

# **BLACK SLUICE**

## **INTERNAL DRAINAGE BOARD**



## **Southern Works Committee Meeting**

**Tuesday 28<sup>th</sup> September 2021 at 3:30pm**

**Station Road, Swineshead, Lincolnshire PE20 3PW**



# Black Sluice Internal Drainage Board

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Our Ref: IW/DPW/B10\_1

Your Ref:

Date: 21<sup>st</sup> September 2021

## To all Southern Works Committee Members

Dear Member

### Southern Works Inspection and Meeting on 28<sup>th</sup> September 2021

Please find enclosed the papers for the Southern Works Committee Meeting to be held after the Inspection Tour of the southern area on Tuesday 28<sup>th</sup> September 2021.

The meeting will be a hybrid meeting; having the facility to attend either physically or remotely. If you would prefer to attend the meeting remotely, please inform the office and the meeting link will be sent to you.

We shall depart at 8:30am from the Boards Offices and arrive back for the meeting around 3:30pm. Tea/coffee and bacon rolls will be provided from 8:00am onwards, drinks and a lunch will be provided.

Please wear appropriate outdoor clothing and footwear for walking and possible trailer rides.

Yours sincerely

Chief Executive

## AGENDA

1. Recording the meeting.
2. Apologies for absence.
3. Declarations of interest.
4. To receive and if correct sign the Minutes of the last Meeting of the Southern Works Committee held on 19<sup>th</sup> May 2021 (**pages 1 - 9**)
5. Matters arising.
6. To discuss the Operations Report and Inspection (**pages 10 - 39**)
  - (a) Capital Schemes Budget (**page 40**)
  - (b) Summer Cutting Works Map – Flailing 2021 (**page 41**)
  - (c) Summer Cutting Works Map – Roding 2021 (**page 42**)
7. Rainfall (**pages 31 & 32**)
8. Any Other Business.

# **BLACK SLUICE INTERNAL DRAINAGE BOARD**

## **MINUTES**

of the proceedings of a Meeting of the  
Southern Works Committee

held remotely on the  
19<sup>th</sup> May 2021

### **Members**

Chairman - \* Mr M Rollinson

- |                 |                   |
|-----------------|-------------------|
| * Mr W Ash      | * Mr J F Atkinson |
| * Mr V A Barker | * Mr K C Casswell |
| * Mr J Casswell | Mr R Dorrington   |
| Mr C Dring      | Mr A Mair         |
| Cllr P Moseley  | Mr M Mowbray      |
| * Cllr S Walsh  | * Mr C Wray       |
| * Mr J R Wray   |                   |

(\* Member Present)

In attendance: Mr I Warsap (Chief Executive)  
Mr D Withnall (Finance Manager)  
Mr P Nicholson (Operations Manager)  
Mr S Harrison (Works Manager)  
Mr K Methley (Pump Engineer)  
Mr P Holmes (Vice Chairman & Northern Works Chairman)  
Cllr P Bedford (Executive Committee)  
Mr J Fowler (Executive Committee)  
Ms Lesley Sharpe (Guest Speaker)

The Finance Manager explained that there were temporary amendments made to the Standing Orders last year to allow remote meetings to take place due to COVID-19, which had an expiry of 7<sup>th</sup> May 2021. There has now been a permanent replacement paragraph added, as displayed on screen, to allow for remote meetings to continue, which will be presented at the next meeting of the Board for approval, but are required to be presented at the beginning of any meeting prior to that due to the temporary version having expired. All APPROVED.

The Chairman welcomed the Chief Executive back to work and thanked all other members of staff for their hard work acting up in the Chief Executive's recent absence.

The Chairman informed the committee that it is planned to hopefully hold an inspection in September 2021 once COVID-19 restrictions are eased.

### 1783 **RECORDING THE MEETING – Agenda Item 1**

Members were informed that the meeting would be recorded.

### 1784 **APOLOGIES FOR ABSENCE - Agenda Item 2**

Apologies for absence were received from Mr A Mair, Mr M Brookes and Cllr P Mosley.

1785 DECLARATIONS OF INTEREST - Agenda Item 3

There were no declarations of interest.

1786 MINUTES OF LAST MEETING - Agenda Item 4

The Minutes of the Southern Works Committee, which was held on 12<sup>th</sup> November 2020, copies of which had been circulated, were considered. It was AGREED that the Minutes should be signed as a true record.

1787 MATTERS ARISING - Agenda Item 5

There were no matters arising.

1788 RECEIVE A VERBAL REPORT FROM LESLEY SHARPE REGARDING THE UPPER CATCHMENT STUDIES - Agenda Item 6

The Chairman introduced Ms L Sharpe, explaining that she has been conducting surveys for natural flood management and has visited himself amongst many other landowners.

Ms L Sharpe gave a presentation on the upper catchment studies as follows.

Ms L Sharpe explained that she was commissioned to identify opportunities and constraints for natural flood management (NFM). She began by conducting a desktop study, followed by walking all the main watercourses and flow paths. The catchment was split into six sub catchments; Heckington, Helpringham, Billingham, Aslackby, Rippingale and Morton. Constraints were considered e.g., archaeological or environmental, followed by talking to landowners where viable NFM opportunities had been identified, followed by mapping and prioritising these opportunities and drawing up ballpark costs. Ms L Sharpe noted that she is currently at the stage of finishing talking to the landowners and beginning to map, prioritise and draw up costs, following delays due to COVID-19.

Ms L Sharpe next presented a Scimap map on screen, explaining that this tool enables the identification of where water is likely to flow under heavy rain (red areas). There were 297 opportunities identified which then have a flow calculation applied to them to see if it is viable. Following this, the opportunities were reduced to 259. There were 55 landowners identified with these NFM opportunities, most of the visits have been carried out, outline designs for interested landowners prepared and some have been revisited. Ms L Sharpe next presented some examples of designs to the committee.

Ms L Sharpe next displayed some photographs of work done upstream of Horncastle on the River Waring, to showcase the variety of work that can be done e.g., earth bunds (used to slow the flow), swales etc.

Ms L Sharpe explained that of all the landowner visits completed there have only been two that have outright said 'no', the rest are considering the options discussed. The biggest concerns with landowners are around existing stewardship schemes and the future of the ELMs scheme.



Ms L Sharpe further explained to the committee that Morton and Billingborough sub catchments offer the best opportunities, with the Heckington sub-catchment offering the least.

Ms L Sharpe concluded her presentation by noting that she is on course to be submitting the relevant maps and costs by June.

The Chairman thanked Ms L Sharpe for her informative presentation, inviting questions and observations.

Mr V Barker noted his idea of putting in pipes of reduced size upstream through a culvert to slow the water down. Ms L Sharpe responded that pipes have not been considered as the work is focusing on natural processes.

The Chief Executive gave a further overview of Ms L Sharpe's work, noting that, in general, NFM works are generally lower in cost, also highlighting the size of the upper catchment; 20,000 ha. This upper catchment was split into sub catchments, as explained by Ms L Sharpe previously, however, Ms L Sharpe is not working on one of the sub catchments, Swaton, at the Environment Agency (EA) are currently undertaking NFM work in this area. The Chief Executive continued by adding that the general purpose of Ms L Sharpe's work is that the majority of the water from the upper catchment ends in the South Forty Foot Drain (SFFD) from the eight unrestricted highland carriers that the Board maintain on behalf of the EA. The Chief Executive welcomed the NFM opportunities, working with landowners and thanked Ms L Sharpe for her work.

The Operations Manager informed the committee that the Board's Officers will be continuing to be in contact with Ms L Sharpe.

The Chairman also noted that in the original countryside stewardship scheme there was funding available for putting grips into wet land, suggesting it would be of interest to many landowners. Ms L Sharpe noted that there is still some but not much available in current schemes and that it is being looked into including NFM within ELMs.

Mr J Fowler questioned if the schemes are measured in square metres or cubic metres of water held back? Ms L Sharpe noted that it is usually cubic metres depending on what can be done, for example, a bund is continually emptying and filling, sometimes monitoring can be done in relation to how much is not being discharged / the slow of the discharge.

Mr K Casswell felt it is a good place for ELMs to be, Ms L Sharpe agreeing, adding that one aspect of ELMs looks at how groups of farmers can work together. There is discussion ongoing around some funding within countryside stewardship this year to trial how groups of farmers within a catchment could be managed as part of ELMs.

#### 1789 RECEIVE THE ENGINEER'S REPORT - Agenda Item 7

The Operations Manager presented the report on Engineering Works, highlighting points as follows.

## 1. CAPITAL ASSET IMPROVEMENTS

### (a) 2020/21 Defra/EA Funded Grant in Aid (GiA) Schemes

#### (i) REMOTE MONITORING, TELEMETRY H&S SCHEME

Works on this scheme have started; implementing the remote control system at some of the pumping stations and continuing with the installation of metric gauge boards.

The funding for this scheme has changed – there is a Local Levy claim for funding to be made this financial year (2021/22).

If funds are sufficient CCTV will be looked into at as many pumping stations as possible.

#### (ii) SWATON NFM

The Board are delivering all work on site, there are three sites involved – Holland Road Farm, Manor Farm (North and South) and Grove Farm. The Holland Road Farm attenuation site is almost complete, with the swales completed, the site design shown on screen, followed by photographs of the attenuation site at Holland Road Farm displayed on screen for the committee. The Operations Manager noted that the attenuation pond is expected to sustain more water year round than shown in the photograph once operational.

It was confirmed that there will be an opportunity to visit this site on the inspection in September 2021.

The Chairman questioned what the EA is compensating the landowner? The Operations Manager responded that he will share that information with the Chairman following the meeting, he is also going to share it with Ms L Sharpe.

Mr P Holmes questioned the size area of this project? The Operations Manager explained that the Holland Road Farm attenuation pond holds 3,220 cubic metres, in terms of area size, it is 95 metres long and 20 metres at its widest point (approx. 0.5 acre).

The Chairman questioned whether it will hold water all year round? The Operations Manager explained that it is designed to hold water all year round. The Chairman noted that if it holds water all year round then it will have less capacity in a flood. The Operations Manager noted that it has been designed in this way for the water to allow for biodiversity all year round.

The Operations Manager noted that the other two sites are owned by the Crown and are still awaiting the agreement to be signed before works can commence.

(b) 2020/21 Board Funded Capital Schemes

(i) GRAFT DRAIN IMPROVEMENTS - Scheme 2086

The map outlining the Graft Drain improvements was displayed on screen, the red showing completed works to March 2021 and the light blue area showing the works to be completed this year currently, with the objective of being substantially completed by the end of 2022. There are still some long sections of culvert to review as soon as able to be surveyed. It was confirmed that currently works are being done to remove three culverts to the same field and replace with the one. The main objectives of this scheme being to reduce the number of culverts where possible and to reduce the water level. Work is on programme to be completed by the end of the next financial year.

The Chairman noted that many of the culverts are surrounded by residential properties and so may be difficult to replace.

The Operations Manager noted that once the condition of the culverts are established then options and associated costs can be considered.

Mr V Barker noted that some of the culverts have water in, wondering whether the land has sunk, expressing his concern for lining a culvert and it being permanently under water. Mr V Barker also noted a new culvert, just after culvert 2521 on the map displayed, stating that he is not sure why it has been put in, feeling it is unnecessary as there is alternative access to the field. The Operations Manager responded that negotiations were held with the landowner and was proven as needed.

Mr P Holmes noted that a lot of culverts were put in for stabilisation, not just access.

It was noted that there would be opportunity to visit the site on the inspection in September 2021.

(ii) LEAK FROM EA BILLINGBOROUGH LODGE INTO 20/5 NOW CURED

Leakage from EA Billingborough Lodge into Board systems was identified in December 2019 and repairs have now been completed to resolve the issue. The EA initially stated that they may be responsible, after seeking a purchase order to complete the works, they stated that it is not their asset and therefore not their responsibility. The Operations Manager will try to recover the cost of the work from the EA.

(c) 2021/22 Defra/EA Funded Grant in Aid (GiA) Schemes

(i) UNDER CAPACITY CULVERT – LANE DYKE

A small amount of work has been done on this scheme and it may have to be pushed into the next year.

The Operations Manager noted that a new Grant in Aid (GiA) Manager has been appointed. Once established she will be able to assist in getting schemes approved for funding.

(ii) UNDER CAPACITY CULVERT – LEAVES LAKE DROVE

This scheme is looking to replace the existing outfall into the South Forty Foot Drain (SFFD). There is potential for GiA Funding available for this scheme.

Replace existing outfall through GiA. Business case needs work.

(iii) SWATON NFM

The sites were shown in detail on the screen.

(d) 2021/22 - Board Funded Capital Schemes

(i) SFFD DESILTING BLACK HOLE DROVE TO GUTHRUM

It is proposed to look at desilting the South Forty Foot Drain (SFFD) upstream of Black Hole to Guthrum (2.6 km) over the next two years, noting there are no records of the last time it was desilted.

It may be that the proposed budget for this scheme is insufficient to use the cutter suction dredger method and therefore a long reach excavator may be the method chosen. It was confirmed that it would require the hire of a long reach machine, whether it be a drag line or hydraulic machine.

(ii) GRAFT DRAIN IMPROVEMENTS - Scheme 2086

The map showing this year's work was displayed on screen.

2. Proposed Works 2022/23

(a) Defra/EA Granted Schemes

(i) DOWSBY LODGE CATCHMENT WORKS

It was explained that funding is available to have studies completed to identify the benefits of the whole catchment and how to best spend any funding achieved.

It was noted that all of the original scheme built pumping stations are over 50 years old, and the Board has not got funds to replace them without external funding. The new restrictions around Eel passage were also noted.

Mr P Holmes questioned whether the feasibility of amalgamating pumping stations has been considered?

The Operations Manager noted that he is hoping it will drive a 'blank piece of paper' scenario whereby all options can be considered and explored.

Mr K Casswell also noted the impact that the South Lincs Water Partnership (SLWP) work could have, especially if the reservoir is built in the Board's catchment. The Chief Executive echoed this, noting that the Board's Officers are very involved and it could be very beneficial to the Board.

**(ii) HACONBY FEN CATCHMENT WORKS**

The above in relation to Dowsby Lode catchment works also applies to Haconby Fen.

**(b) Board Funded Capital Schemes**

**(i) DOWSBY LODGE CATCHMENT WORKS**

The potential Board contribution for this work, if required by the scheme to enable Grant in Aid could be £25,000.

