BLACK SLUICE INTERNAL DRAINAGE BOARD

MINUTES

of the proceedings of a Meeting of the Southern Works Committee

held at the offices of the Board on the 4th March 2020 at 15:50pm

Members

Chairman - * Mr M Rollinson

- * Mr W Ash
 * Mr V A Barker
 * Mr K C Casswell
 * Mr R Dorrington
 Mr A Mair
- * Cllr S Walsh

- * Mr J F Atkinson Cllr C Benn Mr J Caswell Mr C Dring Mr M Mowbray
- * 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 K Methley (Pump Engineer)

Mr P Holmes (Vice-chair & Chairman Northern Works Committee)

Cllr P Bedford (Executive Committee Member)
Mr J Fowler (Executive Committee Member)

Mr A Branton (Guest)
Mr B Atkinson (Guest)
Mr N Scantlebury (Guest)
Mr M Taylor (Guest)

The Chairman welcomed the guests to the meeting.

1585 APOLOGIES FOR ABSENCE - Agenda Item 1

Apologies of absence were received from Cllr C Benn, Mr M Brookes, Mr M Mowbray, Mr A Mair, Mr J Rollinson, Mr G Atkinson and Mr N Morris, Mr C Dring and Mr J Caswell.

1586 DECLARATIONS OF INTEREST - Agenda Item 2

Declarations of interest were received from:

(a) MR V BARKER - DRAINAGE & MAINTENANCE ISSUES – LAND SOUTH OF THE RISEGATE EAU, GOSBERTON FEN

Mr V Barker declared an interest in minute 1591(a) – drainage and maintenance issues at land south of the Risegate Eau, Gosberton Fen.

(b) MR J ATKINSON - POTENTIAL HANDOVER OF DRAIN 26/2 TO LANDOWNER - PINCHBECK NORTH FEN

Mr J Atkinson declared an interest in 1591(c) – potential handover of drain 26/2 to landowner – Pinchbeck North Fen.

(c) MR J ATKINSON - GENERAL DRAINAGE ISSUES – PINCHBECK NORTH FEN SUB CATCHMENT

Mr J Atkinson declared an interest in 1591(d) – general drainage issues at Pinchbeck North Fen Sub Catchment.

(d) MR J ATKINSON - CULVERT WORKS – LEAVESLAKE DROVE

Mr J Atkinson declared an interest in 1591(g) – culvert works at Leaveslake Drove.

1587 MINUTES OF LAST MEETING - Agenda Item 3

The Minutes of the Joint Works Committee, regarding the Southern Works Committee, which was held on 21st November 2019, copies of which had been circulated, were considered. It was AGREED that the Minutes should be jointly signed as a true record.

1588 MATTERS ARISING - Agenda Item 4

There were no matters arising.

1589 TERMS OF REFERENCE - Agenda Item 5

The Chief Executive explained that the only change / addition to the Terms of Reference is the addition of the 'Reporting' section and 'Reviewed & Approved by' section, shown in red in the agenda item. These sections will be added to every committee's terms of reference in order to standardise them all.

All AGREED that the Southern Works Committee Terms of Reference be RECOMMENDED to the Board for approval.

1590 TO RECEIVE A REPORT ON THE SOUTH FORTY-FOOT UPPER CATCHMENT NATURAL FLOOD MANAGEMENT (NFM) STUDIES - Agenda Item 6

The Chief Executive introduced this agenda item, firstly by pointing out that the priority order that the catchments will be completed is the order shown in the white box on the map included in the agenda. These don't correlate with the numbers shown on the map and so the Chief Executive added that the catchment numbers are as follows; catchment 1 should be 6, catchment 2 should be 5, catchment 3 should be 4, catchment 4 should be 1, catchment 5 should be 3 and catchment 6 should be 2.

The Chief Executive asked that if anybody owns / farms land within these catchments, or knows anybody that does, that has an interest in Natural Flood Management (NFM) to get in contact with Lesley Sharpe, who will be conducting the work, alongside a Farm Engagement Advisor. The contact details for Lesley Sharpe are included in the agenda item.

It was also noted that Lesley Sharpe is an expert in countryside stewardship midtier 2020 and is currently at an event promoting 'Championing the farm environment'.

