with the Thurne Bungalow Management Committee and River Thurne Tenants Association. A consultation document and questionnaire describing the proposals were distributed in December 2007.

During the pre-application consultation a wide range of issues were raised in relation to the proposed scheme. BESL has sought to address these issues automatically, wherever it can do so within the remit to provide sustainable flood defences. The issues raised by the consultation exercise and during the planning application are reported in the Environmental Statement that is submitted with the revised application.

The proposed scheme

The proposed flood defence improvements for Compartment 7 involve the following:

- 8772m of floodbank **strengthening**;
- 974m of floodbank **rollback**;

In addition various forms of erosion protection (EP) will be provided:

- 326m of new sheet piling (Somerton Boat Dyke);
- 175m of sheet piled retaining wall behind holiday chalets; and
- 97m of asphalt matting.

A temporary main site compound (including welfare facilities, e.g. toilets and mess huts within the works corridor) and associated engineering operations will be located on an area of former grazing marsh currently used for storage of agricultural machinery off Ferrygate Lane, Martham.

Floodbank **strengthening** is proposed where there is a reasonable existing width of road between the river and the floodbank. It involves strengthening the floodbanks along their existing alignment by placing material on the back and/or front slope. It also usually involves raising the level of the crest to account for past and future settlement. Strengthening creates a wider crest and broader profile, which reduces the likelihood of the banks breaching when high level events overtop them.

Rollback involves moving the line of the floodbank away from the river but without constructing a distinct new bank. It is the preferred solution where the existing road and/or erosion protection is insufficient to allow for just bank strengthening and where ground conditions or other constraints do not permit full setback.

Material for the works will be sourced from the digging of new soke dykes. Due to the narrowness of the current folding (area between the bank and soke dyke) all of the existing soke dykes will have to be in-filled.

The flood defence improvement works are planned to commence in Spring 2009 and be completed during 2010.

Land use and local community

A notable feature of this area is the presence of a large number of chalets along the river's edge – 'Thurne Bungalows'. The flood defence is located behind the

bungalows and is formed by a bank with a concrete floodwall. The bank behind the floodwall will be widened and the dyke to the rear in-filled and a new one excavated in the marshes. This will inevitably cause disruption and disturbance but the aim is to maintain access throughout the works period. On completion the wide crest behind the wall will provide an alternative access route at time of high water. Furthermore the improvements will reduce the risk of the floodbank from breaching and thereby undermining some of the properties.

The proposed works will have a major beneficial effect in protecting the agricultural land of that lies within the compartment. There will be a permanent loss of 8.7ha of grazing marsh due to the need to excavate material from the marshes. The loss of productive agricultural land is regrettable but is small compared to the extent of land that will be afforded greater protection from the impacts of flooding were there to be a breach. Furthermore, the works are only cost effective if the material is sourced locally from the adjoining marshes. There would also be a significant environmental impact of having to import huge quantities of clay to site via the local road network.

A number of tourist related businesses including pubs, boatyards and shops are located along the River Thurne. It is not anticipated that there will be any significant impact on these businesses as most visitors access from the road network. Where access is from the river (e.g. Potter Heigham and Thurne) works will be programmed outside of the main holiday periods.

There will also be some disruption to farming activities close to the works corridor during construction. BESL will provide landowners with appropriate compensation for both temporary and permanent effects. Any land, including access tracks and roads damaged by the construction process, will be returned to their original state upon completion of the works.

During construction there may be some noise disturbance and visual impact to nearby residents, businesses and visitors. The contractor will operate a Project Management Plan that contains provisions for minimising disturbance to neighbours and the public, including limiting the working day to Monday to Friday (07.00-18.00) Saturday mornings (07.00-13.00) with no Sunday or Bank Holiday working. Construction activities adjacent to Thurne bungalows will not start before 08.00, with no Saturday working.

Ecology and nature conservation

The works will provide an appropriate standard of defence to the freshwater features within the Shallam Dyke Marshes Site of Special Scientific Interest (SSSI). The site is currently suffering due to the relatively poor state of the bank leading to frequent seepage of nutrient-rich river water into the marshes. It is a Government target for all public bodies to ensure that 95% by area of all SSSI is in target condition by 2010, so these works are an important part of meeting this Public Service Agreement target.