**(ii) DUNSBY FEN P/S WEEDSCREEN CLEANER**

The weedscreen cleaner is at end of life, with the pump pumping almost every day, the weedscreen cleaner also operates when the pump runs and so has done a lot of work, Based on the final cost for some of the other weedscreen cleaner replacements, it may be found that the £90,000 budget is not enough.

All AGREED £90,000 for the replacement of the weedscreen cleaner at Dunsby Fen Pumping Station.

**(iii) SFFD DESILTING BLACK HOLE DROVE TO GUTHRUM**

All AGREED £65,000 for the desilting of the South Forty Foot Drain from Black Hole to Guthrum.

**(iv) GRAFT DRAIN SCHEME**

All AGREED £60,000 for the continuation of the Graft Drain Scheme.



The Finance Manager noted that there has been a lot of work transferred from 2020/21 to 2021/22, so the Capital Schemes Budget will be updated for the Board meeting. It was also noted about the loss of use of red diesel from April 2022. The Chairman also noted the notion of being carbon neutral in the future.

1790 REPORT ON RAINFALL - Agenda Item 8

The rainfall figures at Black Hole Drove were circulated. The Committee RESOLVED that this report be noted.

1791 ANY OTHER BUSINESS - Agenda Item 9

(a) UNIMOG

Mr V Barker noted that a lot of the efficiency of the work of the Board is dependant on the Unimog, adding that he has previously seen machines stood not doing any work waiting for the Unimog to transport them.

Mr V Barker continued that he has seen other Board's with a rubber tyred excavator that can tow a trailer with its attachments, suggesting that this should be considered, and that discussion should take place with this Board about it.

The Operations Manager responded that the Board made the decision, within the law, that tractors could not be used for haulage unless licenced for vehicle haulage. The Operations Manager also noted that an excavator on tracks is useable all year round.

Mr V Barker made the comparison to a combine harvester having a specific trailer to tow its bed with, the Board's machine would have a specific trailer tow its attachments with.

Mr W Ash suggested a forklift with a high speed gear box and trailer. The Operations Manager explained that the Board used to do this but can no longer do this as the Board is not classed as agricultural.

Mr C Wray suggested that it could be a Twiga that is replaced, possibly by the JCB Hydradig, noting that when it isn't flailmowing, it will still be a sufficient 360 excavator. The Operations Manager is aware of this machine and it will be considered, but also noted that although it is a versatile machine it may be too compromised as a predominantly flailmowing machine.

(b) SHEEP IN DRAIN – FX1792 – SEMPRINGHAM

The Works Manager explained that last week the workforce were desilting the Sempringham Pump Drain, this work includes dropping the water level.

The following day a phone call was received from the tenant of neighbouring land regarding his sheep getting into the drain as a consequence of which two ewes and two lambs died. The tenant has no fencing / any form of barrier to stop the sheep getting into the drain and allows the sheep to use the drain to drink from. The tenant complained that nobody had notified him of the works and wants to claim compensation for the loss of the sheep.

The Works Manager continued by explaining that the desilting was being carried out on the opposite side to the tenant's field of sheep and so he would not be notified, it is only the landowner of the side of the desilting that is notified. Photos were displayed on screen.

The Chairman felt that the tenant's sheep should not be on the watercourse bank anyway.

Mr V Barker noted that he grazes livestock on watercourse banks and that they do drink from the watercourse, but that he would not claim from the IDB if he lost one of his livestock and that the desilting work should make no difference.

Mr P Holmes suggested that he should perhaps be counter sued for damaging the watercourse bank.

The Chairman suggested that it should be put in writing that the Board are not liable. The Finance Manager suggested a letter with a copy of the Board's complaints policy and form.

The Chief Executive clarified that the tenant's initial complaint was regarding that he hadn't been notified of the works being carried out but the Board only notify landowners / tenants on the drain side they are working on and so the complaint is unjustifiable.

The Finance Manager also suggested including Byelaw 13 within the letter – 'Damage by animals to banks'.

Mr C Wray noted that if Byelaw 13 is mentioned within the letter the Board need to ensure they act on it.

All AGREED to send the tenant a letter explaining that the Board are not liable for the loss of his sheep as they should not have been on the bank anyway.

There being no further business the meeting closed at 15:48.



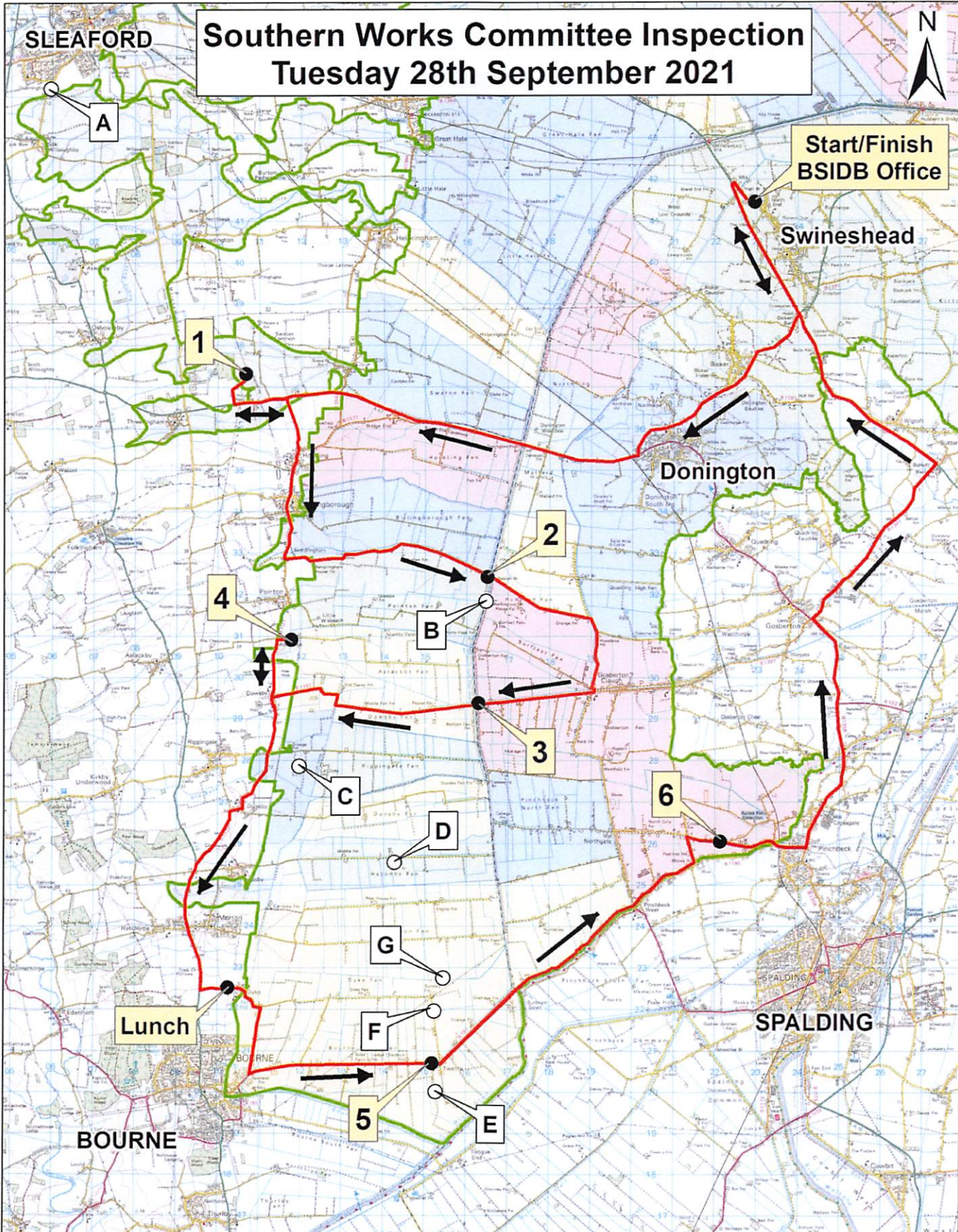
# BLACK SLUICE INTERNAL DRAINAGE BOARD

Desilting Drain 20/1 Sempringham Pump Drain



**SOUTHERN WORKS  
COMMITTEE INSPECTION  
Tuesday 28th September 2021**





**Southern Works Committee Inspection  
Tuesday 28th September 2021**



**Start/Finish  
BSIDB Office**

**Swineshead**

**Donington**

**SPALDING**

**BOURNE**

**Lunch**



**Black Sluice Internal Drainage Board**  
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**Date: September 2021**

**Scale: 1:80,000**



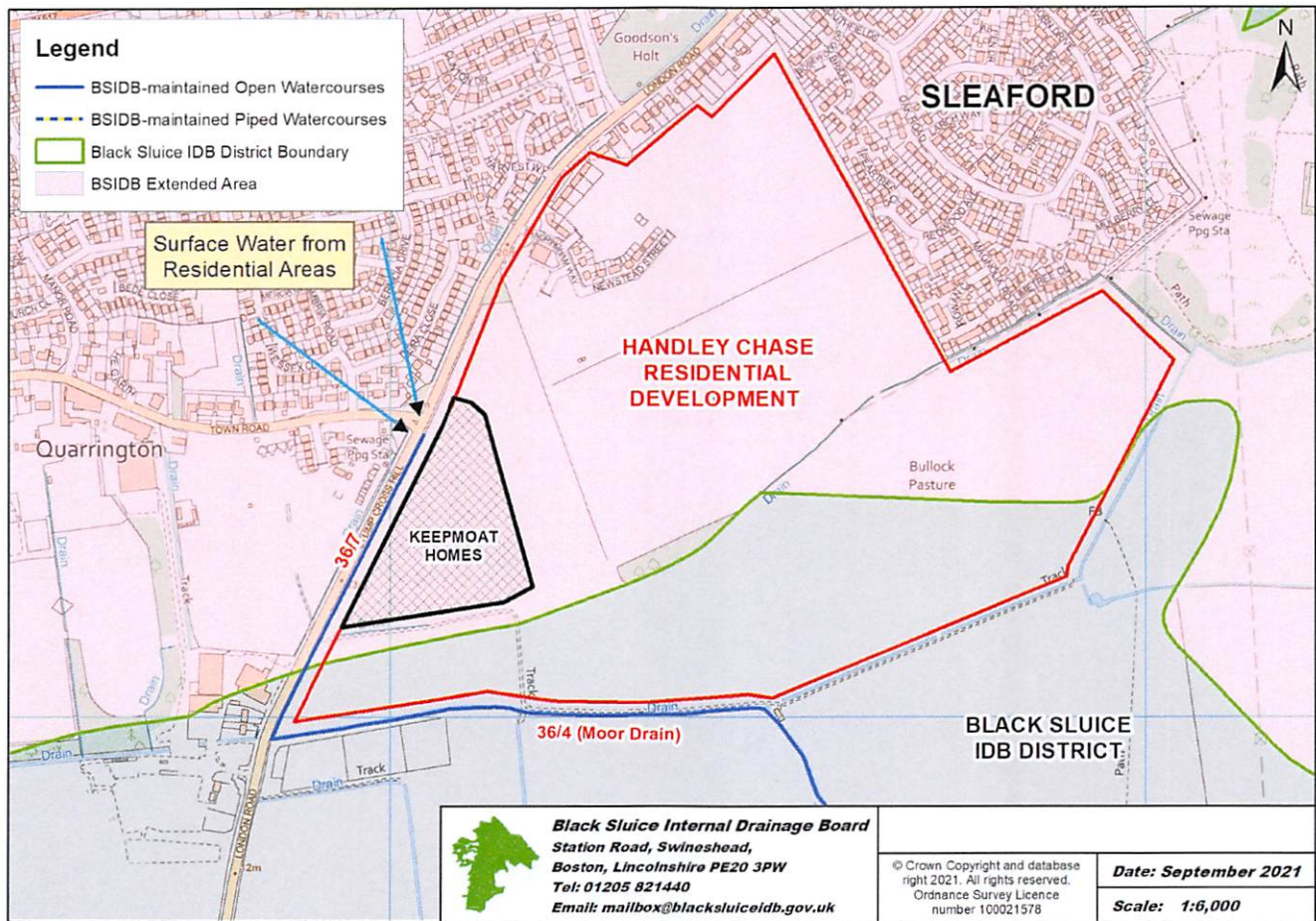
**SOUTHERN WORKS COMMITTEE**  
**INSPECTION ITINERARY**  
**TUESDAY 28TH SEPTEMBER 2021**

**S BSIDB Offices**

		<u>Point of Interest</u>
A	London Road / Stumpcross Hill, Quarrington, Sleaford	Access & Maintenance Proposals for Drain 36/7 (Handley Chase Development)
1	Holland Road Farm, A52 Spanby/Swaton	View & discuss Swaton Natural Flood Management Scheme
2	Neslam Road, Neslam Fen	View access road to Sempringham Pump Station
B	Sempringham Pump Station	<u>Point of Interest</u> Discuss proposed weedscreen cleaner
3	Gosberton Pump Station	View/Discuss Pump Refurbishment (inc. Tea/Coffee Break)
4	Millthorpe Road, Pointon	Discuss maintenance & access issues Drain 37/5 Pointon Lode
C	Dowsby Lode	<u>Point of Interest</u> Discuss sub-catchment works
D	Haconby Fen	<u>Point of Interest</u> Discuss sub-catchment works
	Lunch	The Wishing Well, Dyke
5	Twenty Pump Station	View/discuss Points of Interest E/F/G
E	Sycamore Farm, Twenty	<u>Point of Interest</u> Discuss culvert replacement & WPD overhead electric lines
F	North Drove, Twenty	<u>Point of Interest</u> Discuss existing damming of Drain 28/10 & impact on Dyke Fen pumping
G	Dyke Fen Pump Station	<u>Point of Interest</u> Discuss proposed pump refurbishment
6	Northgate, West Pinchbeck	View/Discuss ongoing Drain 22/31 Graft Drain Scheme Works
F	<b>BSIDB Offices</b>	<b>Southern Works Committee Meeting</b>



## A - Point of Interest - Proposed access & maintenance proposals Drain 36/7 Sleaford



### History

After a request (c1992) from developers of the residential areas north of Town Road for an outfall for their surface water discharges, the Board agreed to cut a new watercourse east of Stumpcross Hill from the junction of Town Road to the Board's Drain 36/4 (Moor Drain) to allow flows to outfall from the Anglian Water surface water sewers under Town Road. A commuted sum was paid by the developer, and the Board "adopted" the watercourse for maintenance c1993 (now known as Drain 36/7).