1591 DISCUSS THE OPERATIONS TOUR & INSPECTION - Agenda Item 7

The Operations Manager presented the agenda item as follows;

(a) <u>DRAINAGE & MAINTENANCE ISSUES – LAND SOUTH OF THE RISEGATE</u> EAU, GOSBERTON FEN

There are four options to be considered for the improvement of conveyance of water along this watercourse as follows;

- enhanced maintenance to three times a year
- lift by pumping in the current direction of flow
- lift by pumping by reversing the direction of flow and outfall into the Hammond Beck
- lift by pumping via a possible shortened route to Drain 22/28 to south.

Following conversation with one of the landowners, Mr V Barker, an initial way forward could be to increase the maintenance along the watercourse i.e. improve weed control through the summer months, meaning that the watercourse will have the banks flailed and mechanically roded twice to three times per year dependent upon the growing season. Following a survey, it may also show that the conveyance could be improved by widening or desilting, which can be considered following the survey. Other options were felt to be less cost beneficial.

Mr V Barker confirmed he was content with this plan, noting that he would like to be involved once the report has been completed.

(b) <u>BSIDB SCHEME WORKS – GRAFT DRAIN, NORTHGATE, WEST</u> PINCHBECK – SCHEME 2086, DRAIN 22/31

This improvement work includes the removal and / or replacement of culverts along the watercourse. The proposal for next year is to continue the work to eventually have completed the whole watercourse.

The proposed budget for next year is £60,000. This phase of work consists of ten existing culverts, of which removal or repositioning, whereby two existing culverts could be replaced by one, will be looked into following negotiations with landowners. Therefore, there will be a reduction in the number of culverts.

Proposed by Mr K Casswell, all AGREED that the £60,000 2020/21 budget for the continuation of improvement works along the Graft Drain (22/31), Scheme 2086, be RECOMMENDED to the Board for approval.

(c) <u>POTENTIAL HANDOVER OF DRAIN 26/2 TO LANDOWNER –</u> PINCHBECK NORTH FEN

Mr J Atkinson noted that he would like the handover of drain 26/2 delayed until a satisfactory solution is made concerning the general drainage issues in the Pinchbeck North Fen Sub Catchment, as explored below in minute 1591(d).

(d) <u>GENERAL DRAINAGE ISSUES – PINCHBECK NORTH FEN SUB</u> CATCHMENT

Options to be considered to improve conveyance along drain 26/2 are as follows:

- lower the pump drain level
- check the condition of the outfall pipe from the watercourse that runs adjacent to the South Forty Foot Drain (SFFD) to ensure it is fit for purpose
- installation of a non-return flap valve on the end of the outfall pipe so the level in that watercourse can be maintained
- the installation of a siphon under the SFFD to take the existing flows into the Dunsby catchment.

The BSIDB operations team will discuss with the landowner to decide upon the most appropriate way forward.

Mr V Barker noted than another option, also relevant to Twenty, may be the use of a small pump.

Mr J Atkinson noted that he wonders if the very small section between the pump and the first bridge could be deepened and a small weir made so that the roadside drain maintains the same depth in addition to the pump pumping to a lower level. Mr J Atkinson noted he is happy for the officers to explore the various options.

(e) <u>REPLACEMENT OF CONTROL PANELS AT DUNSBY FEN PUMPING</u> STATION

The current control panel at Dunsby Pumping Station is at the end of its life, it is 26 years old, some of the parts that may fail no longer have replacement parts available because of its age. It is therefore more cost effective to replace these panels before they begin to fail. The proposed budget for replacement is £30,000.

Mr P Holmes questioned which parts are actually not replaceable, feeling that it is possibly a bit extreme to spend £30,000 on a new control panel that hasn't actually failed yet.

The Operations Manager responded that it is easier and cheaper to replace the whole control panel rather than modify / update the existing one.

The Chief Executive acknowledged Mr P Holmes point, but noted the Environment Agency's (EA) outlook of 'fix following failure'. The Chief Executive added that he doesn't want this Board to have the same outlook, which is why the ten-year plan is in place, of which this is part of. He added that the Board is seen as proactive and how long do you leave the existing control panel before it starts failing?