The net change in habitats that will result from implementation of the scheme are listed in the table below.

Habitat	Total Area (ha)	Shallam Dyke Marshes SSSI Area (ha)
Rond	0	0
Floodbank	+0.80	+0.03
Folding	+3.85	+0.46
Soke Dyke	+4.00	0
Marsh Dyke	-0.43	-0.03
Grazing marsh	-8.69	-0.45

Grazing marsh is a national and local Biodiversity Action Plan priority habitat. As part of targets set by the Department for Environment, Food and Rural Affairs (DEFRA), the Environment Agency must aim to avoid any overall loss of BAP habitat as a direct result of flood defence works. In terms of the Broadland Project the only means of cost effectively delivering the maintenance and improvement works to the flood banks is to source the material from the marshes.

Consequently there will always be a reduction in the area of grazing marsh following the implementation of individual schemes. However, this reduction has to be considered against the fact that the losses are very small compared to the much larger area of grazing marsh, and associated wildlife that will benefit from improved protection afforded by the works. Nevertheless, the Environment Agency intend to create replacement habitat (e.g. conversion of arable fields) to ensure that overall there will be no net loss of grazing marsh. The improvement of

poor quality grazing marsh is also being considered as an option given the limited amount of arable land in the Broads. If there is difficulty with meeting the targets locally then alternative sites will be sought within the Anglian region. Replacement for the element of loss within the SSSI has already been provided by the BFAP as part of an arable reversion scheme on Halvergate Marshes.

The main potential impacts on habitats and species are:

- loss of vegetation on the existing floodbank, folding, and within dykes;
- disturbance to breeding birds or destruction of active nests; and
- risk of killing or injuring protected species including water vole, common lizard and grass snake.

These impacts will be avoided or reduced through scheme design and adoption of mitigation measures that have been successfully used on previous schemes e.g. discouraging nesting birds within the working corridor by cutting vegetation before the bird breeding season begins.

The scheme will also incorporate improvements and enhancements to habitats, which will benefit species e.g. the design and construction of new dykes to encourage colonisation by plants and water voles; the creation of breeding sites for reptiles.

Landscape and visual effects

There will be no significant changes in local views or on the overall landscape character. The proposals will result in an increase in the extent of water as a result of dyke excavation. However, open dykes are a feature of this landscape and the colonisation by reed and aquatic plants will soon soften the appearance of them. A wide ledge or 'berm' will be constructed to encourage reed growth, thereby limiting the extent of open water.

The most significant visual intrusion will be during the construction stage when there will be large areas of bare ground and working machinery next to the river. On immediate completion, the impacts will be the views of the bare soil on the floodbanks and the widened soke dykes. Grass on the floodbanks will establish within one growing season to become covered again. The reeds will also have grown in the soke dykes and on the ronds, helping to blend the affected area back

into the landscape, which will ultimately benefit from improved long-term protection.

Scrub and some trees will have to be cleared from sections of bank behind the Thurne bungalows. In future the bank will be cut annually in order to prevent scrub from developing. This is necessary in order to maintain the defences and allow easy inspection. Sections of bank covered in scrub, especially lengths associated with the concrete floodwall, are more susceptible to leaks developing and going unnoticed.

Water environment

A key requirement of the Project is that the pattern of over-topping of floodbanks in the whole system should remain the same as that which existed in 1995 (i.e. the relative height of banks between different compartments should remain the same). A hydraulic model has been developed to examine the effects on flooding patterns and river flows as a result of undertaking improvements so that design levels can be modified as required.

The hydraulic model has examined effects of this scheme together with others already completed and planned for the future. The model has looked at scenarios involving major events (those with a 1 in 20 year probability of occurring) as well as more typical high level events (average spring tide highs). The results show that there will be no significant changes to the water environment of the River Thurne, River Bure and adjacent marshes, either during construction or within the longer-term. The reduced risk of floodbank breach, and provision of an appropriate over-topping regime, will give an improved level of flood defence to the freshwater marshes and ditches.

Some concern has been raised about high water levels in the River Thurne, not just in the winter months but also in the summer. There is no one singular reason why the river levels seem to rise and remain high in the Thurne as there are so many variables. Water levels in the Thurne are likely to be affected by a combination of channel capacity; river locking by the River Bure; changes to the Thurne mouth; changes in the channel section on the Bure loop; settling land levels; and inputs from the catchment (including pumping). There has been no reduction in channel storage capacity, either for normal tidal ranges or extreme events, in the Bure as a result of flood defence works already completed or underway.