This watercourse is unique within the Boards systems in that a significant section lies outside the Board's district, and as such is not subject to the Board's Byelaws, in particular Byelaw No. 10 (the 9 Metre Byelaw). At the time this was not viewed as an issue as it was not thought that the land east of Stumpcross Hill/London Road would be developed, and the Board could maintain the watercourse from the field side.

### Development

In 2009 a number of planning applications were submitted regarding development of the northern part of the plan above with a request from the developers for a potential outfall to the Boards systems. At the time the applications were refused or withdrawn, but in 2012 the Board were consulted on the proposed "Sleaford South Sustainable Urban Extension" which covers the area shown above in red. At the same time, the Board adopted its "Extended Area" as part of the proposals of the 2010 Water Management Act, advising the developers of the Board's requirements regarding surface water discharges into its systems, as well as information on the location of Board-maintained watercourses and the relevant byelaws, with particular reference to Drain 36/7.

Since 2012, the Handley Chase development has proceeded as a piecemeal affair, with phases of the land being developed by different organisations. A surface water scheme for the entire site was approved by NKDC with a single outfall into the Board's Drain 36/4 (the Moor Drain), with all phases of the development to feed into this single sustainable drainage system.

In June 2021, the Board received notification of the development of the area in black above, and the Board responded to the applicant and planning authority their requirements regarding the future maintenance of Drain 36/7. The applicant requested further information regarding the Board's requirements, the Board's officers stating that ideally the full 9 metres should be left but in lieu of the watercourse being outside the District, its byelaws could not be enforced. The applicant has responded to the Board suggesting a 5 metre unobstructed access be provided, and that they would like to lay paved parking areas between the proposed dwellings and the watercourse. The applicant has also submitted applications for three culverts as shown on the next page.

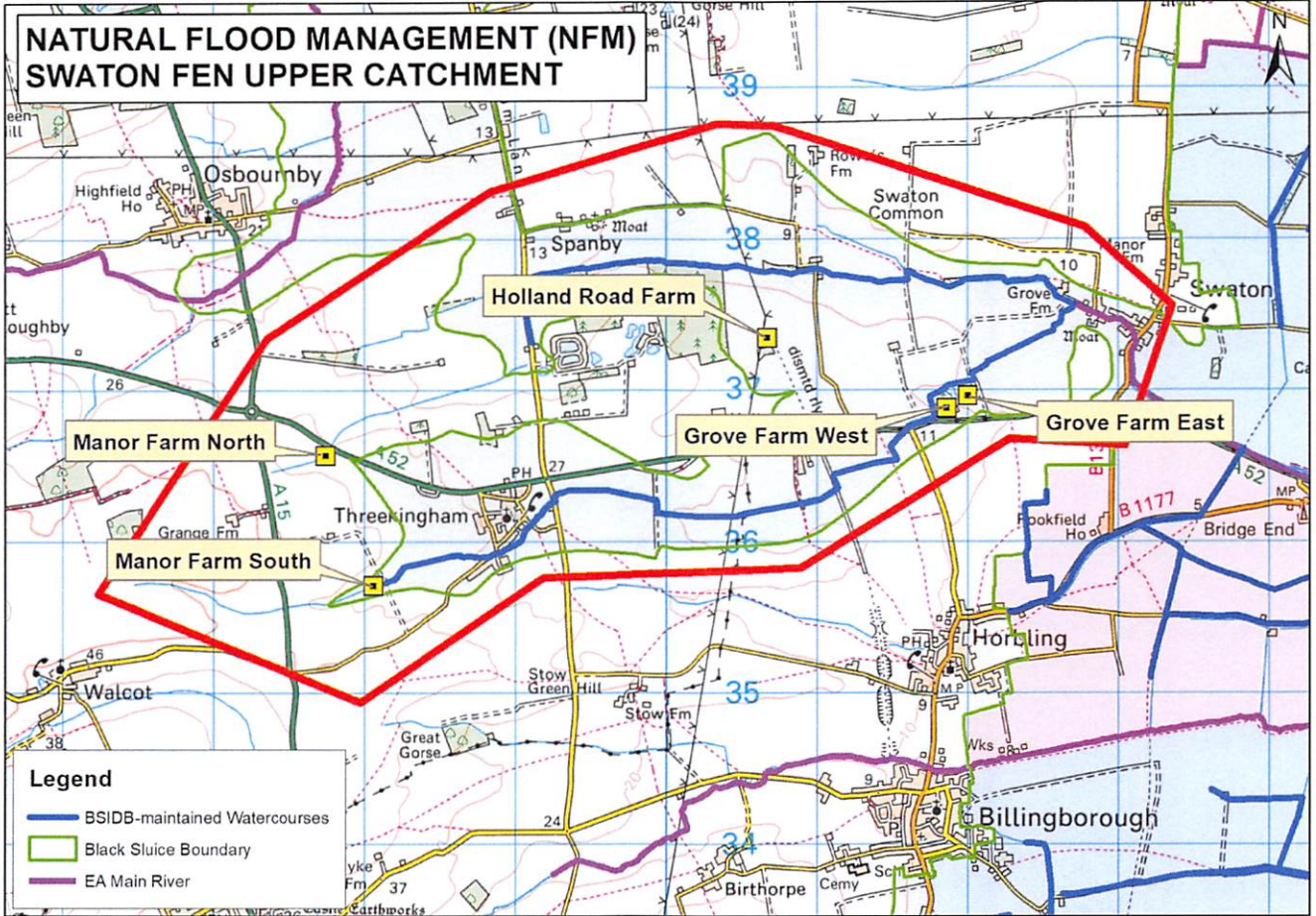
The Board has advised that applicant that their proposals would be put to this committee for consideration.



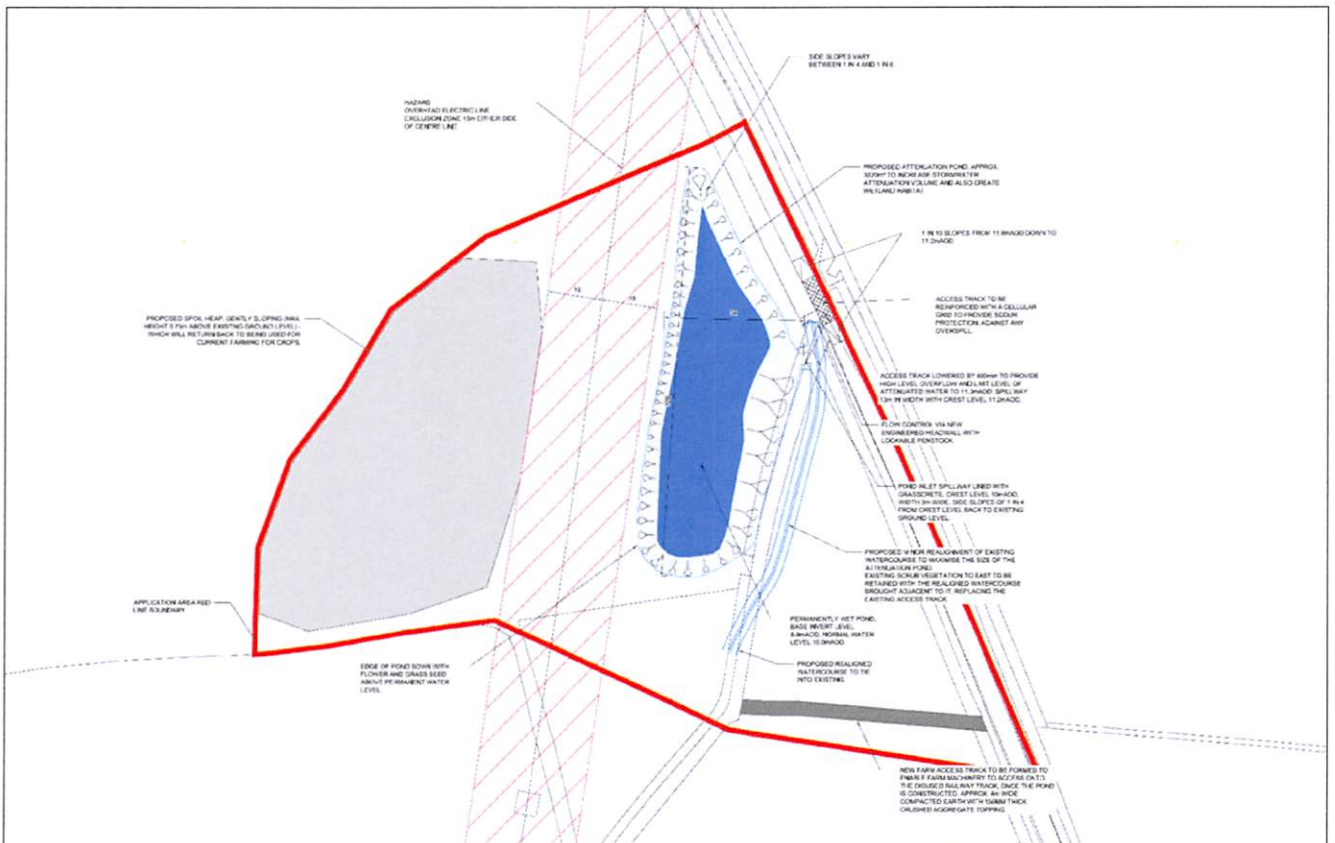




# 1 - Swaton Catchment Natural Flood Management (NFM) Scheme



## 1a - Swaton Catchment Natural Flood Management (NFM) Scheme - Holland Road Farm



**1b - Swaton Catchment Natural Flood Management (NFM) Scheme - Manor Farm**



**1c - Swaton Catchment Natural Flood Management (NFM) Scheme - Grove Farm**





## 2 - Sempringham Pumping Station Access Road



Discussion has taken place with the Environment Agency (the landowners) about safe access to the Pumping Station.

The roadway slopes towards the field and requires improvement.

Agreement has been reached with the EA for construction of a suitable access roadway by the Board, subject to receipt of a Purchase Order.

Estimated cost to construct - £46,000



**B - Point of Interest - Proposed weedscreen cleaner - Sempringham Fen Pumping Station**

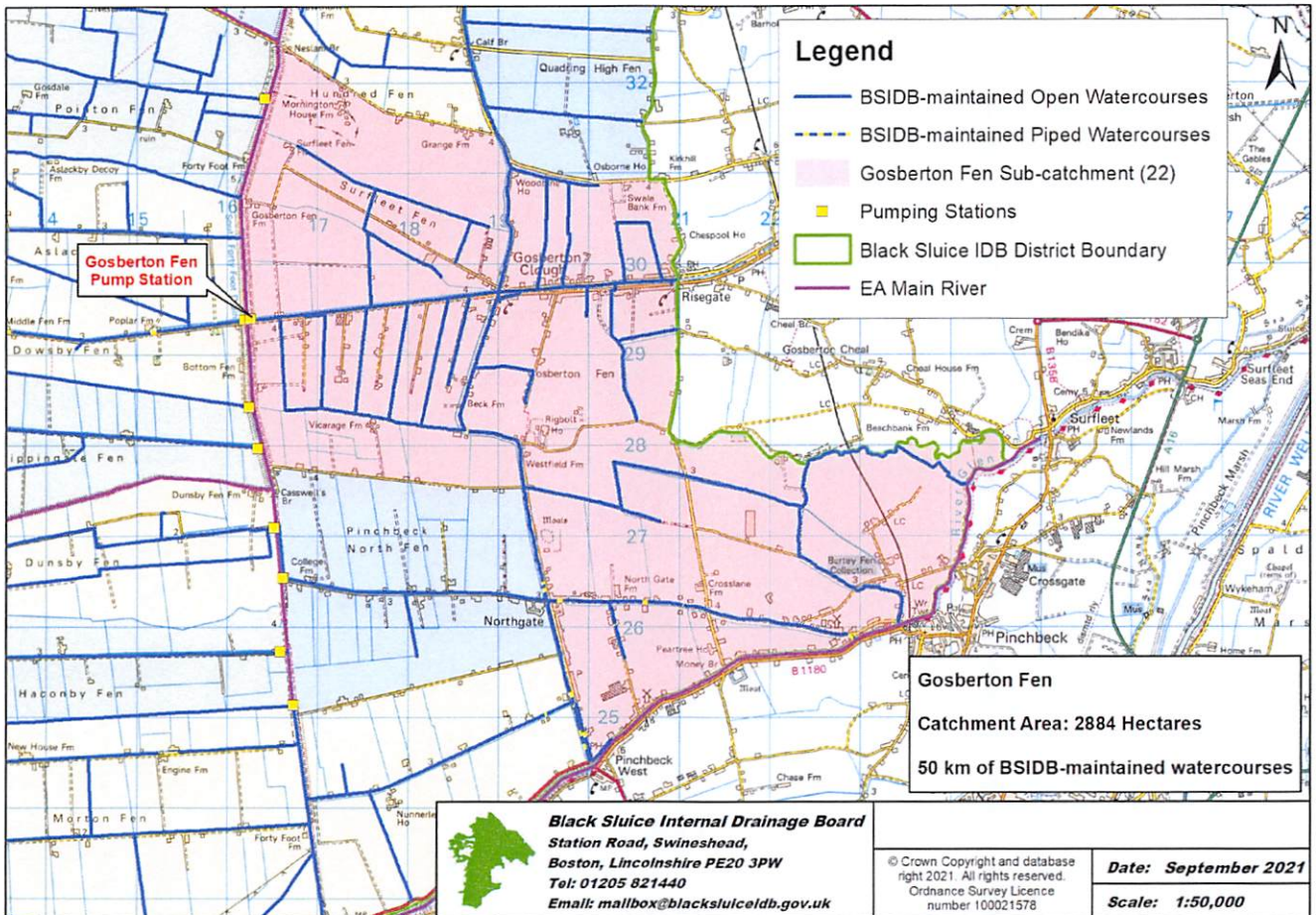


Dump area and weedscreen cleaner expected to be completed by March 2022





### 3 - Gosberton Fen Pump Station - Proposed pump refurbishment



It is proposed to refurbish one of the pump electric motors as part of the preventative pumping station maintenance programme.