It was noted that the only value the existing control panel will have is for scrap metal. The Finance Manager also added the risk of it failing during an emergency event. The Pump Engineer also confirmed that the supplier of the control panel provides the best financial option.

Mr V Barker questioned whether the new control panel will have the correct controls to be able to be controlled from the office rather than having to physically attend site? The Chief Executive noted that it is not the control panels that determine this, but the control software system, which is currently being reviewed and upgraded. The Pump Engineer confirmed that the new control panel will have the relevant connections within it for this, where as the older control panels will have to be adapted.

The Chairman felt it is a worthwhile investment.

Proposed by Mr V Barker, all AGREED that the £30,000 2021/22 budget for the replacement of the control panel at Dunsby Fen Pumping Station be RECOMMENDED to the Board for approval.

(f) <u>CULVERT WORKS – LANE DIKE, M</u>ORTON FEN

The Board would like to replace this culvert through Grant in Aid as it has been identified that during high water flows, the outfall isn't big enough to allow for the flows through the watercourse and so will be replaced with a larger diameter. It will cost £102,000 to replace the culvert.

There is the potential to put the new culvert in at a lower level, which will be investigated before completion.

Mr J Atkinson referred to the map within the agenda, questioning whether it is possible to shorten the route and have more open watercourse rather than tunnel?

Mr V Barker added that, he felt, what Mr J Atkinson was saying is that if the new culvert is located slightly north of the existing culvert it would be much shorter and therefore cheaper.

The Operations Manager acknowledged that the possibility of this can be looked into, however, it can't come too much straighter as it would interfere with the substructure of the station.

(g) <u>CULVERT WORKS – LEAVESLAKE DROVE</u>

The potential for Grant in Aid funding is currently being investigated for the replacement of the Leaveslake Drove outfall culvert. Attention was drawn to the proposed size of the new culvert, 36m x 1500mm diameter, placing it at a lower level will also be investigated.

Mr V Barker questioned that unless the South Forty Foot Drain (SFFD) was pumping at a lower level there won't be a great amount of improvement?

The Operations Manager noted how very saturated and wet the land is in that particular area and so whilst replacing the culvert consideration needs to be given to increasing the conveyance of the water. The installation of a non-return valve will also be considered so that the level within the watercourse can be controlled.

Mr V Barker raised his point again, suggesting that for increased conveyance the level of the SFFD may also need to be lowered.

Mr J Atkinson noted that there is more land under water in this area than elsewhere due to the drain at the roadside not being deep enough.

The Operations Manager noted that improvement works were carried out, however, the restriction is always the outfall. If it was to be dug any deeper then it will only act as a reservoir, so it can't be made any deeper if the capacity is not available.

The Operations Manager concluded that the officers will explore further to see if there is further improvement that can be made, this potentially being the replacement of the outfall culvert and considering what lower level can be achieved.

(h) <u>SMART WATER MONITORING – BSIDB DISTRICT & UPPER CATCHMENT</u>

A large-scale map of the map included within the agenda was provided for members and guests to look at should they wish to.

Landowners within the upper catchment areas will be contacted regarding the installation of gauging sites on their land.

(i) WEEDSCREEN CLEANER – SEMPRINGHAM FEN PUMPING STATION

Grant in Aid funding has been achieved for the weedscreen cleaner at Sempringham Pumping Station.

The weedscreen cleaner will be similar to the one at Horbling Fen Pumping Station and will also require a dump area. This is expected to be completed within the next financial year.

Cllr P Bedford left the meeting.

(j) <u>LEAKAGE INTO DRAIN 20/5 – FROM EA BILLINGBOROUGH LODE,</u> <u>NESLAM FEN</u>

There is an existing pipe under the road into the Billingborough Lode and when the Billingborough Lode is at high levels, it has now started to push water under the road and into the BSIDB watercourse, therefore filling up the BSIDB system every time water levels are high.

The Operations Manager has been in contact with the Environment Agency (EA) about this and they are aware of it. We are currently waiting for them to decide upon the next course of action. Although it is effecting the BSIDB system, the water is coming from the EA and so ultimately it is their problem. The simplest option may be to cap it off with concrete.

Mr V Barker felt that rather than coming under the pipe, he felt it is coming through the pipe to a point in the bank and it is now coming through the rusted pipe. He felt using cement to block it would be the best option.