There will be temporary effects on the internal marsh drainage system during construction. The reduced risk of floodbank breach will provide an improved level of protection against serious flooding of the freshwater marshes and dykes.

Archaeology and cultural heritage

There are a large number of sites of archaeological, cultural and built heritage interest located within Compartment 7, comprising of former drainage mills, brick-pits, peat extraction (e.g. Martham and Thurne Broads) crop marks, World War II defences, former railways, potboilers and trackways/causeways.

A total of 45 features were identified by Norfolk County Council's Historic Environment Record (HER) as being located within the compartment. The most notable site is Thurne Mill which is a Grade II* listed building.

Due to the large numbers of features and importance of this area a number of discussions have taken place with specialists from the Norfolk Windmills Trust and Broads Authority. The requirement to protect known features and preserve the historical context of adjoining areas has been met through scheme design.

A method statement for working around structures of built heritage has been developed in partnership with the Broads Authority and will be adopted in order to protect such locations from the improvement works. This includes undertaking a condition assessment of relevant structures before works start and then monitoring during construction and on completion.

In addition to the known features there is the potential for previously unrecorded remains to be uncovered during material sourcing works. An archaeological watching brief will be implemented to record any archaeological features uncovered during the proposed works and minimise the effect of disturbance.

Recreation and navigation

The River Thurne is used extensively by hire boats, private boats and for sailing. Most of the piled edge is used for mooring, including BA 24-hour moorings, private rented, informal and the large number of moorings associated with the Thurne bungalows. The floodbank is used for walking, access to Thurne bungalows and angling. A wide range of businesses provide facilities at Thurne and on the opposite bank at Ludham and Potter Heigham.

The proposed works will impact upon some land-based recreational activities, notably **walking** and **angling**, due to the need to restrict access whilst the works are undertaken. The section of floodbank from Thurne to Potter Heigham forms part of the Weaver's Way long distance route and this, like other sections of bank, will have to be subject to a temporary closure. The Broads Authority has agreed that there is no need for a temporary diversion as alternative existing routes can be used between Thurne and Repps.

Information about the temporary closure and alternative routes will be clearly signed on site and updates provided on the Project's website (www.bfap.org). The completed works will result in a wider, flatter crest for walkers including an alternative route above the public footpath behind the Thurne bungalows. This will be particularly beneficial at times when the footpath is flooded.

During the original planning application consultation The Ramblers Association raised concerns that the existing public footpath behind the bungalows was becoming increasingly inaccessible due to flooding and that the proposals for the extended floodbank with a footpath on top were not compliant with the Disability Discrimination Act. BESL has discussed this issue with Norfolk County Council, as Highways Authority, and confirmed that it is not appropriate, or a requirement of the DDA, to incorporate a hard surface or other measures to improve access for disabled people at this location. The original design has been modified slightly to ensure at least a 900mm wide crest around any structures (electricity poles) that already lie along the back of the floodbank.

The Thurne and its associated broads are extremely important for **angling** and are used throughout the coarse fishing season. Martham Pits is open throughout the year as the closed season does not apply. The Environment Agency has historically provided a number of angling platforms along sections of bank that it owns and is currently planning to replace and refurbish these. BESL, the Broads Authority and Environment Agency are working closely to identify and deliver angling enhancements in this part of the system including the potential for a new slipway for small boats at Martham.

There will be no pedestrian access for fishing during the works but people will be able to continue to fish from boats where there is no restriction on mooring. On completion access to the piled edges will be available once more; longer term there may be a need to remove the piling (see below). Some of the existing fishing platforms will be replaced by the Environment Agency.

BESL and the Environment Agency acknowledge the value of piled lengths for **mooring** and the fact that a number of organisations remain concerned about the fact that some of it is not going to be maintained and replaced as it is no longer required for flood defence purposes. However, the Project Strategy promotes sustainable flood defence solutions with less reliance on piling as a method of erosion protection. This approach is reflected in the amount of funding available and means that piling can only be maintained and replaced in certain circumstances. Consequently the Project has agreed that where piling is currently used for informal mooring and is in a safe condition it will be retained in the short-term. However, responsibility for maintenance, and ultimately its replacement, will have to be with the landowner or third party. The Project will remove the piling if it becomes hazardous.