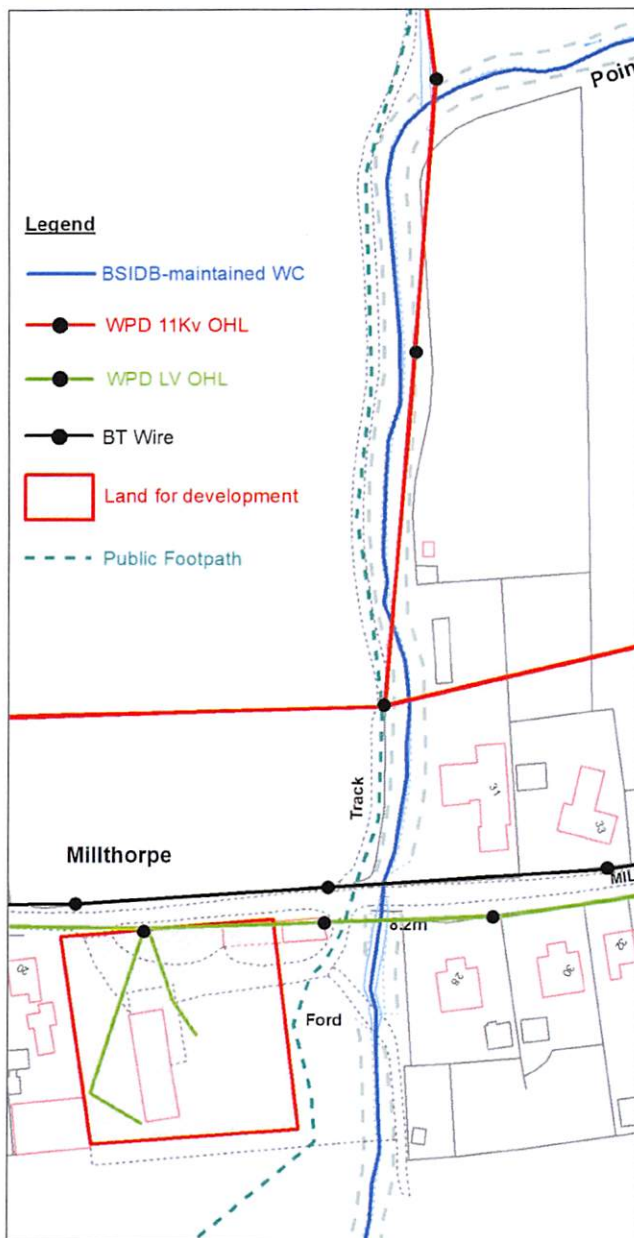
Estimate to refurbish - £4,000



**Intentionally Blank**



#### 4 - Pointon Lode, Millthorpe Road, Pointon - Access & maintenance issues



The Board took on the responsibility for maintenance of the Pointon Lode in 2019 following the Rationalising of the Main River Network by the Environment Agency. Prior to this the Board completed maintenance on behalf of the EA through the PSCA (since 2015).

Since the transfer of the Pointon Lode to the Board, there have been some issues with maintenance at the section shown above. The section adjacent to the properties is hand-rodded due to machine access issues.

After the high water levels in the Pointon Lode during 2019, a meeting with the owner of the property to the north of Millthorpe Drove took place with the type and frequency of the Boards maintenance discussed.

A proposal to remove the trees and bushes on the opposite bank was put forward.





*13th June 2019 - Overhanging branches removed at request of the northern property holder during high water levels in the Pointon Lode*

The property owner has objected to the Board's proposals due to environmental concerns and the screening provided by the trees to the property.

The land on the opposite bank is tenanted (Crown ownership).



*Images taken from Google Streetview showing the trees and bushes on the banks adjacent to the northern property on Millthorpe Drive*

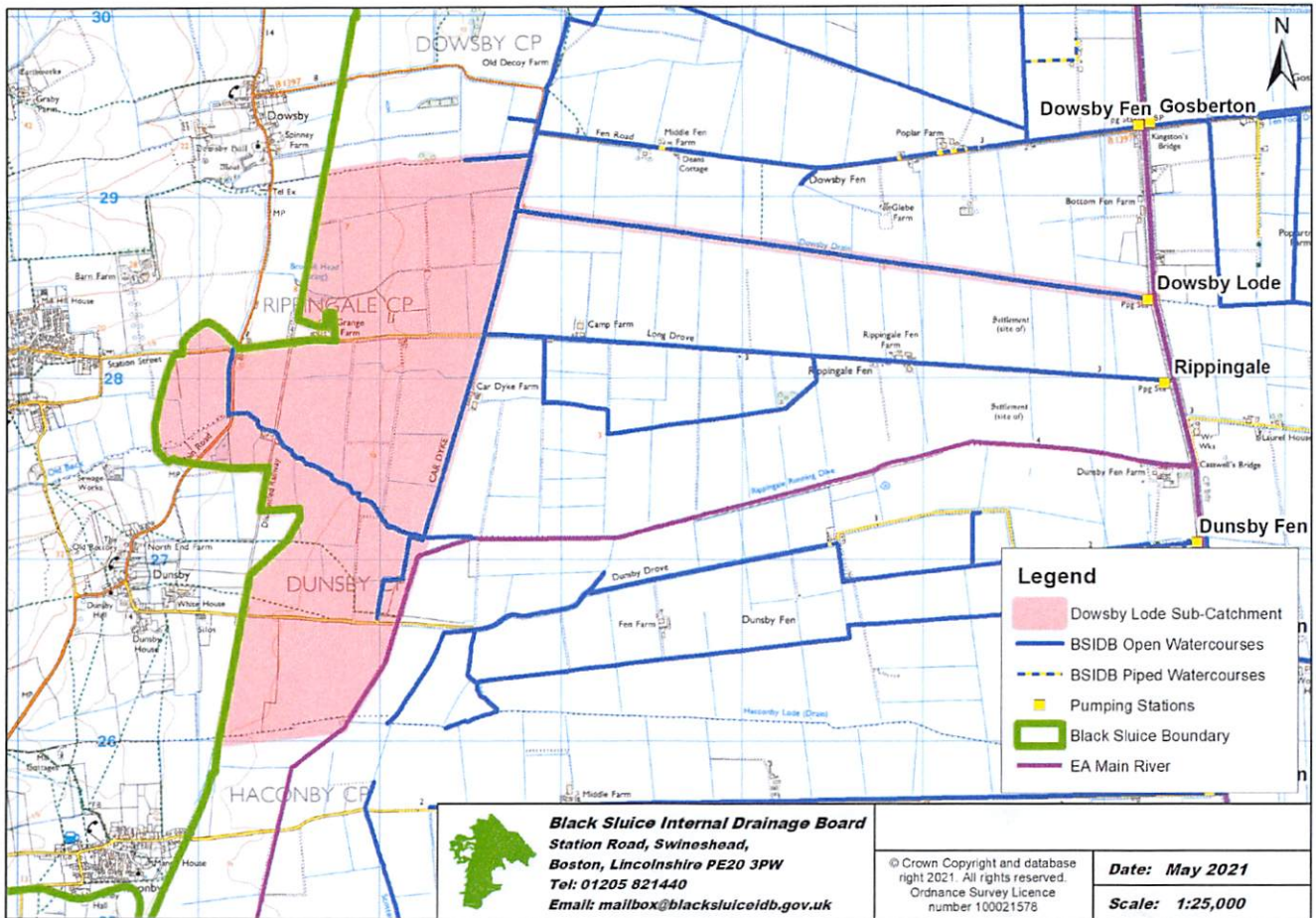
The Board has also received an enquiry from the property owner to the south of Millthorpe Drive adjacent to the watercourse regarding maintenance of the watercourse and the adjacent trees.

The Board has informed the property owner of the maintenance regime carried out by the Board, as well as their riparian rights and responsibilities for the watercourse within common law.





**C - Point of Interest - Dowsby Lode Sub-catchment Works**

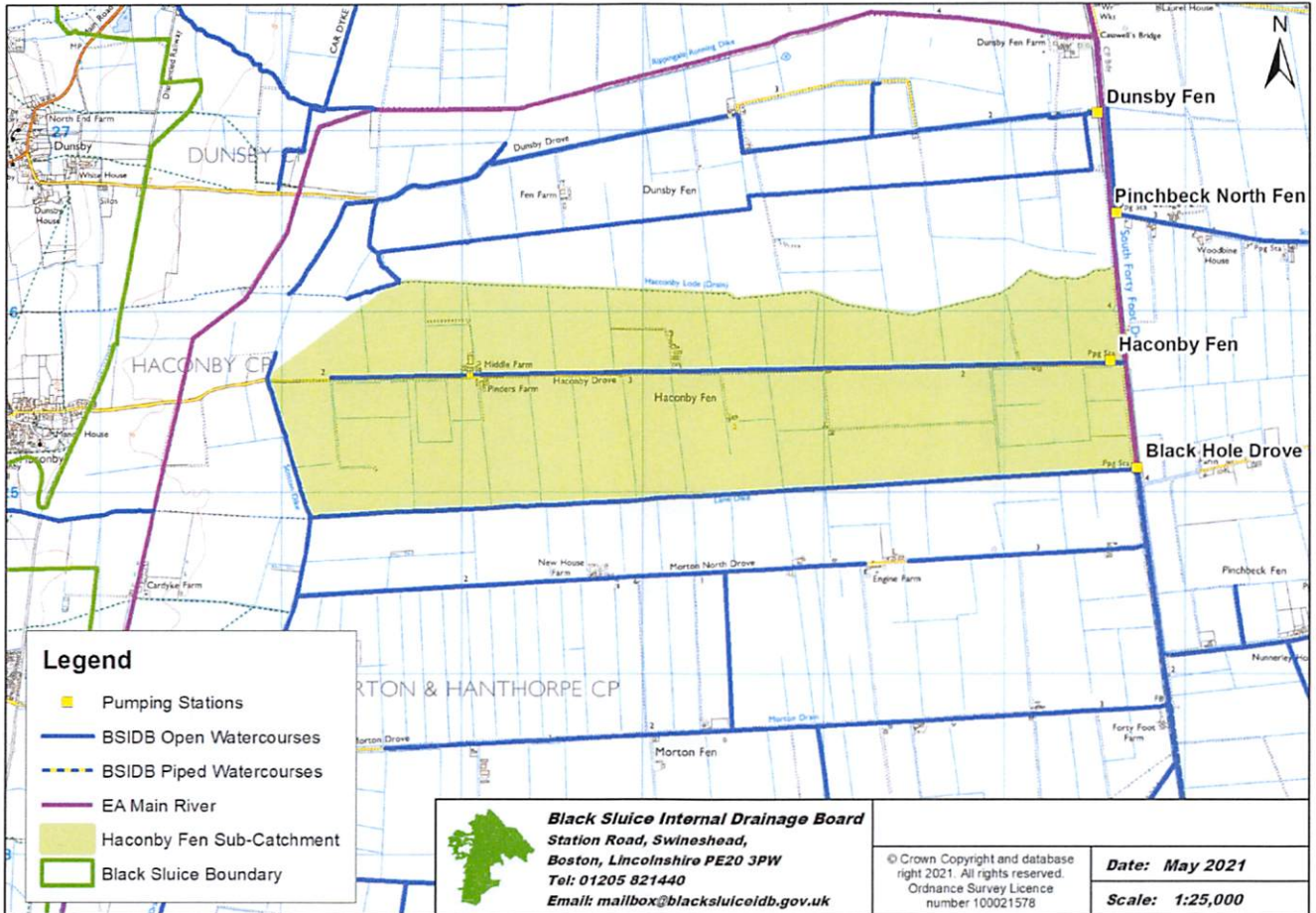


Dowsby Lode catchment area - 345 hectares.

Total length of maintained watercourse - 8.742 km

Catchment works schemes are part of a proposal discussed with the Environment Agency for some time now towards a whole catchment survey.

**D - Point of Interest - Haconby Fen Sub-catchment Works**



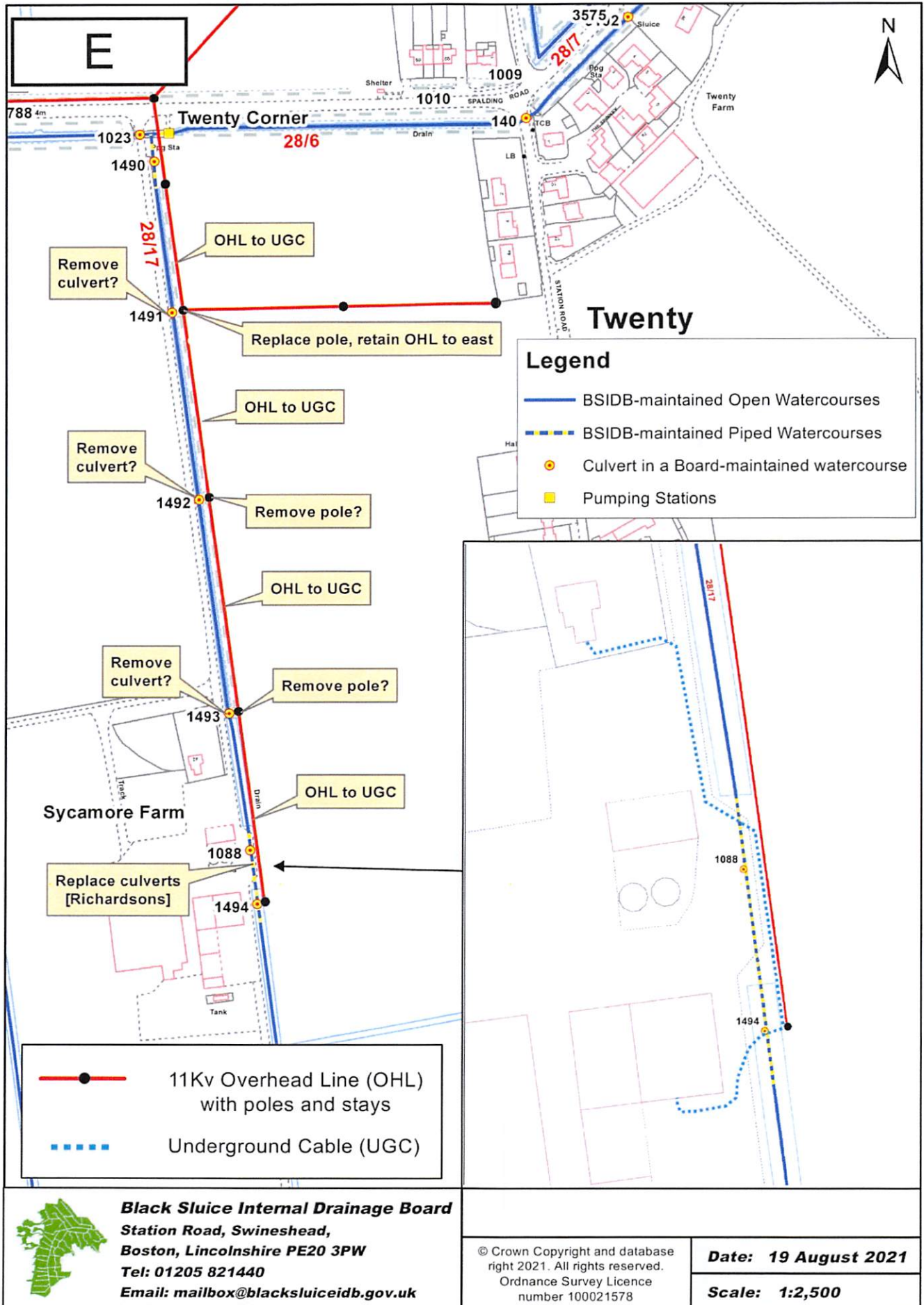
Haconby Fen catchment area - 510 hectares.