(k) <u>NEW ROOF – HORBLING PUMPING STATION</u>

As part of the programme to replace all pumping station roofs, it is proposed to complete the new roof at Horbling Pumping Station in 2021/22 at an estimated cost of £9,000. For reference, the roof will be the same type fitted to Donington Mallard Hurn in 2018.

Proposed by Mr W Ash, all AGREED that the installation of a new roof at Horbling Pumping Station in 2021/22 at an estimated cost of £9,000 be RECOMMENDED to the Board for approval.

(I) NATURAL FLOOD MANAGEMENT (NFM) SCHEME – SWATON SUB-CATCHMENT

The Environment Agency (EA) have asked the IDB to promote their pilot project of natural flood management.

The EA are looking to introduce swales to capture the water and stop it entering watercourses so quickly, to capture over land flow water, to enable the watercourse to be better managed and a reduction in flows.

The Chief Executive added that the swales are not connected to the watercourse and through evaporation and natural seepage the water will dissipate.

The EA have created three options of swale plans, which were displayed on screen. The Operations Manager added that the Board's machinery will still require access and so a minimum of six metres is required, which the EA are aware of, the plan shows 5 metres.

The EA's ideal is that whatever they create is within the existing margins as you can apply for derogation on the existing licence to change what the licence includes – this will work for riparian watercourses but not board maintained, the EA will have to either consider paying a short term crop loss compensation or increase the margin that encompasses the swale.

The scheme is still in its early stages, with the aim being to have completed the majority of the scheme by 2021. This work will be offered to the IDB through the Public Sector Cooperation Agreement (PSCA).

The majority of the relevant land is owned by the Crown, whom the Farm Engagement Officer will have / will be negotiating with. Mr V Barker noted the length of time taken to negotiate with the Crown Estate regarding the IDB lagoons.

Mr K Casswell raised his concern about the swales and that once full they will surely overflow? It may work in a flash amount of rain, but will it work with prolonged amounts of rain? The Operations Manager agreed that it is not as far reaching as was expected.

Mr V Barker questioned the cubic capacity of the swales in comparison to the drain running along side it; he felt it would be minimal.

(m) <u>REPLACEMENT OF CULVERT 2422 – DRAIN 36/3, NORTH BECK,</u> ASWARBY

Culvert 2422 has partially collapsed which, alongside high water flows, has caused a slippage on the bank. The site is being monitored.

Some of the Board's officers have spoken with the landowner regarding the replacement of the culvert, with an estimated cost for replacement being C£15,000.

The Chief Executive noted that he is under the impression that the landowner is pursuing an insurance claim. It was noted that they are still using the culvert to get to and from the house and farm. The Chairman felt the landowner will ask the Board to replace it.

(n) WEEDSCREEN CLEANER – HELPRINGHAM FEN PUMPING STATION

Once the pumps start running they naturally start to drag the weed that is in the system, this can create a problem, which has been especially so this year at Helpringham.

The weed stops at the weedscreen and prevents the water getting to the pump and therefore the pump stops running. The pump will only come back on once the water level builds up again. The stopping and starting of pumps like this is not good for the motor within the pump and so should be avoided as much as possible.

The existing dump area was built a number of years ago with the hope of being able to attract funding for an automated weedscreen cleaner. Unfortunately, gaining funding has been unsuccessful and following the problems encountered, it is felt it needs replacing.

Another problem faced is that the electrical contractors have stated that the pumps are not designed to run for prolonged periods of time, however, this is what we need them to be able to do in order to manage water levels. Therefore, this is going to be brought in as a possible grant in aid scheme or capital scheme for the future to install an automated weedscreen cleaner and improvements to the station. This has an estimated cost of £120,000 to include extension works to the dump area and the new weedscreen cleaner. The Chief Executive also made reference to the possibility of extending with a box unit which will be explored further by the officers.

(o) SOUTH FORTY-FOOT DRAIN BUSHING WORKS

Bushing has almost been completed for the 3km stretch from the A52 to almost Bicker Fen.

The aim is to get a 3km section desilted this year, another 3km desilted the following year and the same again the year after. However, there are some restrictions around when the works can actually take place, for example, the bushing can only take place out of bird nesting season. This will all be determined by funding from the Environment Agency (EA), which is currently not available. However, there is a high level of confidence that the funding will become available.