The piling used for the Broads Authority's 24-hour mooring will now be maintained by the Project although the responsibility for the actual management and maintenance of the moorings will remain with the Authority as part of their long-term lease agreement.

Conclusions

The Thurne valley represents an important recreational area for many thousands of people and a large number of local businesses are dependant upon this recreational use. As well as the standard techniques that have been used elsewhere to minimise the environmental impacts of the construction works it will be important to adopt additional measures to ensure that people that will be directly affected during construction are kept informed of the programme. This will be achieved through maintaining close contact with landowners and businesses, Thurne Bungalow Management Committee and River Thurne Tenants Association; providing posters of site information about footpath closures and programme; providing regular updates on progress and programme on the Project's website www.bfap.org. The programming of the construction works will take account of the sensitivity of particular sections of floodbank.

The completed works will provide a number of benefits to the area. The protection of 630ha of low-lying land beyond the floodbanks will benefit the wider Broads landscape, the nature conservation value of the marshes, businesses, properties, built heritage and archaeological remains. Without these works the banks will continue to deteriorate making regular, widespread flooding of the

marshes more likely and also threatening the informal recreational activities that are dependant upon the maintenance of flood defences.

The implementation of recommended mitigation and monitoring measures through an Environmental Action Plan will minimise any adverse effects and ensure that environmental benefits are delivered.

Most of the impacts will be temporary and confined to the construction period only. Overall therefore, there will be important environmental, economic and social benefits as a result of the investment in these flood defence improvement works.

**Compartment 7 Thurne to West Somerton
Application No: BA/2008/0378/FUL**

Draft Conditions

1. The development must be begun not later than the expiration of three years beginning with the date of this permission.
2. All landscaping and restoration shall accord with the approved details unless otherwise agreed in writing with the Local Planning Authority.

All planting/seeding comprised in any approved details of landscaping/restoration shall be completed within the time periods specified in the approved details or within such other period as may be agreed in writing with the Local Planning Authority.

Any planting/seeding within the limits of the scheme which fails within 5 years of the completion of the landscaping/restoration works shall be replaced in the next planting season with others of a similar size and species unless the Local Planning Authority gives written consent to any variation.

3. Notwithstanding the provisions of Article 3, Schedule 2, Part 15 of the Town and Country Planning (General Permitted Development) Order 1995 (or any order revoking or re-enacting that order) the removal of any piling on the application site shall not be allowed without the granting of a further specific permission.
4. No works shall commence on any part of the site where footpaths will be affected until a phased programme for the closure and/or temporary diversion including details of the provision / means of temporary signage have been submitted to and approved in writing by the Local Planning Authority in conjunction with Norfolk County Council. No change to this phased programme shall be permitted without the written consent of the Local Planning Authority.
5. No development shall take place within the site until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the Local Planning Authority.
6. Unless otherwise agreed in writing between the applicant and the Local Planning Authority in consultation with the Highway Authority, the means of access and egress from the development hereby permitted shall be via the access roads depicted in the Environmental Statement and approved plans. Within three months of the completion of works requiring the use of any such accesses, all restoration works shall be

carried out in the manner specified in the application unless otherwise agreed in writing with the Local Planning Authority.