Total length of maintained watercourse - 4.384 km

Catchment works schemes are part of a proposal discussed with the Environment Agency for some time now towards a whole catchment survey.



5 - Twenty Corner Pump Station - Discuss Points of Interest E / F / G





Exposed underground electric cable  
(secured by Western Power Nov 2020)

## History

1989 - Culvert 1088 installed by the Board on behalf of the owners of Sycamore Farm to allow HGVs room to manoeuvre within their yard. Landowners paid contribution to Board. During mid-90s, Culvert 1494 was added to allow the laying of an underground electric cable (UGC) connection into Sycamore Farm.

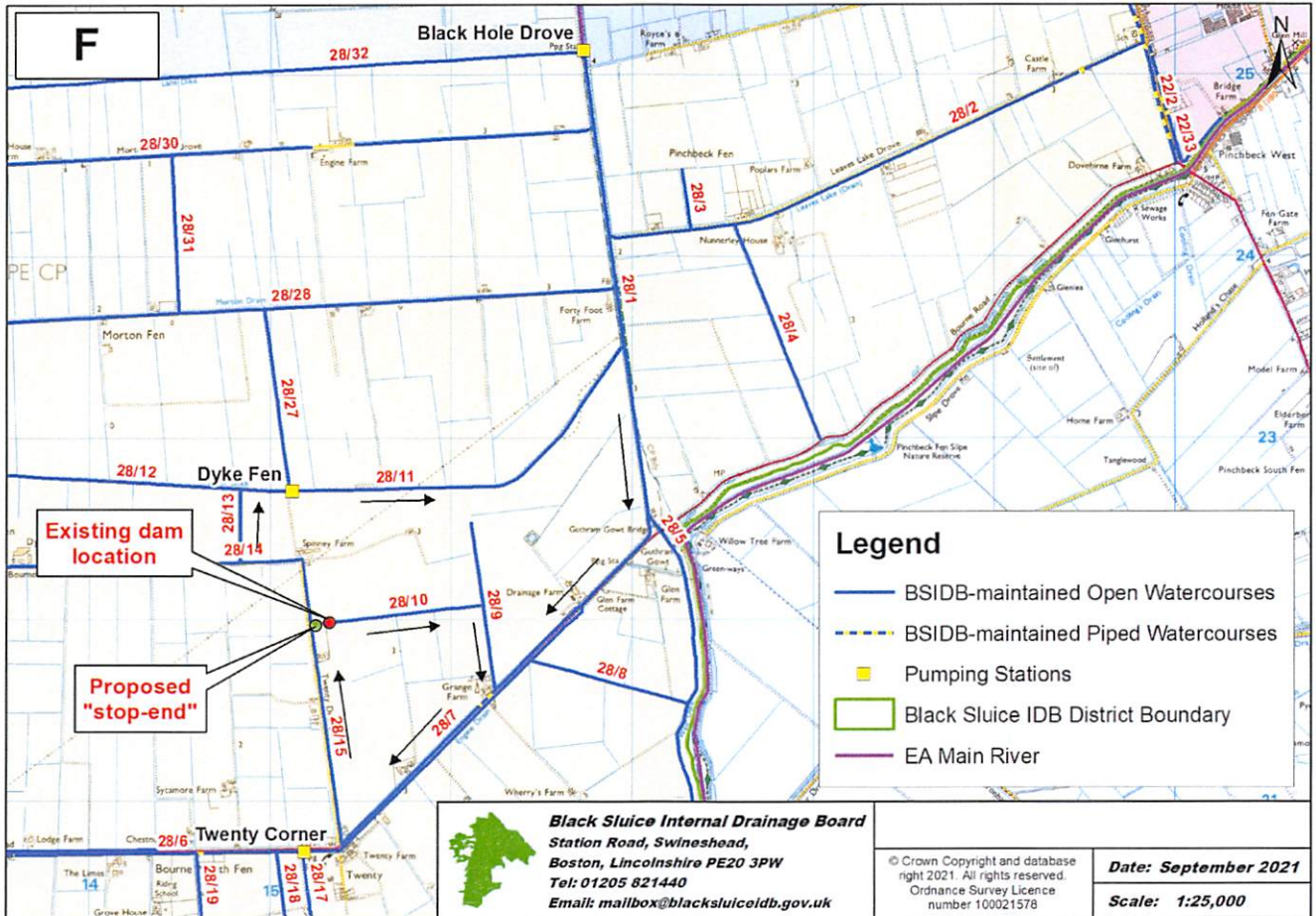
November 2020 - during works to clear debris dumped on top of Culvert 1494, culvert part-collapsed and electric UGC damaged. Reported to Western Power who secured the cable in lieu of replacement of the culvert. Subsequent inspection found both culverts to be in poor condition.

2021 - Board approached by farm manager of landowners of Sycamore Farm, stating that as the culverts were in a Board watercourse, the Board should replace them. The Board gave the person concerned copies of the correspondence regarding the culvert from 1989 which stated that ownership was theirs as Culvert 1088 was put in place for their benefit only, as was the subsequent extension to allow the laying of the UGC.

The Board approached the relevant officer at Western Power Distribution (WPD) to discuss the matter regarding the UGC, and to also discuss the potential for removing the overhead wires to the north which were now leaning into the field (adjacent culverts installed to protect the BSIDB watercourse when the wire was erected in the 1980's now in poor condition). WPD agreed to look at undergrounding the north to south cable as a health and safety issue.



**F - Point of Interest - Discuss existing dam arrangement Drain 28/10 & Dyke Fen PS**



**History**

c2000 - a control structure put in place by the Board in Drain 28/10 to assess whether doing so would prevent water from being pumped in a continuous circle when Dyke Fen pump was operating.

Water would be pumped east by Black Hole Drove pump, with Dyke Fen pump taking up the remainder.

Structure would allow water to overtop during periods of high water levels.

Structure worked so left in situ.

**September 2020**

Structure washed away during high water levels, leaving large slip in the bank.

New temporary pile dam installed as a replacement.

**Proposal**

The Board's officers believe that whilst the temporary dam is working, a longer term solution would be to place a permanent "stop-end" at the western end of Drain 28/10 to separate it from Drain 28/15 along Twenty Drive, This would remove the need for maintenance of the dam and any potential future bank issues.





Previous control structure  
in operation April 2016



Previous control structure collapsed  
September 2020



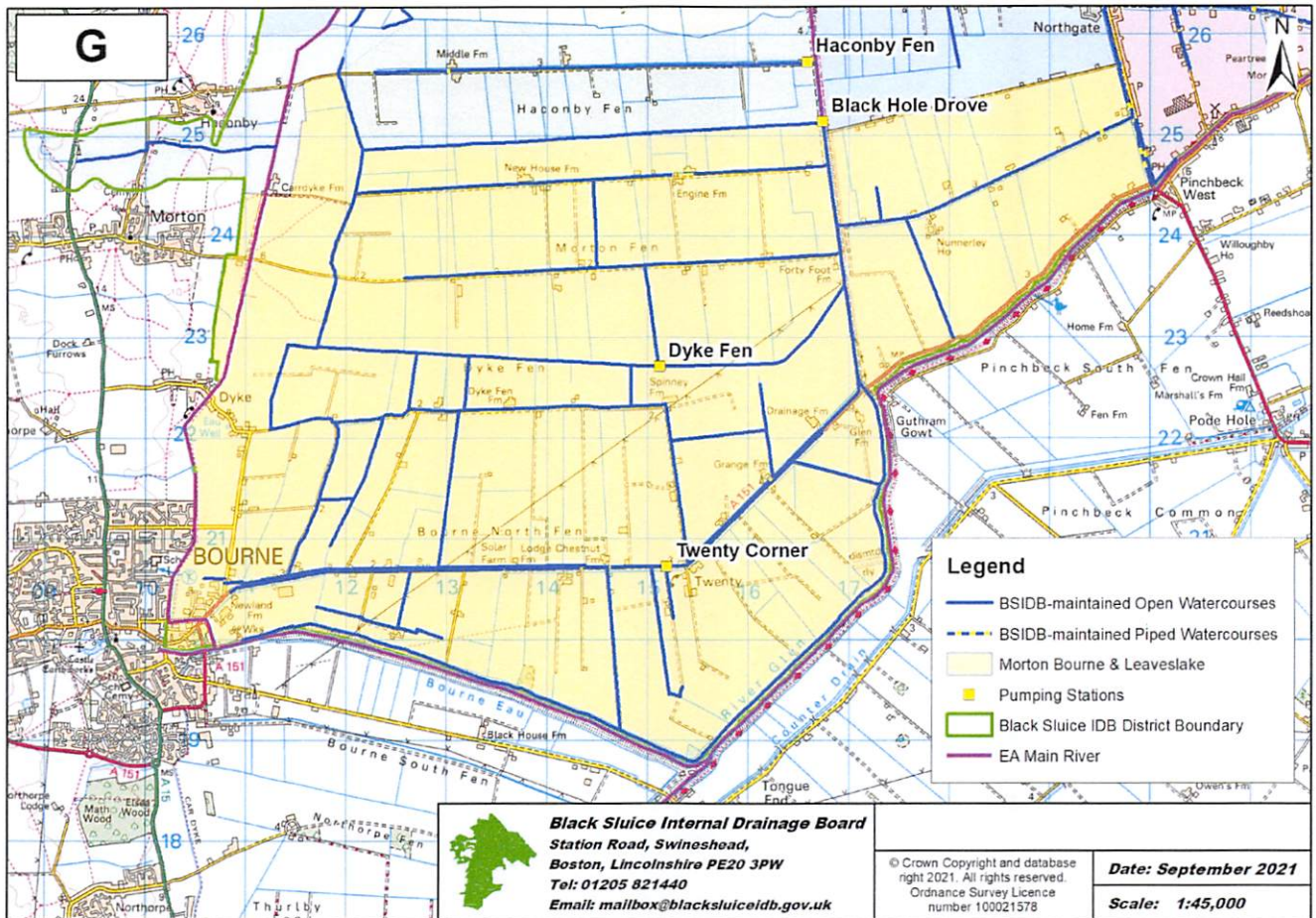
Temporary dam installed  
September 2020



Dam in operation September 2021



**G - Point of Interest - Discuss proposed pump refurbishment, Dyke Fen PS**



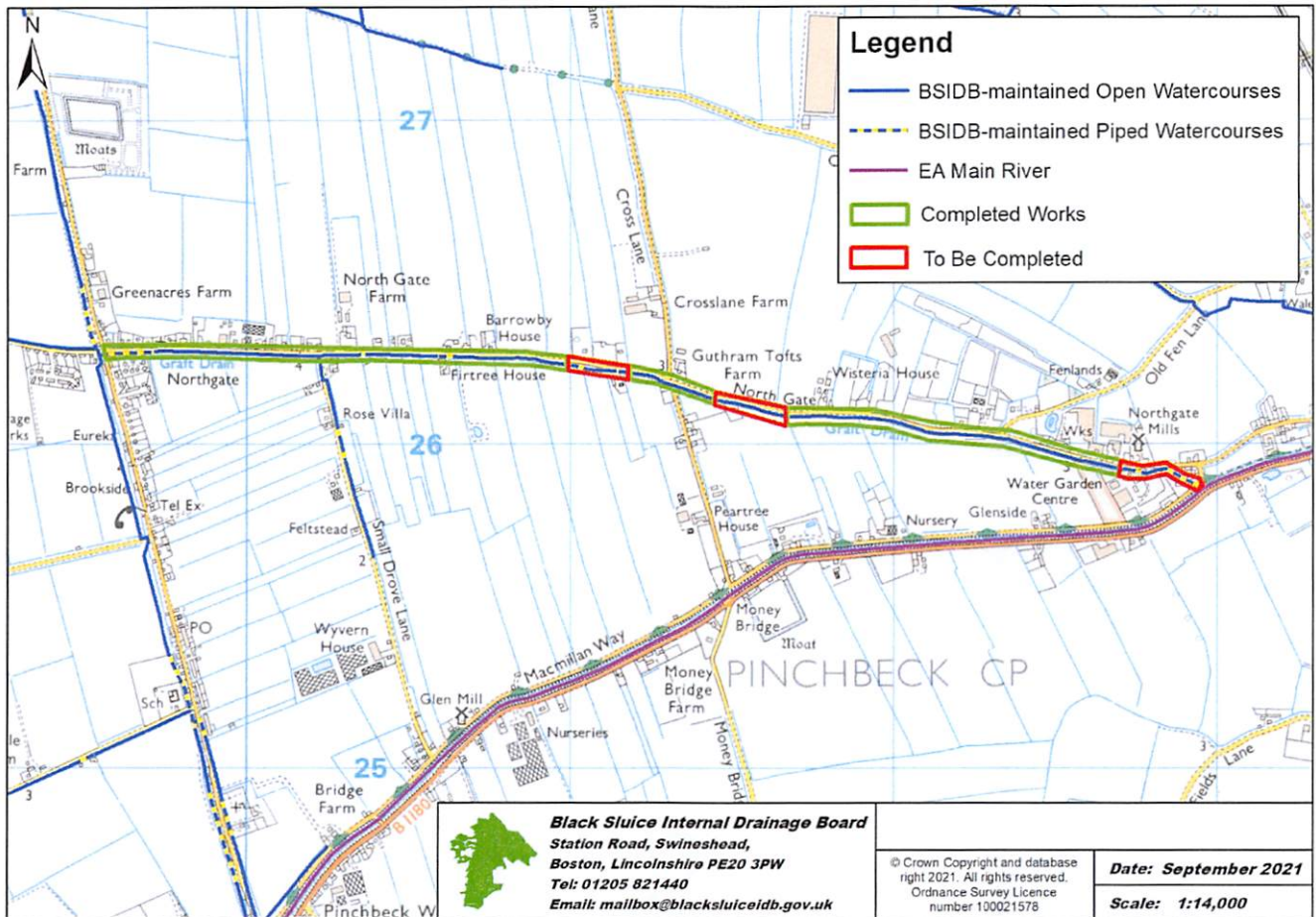
It is proposed to refurbish one of the pump electric motors as part of the preventative pumping station maintenance programme.

Estimate to refurbish - £3,000





**6 - View continuing BSIDB Scheme Works—Graft Drain, Northgate, West Pinchbeck**



**Scheme 2086 - Graft Drain (Drain 22/31)**

**Budgets**

2021-2022            £26,000 of £60,000 budget spent

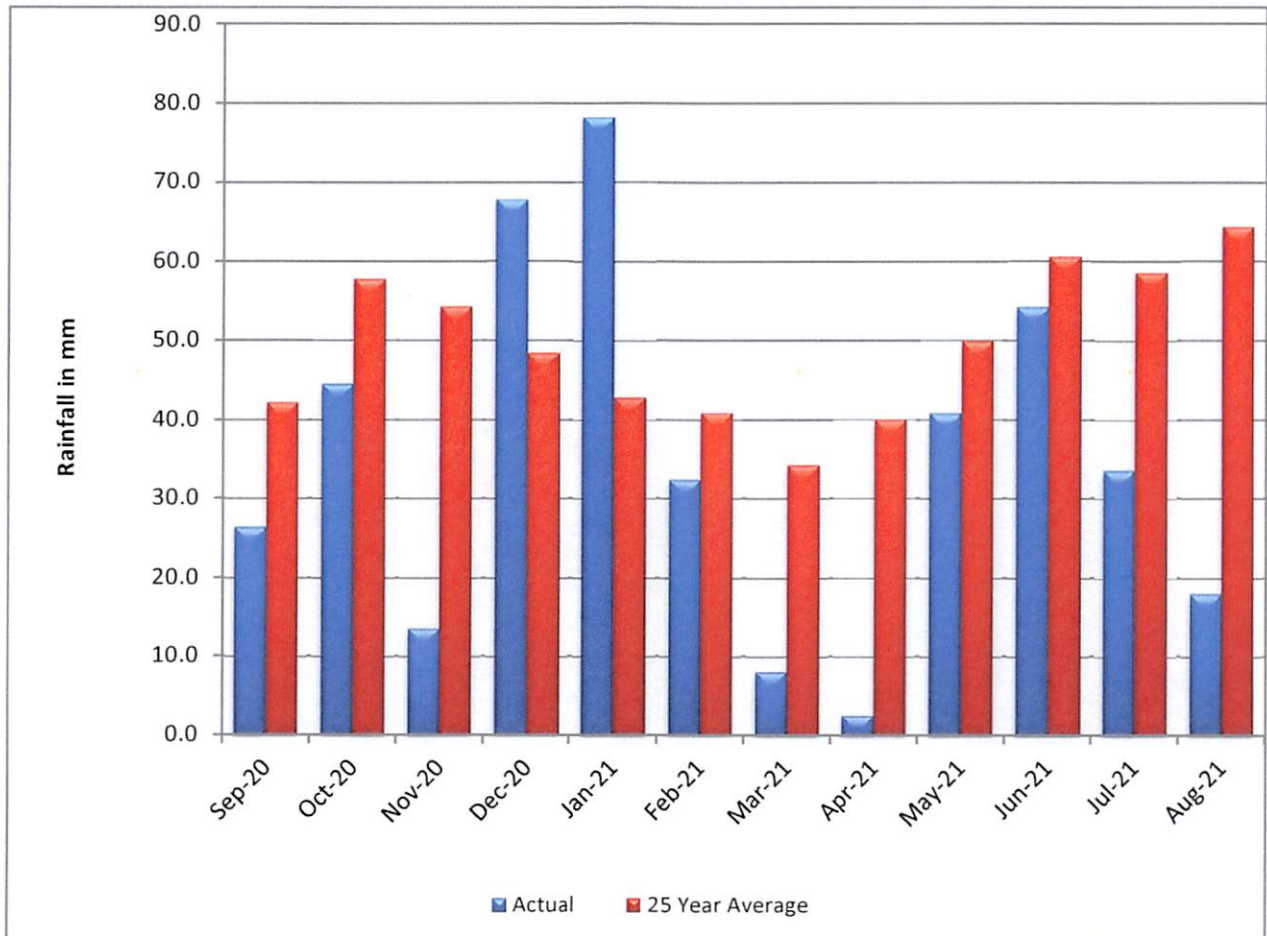
2022-2023            £60,000 proposed budget

The remaining culverts in the sections marked red above are potentially to be UV-lined subject to survey.



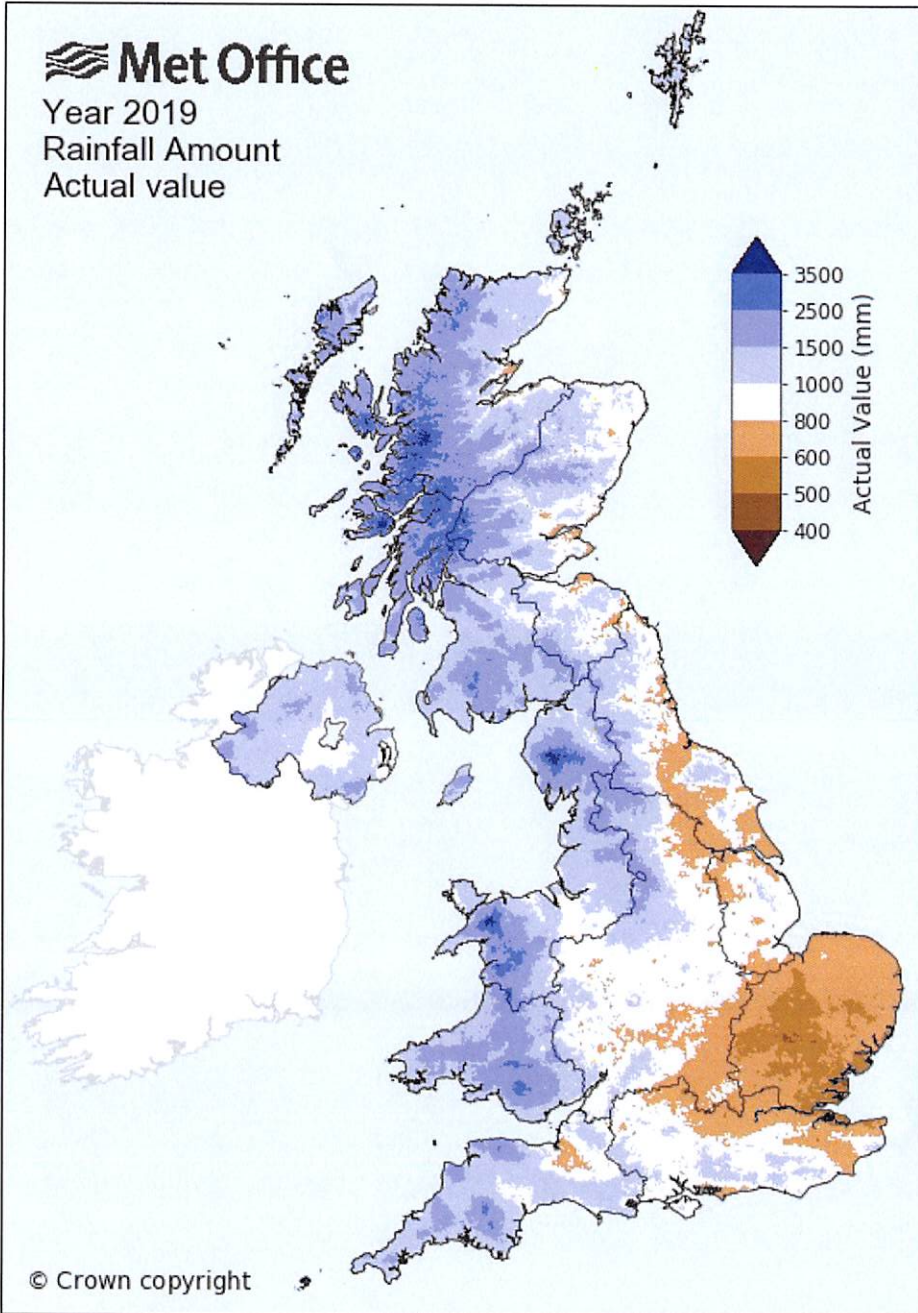
## BLACK SLUICE INTERNAL DRAINAGE BOARD Rainfall at Black Hole Drove Pumping Station


MONTH	Rainfall		Actual / Average
	Actual	25 Year Average	
	mm	mm	%
Sep-20	26.4	42.2	62.56%
Oct-20	44.6	57.8	77.16%
Nov-20	13.6	54.3	25.05%
Dec-20	67.8	48.5	139.79%
Jan-21	78.2	42.9	182.28%
Feb-21	32.4	40.9	79.22%
Mar-21	8.2	34.3	23.91%
Apr-21	2.6	40.0	6.50%
May-21	40.8	49.9	81.76%
Jun-21	54.2	60.6	89.44%
Jul-21	33.6	58.6	57.34%
Aug-21	18.0	64.3	27.99%
<b>Totals</b>	<b>420.4</b>	<b>594.3</b>	<b>70.74%</b>



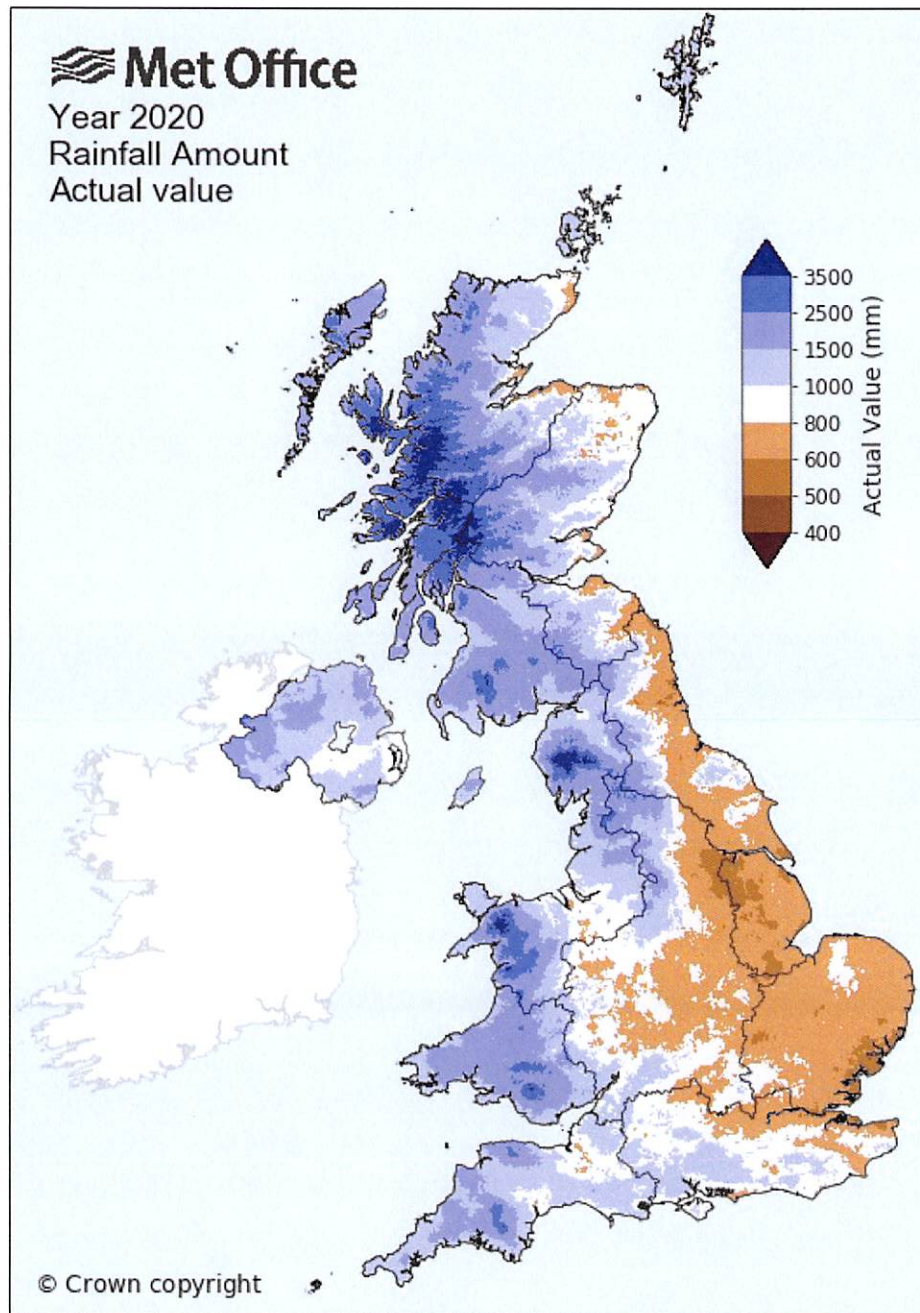
 **Met Office**

Year 2019  
Rainfall Amount  
Actual value



 **Met Office**

Year 2020  
Rainfall Amount  
Actual value





**BLACK SLUICE INTERNAL DRAINAGE BOARD**  
**SOUTHERN WORKS COMMITTEE - 28 SEPTEMBER 2021**

**AGENDA ITEM 06**

**ENGINEER'S REPORT**

The ten year schemes budget, included on page 40, has been reworked with the following amendments being made immediately and the long term plan being adjusted to accommodate these changes, and are indicated in purple text.