7. Within seven days of works that adversely impacts on navigation, temporary channel marking shall be provided indicating the width of the navigable channel and/or the marking of hazards to boats in a manner to be agreed in writing with the Local Planning Authority. No temporary markers shall be removed prior to the completion of the flood defence works to which they relate without the written agreement of the Local Planning Authority.
8. The use of land for a temporary compounds linked to the flood defence works in this compartment shall cease within one month of the completion of work in this compartment and the land shall be restored to the previous/agreed condition, unless otherwise agreed in writing with the Local Planning Authority.
9. All works shall cease on site unless the mitigation measures outlined in the Environmental Statement have been implemented in accordance with these details and to the satisfaction of the Local Planning Authority.
10. In the chainage 2650 – 4300, 4800 – 5700, 6600 – 7400 and 11100 – 11230, the hours of working shall be restricted to 08-00 to 18-00 Monday to Friday with no work permitted outside these hours, at weekends nor on public holidays. Elsewhere in the compartment the hours of working shall be restricted to 07-00 to 18-00 Monday to Friday and 07-00 to 13-00 on Saturday with no working permitted outside these hours nor on Sundays or public holidays. No change to these hours of working shall be permitted unless agreed in writing with the Local Planning Authority.
11. No works shall commence on site until a programme for the phasing of works, including the timing of floodbank and erosion protection work, has been submitted and approved in writing by the Local Planning Authority. No change to this programme is permitted without the written consent of the Local Planning Authority.
12. No works shall commence on any piling until a detailed specification for new piling and repair work to existing piling, including the height, waling and capping, has been submitted and approved in writing by the Local Planning Authority. No change to this programme is permitted without the written consent of the Local Planning Authority.
13. Notwithstanding the provisions of Article 3, Schedule 2, Part 15 of the Town and Country Planning (General Permitted Development) Order 1995 (or any order revoking or re-enacting that order), during the implementation of this consent, no erosion protection measures shall be implemented other than those measures specified in this planning application, without the written agreement of the Local Planning

Authority.

14. Within all school term times, no construction traffic shall be permitted to use the primary access construction traffic route that passes Martham Primary School between 8-00 and 9-30 and 15-00 and 16-00.

NOTE: This permission has been granted linked to the attached Memorandum of Understanding signed on 25 April 2003 between the Broads Authority and the Environment Agency.

NOTE: The applicants' attention is drawn to the advice that works close to any floodbank may require consents under the Water Resources Act and Land Drainage by-laws.

The reasons for the above conditions are

- 1 Required to be imposed by Section 91 (as amended) of the Town and Country Planning Act 1990.
2. For the avoidance of doubt and in the interests of the visual amenities and to ensure a satisfactory appearance and form of development in compliance with policy INF5 of the Broads Local Plan and policy CS4 of the Core Strategy DPD.
3. In order to comply with policies TR2 and INF 5 of the Broads Local Plan and that the Local Planning Authority may retain control over future development that could be detrimental to navigation interests or the character and appearance of the Broads if otherwise allowed by the above mentioned Order
4. To ensure that the impact on access to the network of public rights of way is limited during the flood defence works in compliance with policy TR27 of the Broads Local Plan.
5. To ensure that the archaeological interest of the site is investigated and recorded in accordance with policy INF5 of the Broads Local Plan and CS6 of the Core Strategy DPD.
6. To control the impact of construction traffic and ensure satisfactory restoration works to accord with the aims of policy INF5 of the Broads Local Plan.
7. To ensure that works undertaken do not prove a hazard to navigation in accordance with policies TR2 and INF5 of the Broads Local Plan and policy CS3 of the Core Strategy DPD
8. To ensure that the landscape and wildlife interests are protected to accord with the aims of policy INF5 of the Broads Local Plan.
9. To ensure that the landscape and wildlife interests are protected to

accord with the aims of policy INF 5 of the Broads Local Plan and policy CS4 of the Core Strategy DPD.

10. In order to limit impact on the amenities of local residents and visitors to meet the aims of policy INF 5 of the Broads Local Plan.
11. To ensure an orderly approach to works to limit impacts on recreation, navigation and conservation interests to meet the aims of policy INF5 of the Broads Local Plan and policy CS3 of the Core Strategy DPD.
12. To ensure that the works provide flood defences in a manner that will preserve and enhance the use of new piling for mooring in accordance with policy INF 5 of the Broads Local Plan and policy CS3 of the Core Strategy DPD.
13. In order to comply with policies TR2 and INF5 of the Broads Local Plan, policy CS3 of the Core Strategy DPD and that the Local Planning Authority may retain control over future development that could be detrimental to navigation interests or the character and appearance of the Broads if otherwise allowed by the above mentioned Order
14. In the interests of highway safety to limit the potential conflict in movements between construction traffic and children / parents arriving and leaving at the start and end of the school day to meet the aims of policies INF 5 and TC6 of the Broads Local Plan.

Reasons for Approval

The application is considered to meet the requirements of the Broads Local Plan and Core Strategy DPD policies, in particular policies INF 5 (Broadland Flood Alleviation Strategy) of the Broads Local Plan and would not materially conflict with other policies in the Plan or Strategy. The proposal represents an appropriate design of development associated with flood defence work in this location.