- Defer £10,000 for Kirton Marsh Roof in 2021/22
- Defer £9,000 for Horbling PS Roof in 2020/21
- Defer the £90,000 for the replacement of Dunsby PS Weedscreen Cleaner in 2022/23
- Defer the £65,000 for the SFFD Works in 2022/23 and £65,000 in 2023/24
- Include £20,000 in the budget for the Board's contribution to the Leaveslake Drove Scheme
- Include the £1,000 in the budget for the Board's contribution to the Lane Dyke Culvert Scheme.
- The adjustment in purple was proposed to the works committees to change the allocation of budget to replace the Great Hale PS Weedscreen Cleaner to the refurbishment of the Wyberton PS Pumps which is a higher priority.

The net effect of all these schemes is a reduction over 3 years of £318,000 of Board expenditure. This amended proposal would then comply with the aims of the Reserve policy over the ten year period.

**1. Capital Asset improvements**

**(a) 2021/22 Defra/EA Funded Grant in Aid (GiA) Schemes**

**(i) Remote monitoring, telemetry H&S scheme**

Works have progressed on this scheme, with new metric gauge boards now being placed at pumping stations, and remote operation of the pumping stations currently being completed, utilising the £57,000 contribution towards this scheme from the Board.

As reported to the last meeting, Holland Fen and Dyke Fen pumping stations now successfully running the pump control. Great Hale Fen has new operating system but setup is still required. There are five more, Mallard Hurn, Wyberton Chain Bridge, Cooks Lock, Blackhole Drove and Quadring pumping stations operating systems to install which the Pump Engineer will be completing.

This scheme has now been reviewed by the FCERM Capital Programme Manager, following a meeting with the Environment Agency, whereby originally the information had been that the benefits available did not meet the criteria to achieve Grant in Aid(GiA). Therefore a revised Business Case has now been developed and an application for £204,500.00 100% GiA submitted.



This revised total includes:

£110,000.00 original application for telemetry upgrades, metric gauge boards, CCTV equipment

£57,000.00 original Board contribution to the scheme

£37,500.00 CCTV equipment at the remaining 15 sites

(ii) Leaves Lake Drove Under capacity outfall culvert - £200,000

GiA £180,000, possible Board contribution £20,000.

Funding for this scheme has yet to be approved, subject to Outline Business Case approval.

(iii) Lane Dyke culvert replacement - £102,000

GiA £102,000 possible Board contribution £1,000.

Funding for this scheme has yet to be approved, subject to Outline Business Case approval.

(iv) Sempringham Pumping Station refurbishment - £208,000

GiA - £153,500

Local Levy - £27,000

BSIDB - £27,500

Works are programmed to progress on this scheme subject to completion of the new access road, as discussed on the inspection tour.

(v) SFF Upper catchment Natural Flood Management (NFM) and Control Analysis - £100,000

This scheme commenced two years ago to identify any relevant NFM works that could be implemented with agreement from landowners throughout our Upper Catchments. The studies have now been completed, with landowner engagement being positive, the study showed the Morton, Aslackby, Billingborough and Helpringham catchments as those with the best opportunities for NFM implementation. A proposal for funding towards implementation of these schemes is to be put before the Regional Flood and Coastal Committee (RFCC) Local Choices. Much of the funding for flood and coastal erosion risk management schemes comes from central government, which is prioritised nationally, but the Committee advises on the national funding programme and can exercise some Local Choice.

(vi) Dunsby Fen Catchment Works study

Catchment works schemes are part of a proposal discussed with the Environment Agency for some time now towards a whole catchment survey.

EA have advised that the best option would be to present an Outline Business Case based upon works that are required within individual catchments. It is envisaged that these works will include, a survey of the catchment along with proposed improvements to Board maintained assets within, to include Pumping Station refurbishments/updates.

An indicative value for proposed works being provided as per the advice received, which will be subject to change as the scheme is developed.

The estimate to complete the study £20,000.00

(vii) Flood Alleviation Scheme Horbling Town Beck study

As above, and also, this study is to investigate the high water levels in WC 18/7 (the Town Beck) during heavy rainfall events which cause flooding to the adjacent B1177 road.

To establish whether a potential connection into WC 18/4 in Horbling Fen catchment and an increase to the capacity of Horbling Fen PS would be beneficial in reducing the flood risk in Horbling village by enabling connection into this catchment and reducing the downstream effects of high water levels on WC 18/7.

(viii) Swaton NFM

3 sites were identified to attenuate flows in the Swaton catchment. Following agreement with the Environment Agency, these sites are being delivered by the Board through the PSCA. One of the attenuation sites is currently being constructed, and site visits are planned for the other 2 sites.

**(b) 2021/22 Board funded capital schemes**

(i) Graft Drain - £60,000

Works continued on the Graft Drain scheme in 2021/22. Progress on this scheme being affected by adverse weather conditions and high water levels.

An appraisal on long piped sections, culvert No's 1928 and 2521 is to be completed towards consideration to line these sections.

(ii) The Alternate Programme Access Work

The Alternate Programme Access work has spent £6864 of £20,000 budget. There are plans to place some side entry culverts to assist with these works, with the remaining budget.

**(c) 2021/22 Defra/EA Funded Grant in Aid (GiA) Schemes**

(i) Under capacity culvert - Lane Dyke - £103,000

This scheme is now part of next year's potential GiA funding allocation, however the Outline Business Case will continue to be developed along with the Leaves Lake Drove culvert scheme.



(ii) Under capacity culvert - Leaves Lake Drove – £200,000

The Outline Business Case is being developed for this scheme.

(iii) Swaton NFM

Works are planned to continue on the Swaton NFM scheme throughout this financial year, towards completion of the two outstanding sites, estimated November/December 2021.

**2. Proposed works 2022/23**

Please refer to the Capital Scheme budget on page 40.

**(a) Defra/EA Granted schemes**

(i) Dowsby Lode Catchment works - £20,000

Dowsby Lode catchment covers an area of 355 hectares.

Catchment works schemes are part of a proposal discussed with the Environment Agency for some time now towards a whole catchment survey.

EA have advised that the best option would be to present an Outline Business Case based upon works that are required within individual catchments. It is envisaged that these works will include, a survey of the catchment along with proposed improvements to Board maintained assets within, to include Pumping Station refurbishments/updates. An indicative value for proposed works being provided as per the advice received, which will be subject to change as the scheme is developed.

An estimate of contribution from the Board is included for information and may be required to make the scheme viable, based on existing proposed benefits available for the scheme, should Local Levy or additional external funding not be available.

(ii) Haconby Fen Catchment works - £20,000

Haconby Fen catchment covers 503 hectares.

As item (i), except there is no contribution proposed for this scheme in this financial year.

**(b) Board Funded Capital schemes**

(i) Dowsby Lode Catchment works - £25,000

Dowsby Lode catchment covers 345 hectares.

Currently this is an estimate of contribution from the Board and included for information and may be required to make the scheme viable, based on existing proposed benefits available for the scheme, should Local Levy or additional external funding not be available.

(ii) Dyke Fen PS Pump Motor refurbishment - £3,000

Part of ongoing preventative maintenance at this Pumping Station to refurbish the pump motor to one of the pumps, this is a two pump station.

(iii) Dunsby Fen PS Pump Motor Refurbishment - £3,000

Part of ongoing preventative maintenance to refurbish the pump motor at this Pumping Station, this is a single pump station.

(iv) Gosberton Fen PS Pump Motor Refurbishment - £3,000

Part of ongoing preventative maintenance to refurbish the pump motor at this Pumping Station, this is a three pump station.

(v) Graft Drain Scheme

The next section of the Graft drain scheme works to desilt the watercourse and replace or remove existing culverts - £60,000 estimate.

### **3. Drain Maintenance**

(a) Annual Summer Flailmowing / Cutting

The summer flail mowing and cutting began w/c 2<sup>nd</sup> August. A sixth 13 ton excavator, operating one of the Boards 4m cutting baskets has been hired in for twelve weeks. Therefore, the Boards maximum production has three flails (Spearhead Twiga No 1 SPV 2 with side flail and cutting basket, Twiga No 2 SPV2 with side flail and front flail, and Twiga No 3 SPV2 with side flail and front flail) flailing in front of the six cutters (Hitachi ZX 210, JCB JS 145, JCB JS 145HD, 2 x JCB JS 130 and hired in JCB131) albeit the Twiga No 1 does change cutting heads and cuts some watercourses.

The 67km (Northern & Southern Works areas) of high profile watercourse assets are constantly being monitored to determine whether a second flail and/or cut is required, these will most probably require a second cut.

The SKDC (c£33k) & Lincolnshire Housing Partnership (c£11.5k) Hand Roding contract works are being completed. All the Board hand roding watercourses are being completed. Additional hand roding works are also being completed for the Environment Agency through PSCA.

A bulldozer has been hired in to grade out the previous year's winter cleansing arisings, these works are completed within a small window of opportunity (between harvest and drilling) and will continue as budgets dictate.

EA Waste Management exemptions have been applied for over the next year for burning wood on site, dredging inland watercourses and spreading watercourse arisings over adjacent land.



(b) Prior Notice Given for Summer Cutting

Notice was issued within the 2021/22 Drainage Rates brochure, along with a provisional works programme, stating that all landowners/farmers can view weekly updated accurate summer cutting works programmes on the Boards web site.

Landowners/farmers were requested, to contact the Board with any summer cropping issues throughout the summer cutting season.

The text messaging service informing landowners/tenants that Boards machinery is working in the area continues to be used. This has proved successful, and all landowners/tenants are encouraged to provide mobile phone contact details to enable ongoing success.

This has been a success, and we recommend that the Board continue with this approach.

(c) Summer Crop Loss/Damage Compensation

In line with the summer cutting landowners/farmers are encouraged to agree to the Boards equipment travelling through their crops whereby the Board agree crop loss compensation, where crop damage/loss has occurred, instead of the higher costs associated with removing the machine and subsequently returning once the crop has been harvested, albeit in some cases a new crop may have already been planted.

The cutting programme in the drainage rates brochure along with the updated programme on the website will remind all landowners adjacent to all the Board maintained watercourses of the Boards intention to carry out summer vegetation flailing/cutting to the programmes identified on the Boards web site and therefore try to manage fields accordingly. At the same time the programme should be used to assist timely removal of any obstructions (electric fencing, bird scarers, irrigation pumps & pipes etc).

(d) Winter Crop and Land Loss Compensation

The Boards written intention of improvement cleansing works will be issued to landowners in October 2021 for the works to be undertaken throughout February to April 2022. The notice being given, the farmer can decide whether to plant the affected area or not, the arisings are spread and levelled by the landowner or by the Board generally the following year.

(e) Proposed Desilting, Bushing and Cleansing Works

Letters will be sent to landowners/occupiers adjacent to the drains identified for cleansing giving notice that the Board intend to bush where required and de-silt during the winter months.

Letters will also be sent to occupiers where the Board proposes to carry out other bushing works in preparation for next year's de-silting.

We are currently employing Scarborough Nixon Associates as an external Environmental Consultant to carry out surveys of any relevant drains on our desilting programme.

**4. Pumping Station Maintenance**

At the end of September (Period 5) the budget for maintenance works is £110,458 with the actual expenditure being £148,283 which includes estimated electricity payments.

**5. External Recoverable Works**

Current external recoverable income is £248,161 for rechargeable works compared to £141,295 last year.

**6. Health and Safety**

The Board have appointed Cope Safety Management agreeing terms on a new contract as their Health & Safety consultants for a 5-year period commencing June 2019.

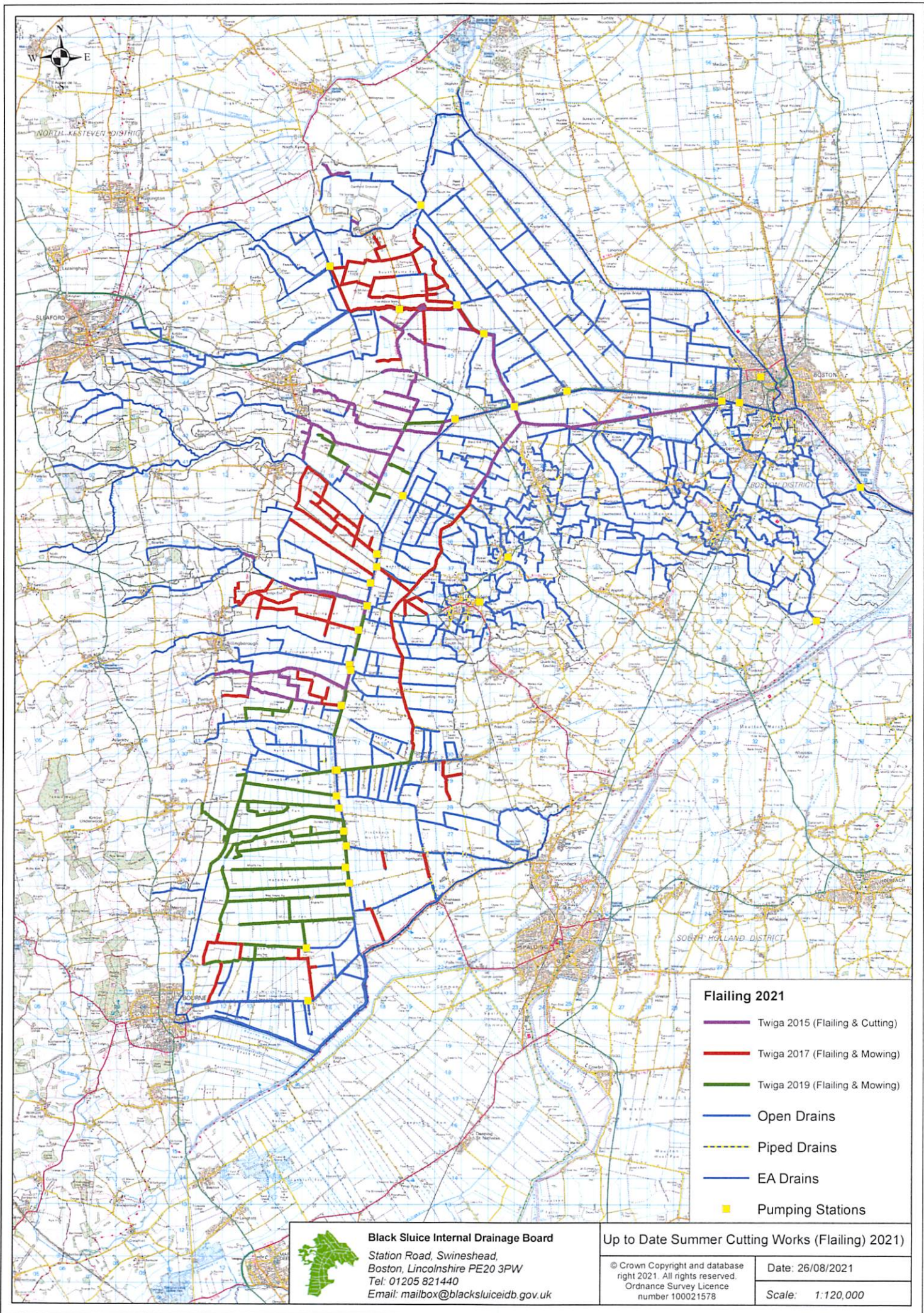
All employees and contractors to the Board required to work alone, are now using the automated Peoplesafe system using mobile phone technology.



## Black Sluice Internal Drainage Board 10 Year Capital Schemes Budget

Year	Type	Scheme	Total	Grant	Local Levy	Possible Board Contribution	Drain	PS
2021/22	Drain	Leaves Lake Drove under capacity outfall and works	£ 200,000	£ 180,000		£ 20,000		
	Drain	Lane Dyke culvert replacement	£ 103,000	£ 102,000		£ 1,000		
	Drain	Graft Drain improvements	£ 60,000				£ 60,000	
	Drain	Jetting to major pipelines	£ 54,000				£ 54,000	
	Pump	Wyberton Marsh PS, Pump Refurb (Works approved)	£ 46,000					£ 46,000
	Drain	Alternative Programme access works	£ 20,000				£ 20,000	
	Drain	NFF Revetment Works	£ 341,963	£ 263,963	£ 8,000	£ 70,000		
	Pump	Sempringham PS Weedscreen Cleaner	£ 206,339	£ 206,339				
	Drain	SFF Upper Catchment NFM and Control Analysis	£ 64,800	£ 64,800				
	Pump	PS Automation & CCTV	£ 105,753		£ 105,753			
	Drain	Leaves Lake Drove, Under capacity South Forty Foot Outfall	£ 20,000	£ 20,000				
	Drain	Dunsby Fen Catchment Works	£ 20,000	£ 20,000				
	Drain	Flood Alleviation Scheme Horbling Town Beck	£ 20,000	£ 20,000				
	Drain	Bicker Fen Catchment Works	£ 20,000	£ 20,000				
	Drain	Ewerby Fen Catchment Works	£ 20,000	£ 20,000				
Drain	General culvert replacement contributions	£ 5,000				£ 5,000		
			£ 1,306,855	£ 917,102	£ 113,753	£ 91,000	£ 139,000	£ 46,000
2022/23	Drain	Ewerby Fen Catchment Works	£ 530,000	£ 410,000	£ 70,000	£ 50,000		
	Drain	Graft Drain improvements	£ 60,000				£ 60,000	
	Drain	Dowsby Lode Catchment Works	£ 45,000	£ 20,000		£ 25,000		
	Drain	Haconby Fen Catchment Works	£ 20,000	£ 20,000				
	Drain	Alternative Programme access works	£ 20,000				£ 20,000	
	Pump	Dyke Fen PS, refurbish 1 pump motor	£ 3,000					£ 3,000
	Pump	Dunsby Fen PS, refurbish 1 pump motor	£ 3,000					£ 3,000
	Pump	Gosberton Fen PS refurbish 1 pump motor	£ 4,000					£ 4,000
	Drain	General culvert replacement contributions	£ 5,000				£ 5,000	
			£ 690,000	£ 450,000	£ 70,000	£ 75,000	£ 85,000	£ 10,000
2023/24	Drain	Horbling Town Beck Flood Alleviation scheme	£ 525,000	£ 410,000	£ 95,000	£ 20,000		
	Drain	Dunsby Fen Catchment Works	£ 335,000	£ 230,000	£ 55,000	£ 50,000		
	Pump	Great Hale Fen PS refurbish weedscreen cleaner	£ 75,000					£ 75,000
	Drain	Jetting to major pipelines	£ 40,000				£ 40,000	
	Pump	Dyke Fen PS, refurbish 1 pump and 1 motor	£ 25,000					£ 25,000
	Drain	Quadrang North Fen roadside revetment	£ 24,000				£ 24,000	
	Drain	Alternative Programme access works	£ 20,000				£ 20,000	
Drain	General culvert replacement contributions	£ 5,000				£ 5,000		
			£ 1,049,000	£ 640,000	£ 150,000	£ 70,000	£ 89,000	£ 100,000
2024/25	Drain	NFF Desilting	£ 65,000				£ 65,000	
	Drain	Bicker Fen Catchment works	£ 325,000	£ 275,000	£ 1,000	£ 49,000		
	Drain	Dowsby Lode Catchment Works	£ 245,000	£ 245,000			£ 60,000	
	Drain	Jetting to major pipelines	£ 60,000					
	Pump	Ewerby Fen PS Replace control panel	£ 60,000					£ 60,000
	Pump	Kirton Marsh PS refurbish 1 pump and 1 motor	£ 30,000					£ 30,000
	Drain	Dyke Fen (New Dyke) revetments	£ 25,000				£ 25,000	
	Drain	General culvert replacement contributions	£ 5,000				£ 5,000	
			£ 815,000	£ 520,000	£ 1,000	£ 49,000	£ 155,000	£ 90,000
2025/26	Drain	Claydyke desilting	£ 65,000				£ 65,000	
	Drain	Haconby Fen Catchment Works	£ 280,000	£ 255,000		£ 25,000		
	Drain	Dowsby Fen Catchment Works	£ 300,000	£ 275,000		£ 25,000		
	Pump	Damford PS replace control panel	£ 65,000					£ 65,000
	Drain	Jetting to major pipelines	£ 50,000				£ 50,000	
	Drain	Dyke Fen (New Dyke) revetments	£ 35,000				£ 35,000	
	Drain	NFF Desilting	£ 20,000				£ 20,000	
	Pump	Haconby PS refurbish axial flow pump	£ 25,000					£ 25,000
Drain	General culvert replacement contributions	£ 5,000				£ 5,000		
			£ 845,000	£ 530,000	£ -	£ 50,000	£ 175,000	£ 90,000
2026/27	Drain	Claydyke desilting	£ 65,000				£ 65,000	
	Drain	SFFD Desilting Guthrum to Blackhole Drove PS	£ 60,000				£ 60,000	
	Drain	Jetting to major pipelines	£ 50,000				£ 50,000	
	Pump	Gosberton Fen PS Refurbish 3 x axial flow pumps	£ 40,000					£ 40,000
	Pump	Haconby Fen PS Replace control panel	£ 35,000					£ 35,000
	Drain	General culvert replacement contributions	£ 5,000				£ 5,000	
			£ 255,000	£ -	£ -	£ -	£ 180,000	£ 75,000
2027/28	Drain	SFFD Desilting Guthrum to Blackhole Drove PS	£ 80,000				£ 80,000	
	Drain	Jetting to major pipelines	£ 50,000				£ 50,000	
	Pump	Cooks Lock p/s refurbish weedscreen cleaner	£ 50,000					£ 50,000
	Drain	New Hammond Beck Desilting	£ 40,000				£ 40,000	
	Pump	Bicker Fen replacement control panel	£ 33,000					£ 33,000
	Pump	Bicker Fen 1 x axial flow pump refurb	£ 15,000					£ 15,000
	Drain	General culvert replacement contributions	£ 5,000				£ 5,000	
			£ 273,000	£ -	£ -	£ -	£ 175,000	£ 98,000
2028/29	Drain	Old Hammond Beck Desilting	£ 80,000				£ 80,000	
	Drain	Jetting to major pipelines	£ 60,000				£ 60,000	
	Pump	Donington NI refurbish 3 x axial flow pumps	£ 43,000					£ 43,000
	Pump	Kirton Marsh p/s replace control panel	£ 37,000					£ 37,000
	Drain	Bourne Fen 28/10 Revetment	£ 30,000				£ 30,000	
		To be allocated	£ 15,000				£ 15,000	
	Pump	Helpringham p/s new roof	£ 11,000					£ 11,000
Drain	General culvert replacement contributions	£ 5,000				£ 5,000		
			£ 281,000	£ -	£ -	£ -	£ 190,000	£ 91,000
2029/30	Drain	Jetting to major pipelines	£ 60,000				£ 60,000	
	Pump	Chain Bridge p/s refurbish 3 x axial flow pumps	£ 45,000					£ 45,000
	Drain	Gosberton pump drain desilting/pump inspection	£ 40,000				£ 40,000	
	Drain	Dowsby Fen pump drain desilting/pump inspection	£ 40,000				£ 40,000	
	Pump	Quadrang Fen p/s replace control panel	£ 40,000					£ 40,000
	Pump	Allen House p/s replace control panel	£ 32,000					£ 32,000
	Drain	Chain Bridge pump drain desilting/pump inspection	£ 20,000				£ 20,000	
	Drain	To be allocated	£ 8,000				£ 8,000	
Drain	General culvert replacement contributions	£ 5,000				£ 5,000		
			£ 290,000	£ -	£ -	£ -	£ 173,000	£ 117,000





**Flailing 2021**

- Twiga 2015 (Flailing & Cutting)
- Twiga 2017 (Flailing & Mowing)
- Twiga 2019 (Flailing & Mowing)
- Open Drains
- - - Piped Drains
- EA Drains
- Pumping Stations



**Black Sluice Internal Drainage Board**  
 Station Road, Swineshead,  
 Boston, Lincolnshire PE20 3PW  
 Tel: 01205 821440  
 Email: mailbox@blacksluiceidb.gov.uk

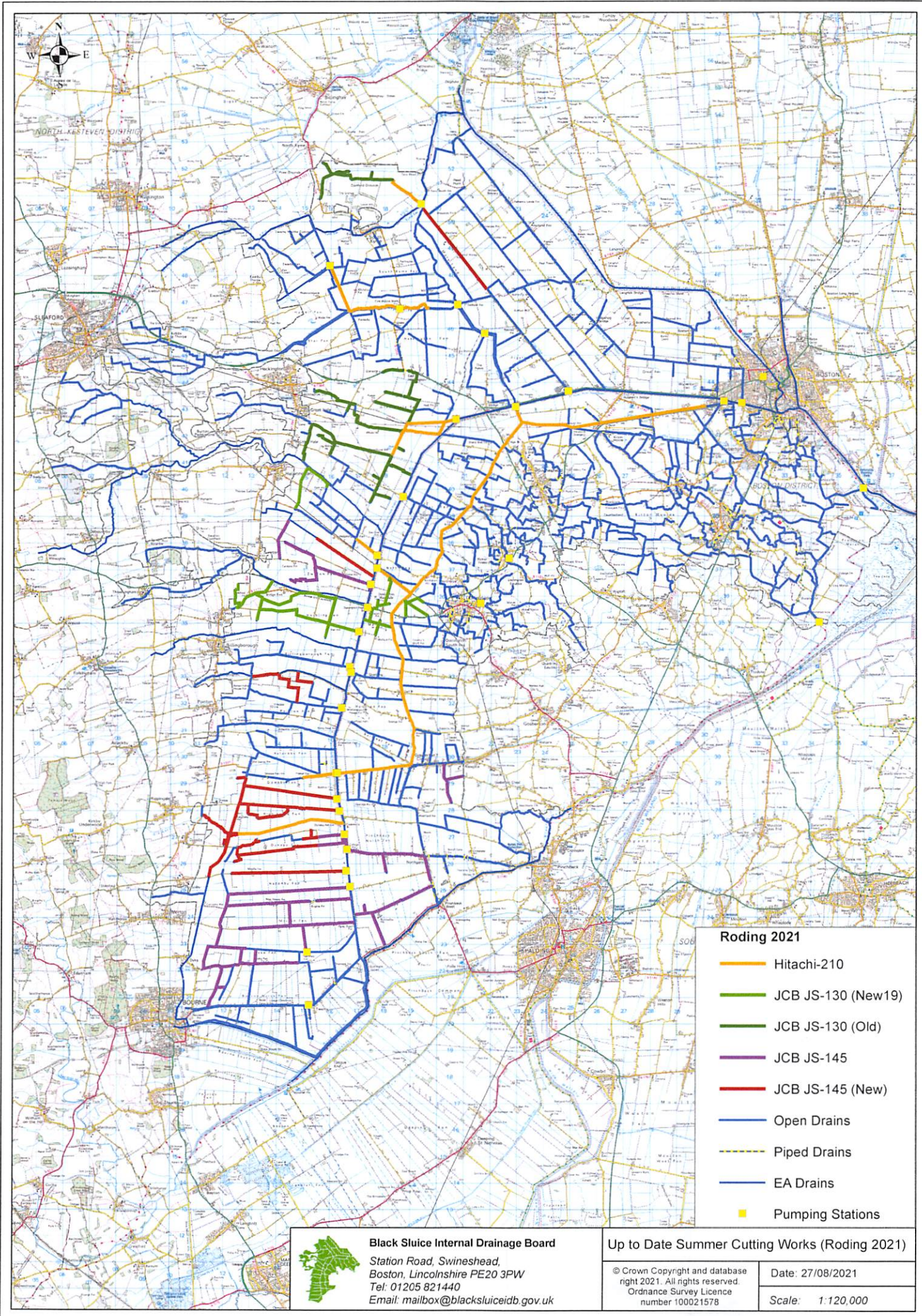
**Up to Date Summer Cutting Works (Flailing) 2021)**

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- Roding 2021**
- Hitachi-210
  - JCB JS-130 (New19)
  - JCB JS-130 (Old)
  - JCB JS-145
  - JCB JS-145 (New)
  - Open Drains
  - Piped Drains
  - EA Drains
  - Pumping Stations

**Black Sluice Internal Drainage Board**  
 Station Road, Swineshead,  
 Boston, Lincolnshire PE20 3PW  
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 Email: mailbox@blacksluiceidb.gov.uk

**Up to Date Summer Cutting Works (Roding 2021)**

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