(p) FLOODING – EA HELPRINGHAM EAU – RED BRIDGE, HELPRINGHAM

There have been high water levels in the Helpringham Eau, videos displaying this were shown on screen.

This watercourse is maintained by the Board on behalf of the Environment Agency (EA), however, this year the Board were stopped by the EA from traveling along the banks of the drain to maintain it due to how saturated the banks were as a health and safety risk. Therefore, the watercourse was not able to be cut prior to these high levels and flooding, however, the Operations Manager felt it would not have made much difference based on the amount of water received.

(q) TWENTY PUMPING STATION & DRAINAGE ISSUES

An additional slide was presented on screen, not included within the agenda inspection booklet.

There are currently issues with standing water on land and water above land draining outfalls in both Board-maintained and riparian watercourses. The relevant Farm Manager, Mr M Taylor, has conversed on several occasions about this with the Operations team and the short-term fix currently used is to run the pumps at Twenty to try and lower the levels. This is only a short-term solution and so other options need to be considered as follows; to collate all existing survey information and decide whether a new survey needs to be conducted, a walk over survey has been completed last week with no obvious problems observed such as blockages, siltation, etc. Mr M Taylor also added that he also has not identified any blockages etc.

Mr M Taylor questioned whether the problem with Dyke Fen Pumping Station could be having an effect? The Pump Engineer responded that this wouldn't have an impact as it is pumping at its usual level. It was added that Dyke Fen level is a metre lower than Twenty.

The Operations Manager added that it is a question of even if the water could get off the land and into the watercourse, is that the problem? Alternatively, is the problem that the water is not getting away and why not?

Mr M Taylor added that north of Twenty pump, where it flows through the farm, the levels have been considerably higher therefore meaning there seems to be no natural drainage off that land. Mr W Ash added that rather than going down BSIDB drains, it is going down the landowners drains through the farm, the water is taking the easiest course. Mr W Ash felt the water level being pumped to is too high. He further suggested a sluice to allow the water to travel straight through, that way, the water could also be held back during the summer for irrigation purposes.

The Chief Executive responded that there is a gravity flow pipe through Twenty Pumping Station but it sounds like it is too high a gravity flow pipe. Therefore, the officers will investigate what a new 'bypass channel' should be at in relation to the existing.

The Operations Manager noted that the ideal situation is to be able to achieve the same results from pumping at Twenty as through gravitation.

The Chairman questioned whether valves could be placed on the drains to stop it backing up? It was confirmed this isn't possible.

The Operations Manager concluded that the existing survey data will be analysed, possibly another survey completed and look at possible options.

Mr M Taylor noted his appreciation for the effort in trying to resolve the issue.

1592 REPORT ON RAINFALL - Agenda Item 7

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

Mr P Holmes questioned whether the Black Hole Drove rain gauge has been checked as it was showing consistently lower results than Swineshead?

The Pump Engineer responded that he has been and tested it and it all seemed to be working correctly.

The three rainfall gauges at Black Hole Drove, Cooks Lock and Swineshead will all be being replaced through another scheme.

Mr V Barker added that Welland & Deepings IDB have a gauge close by which could be used to compare to.

The Chief Executive noted as a point of interest that recently over the same period of time, the Black Sluice IDB catchment had recorded 32mm of rain where as Welland & Deepings had only recorded 3mm.

The Chief Executive made reference to the Rainfall Actual Value Maps within the agenda and displayed the February 2020 map on screen, highlighting that the scaling has had to be changed due to the highest ever recorded levels of rainfall.

The Operations Manager noted that a few years ago an app was discussed and shared regarding weather stations and recording rainfall, questioning if anybody knows the name of this app as it has been lost in the system? It was established that it was called Weather link.

1593 ANY OTHER BUSINESS - Agenda Item 8

(a) <u>LEVEL OF STAFFING</u>

Mr V Barker questioned whether, due to the recent prolonged rainfall events, management are happy with the level of machinery and workforce? He noted the length of time it will take to complete the extra work created as consequences of the rainfall events i.e. bank slips etc. He acknowledged the financial impact of taking on more members for the workforce but felt that if there are jobs that need doing then they need to be done.

The Chief Executive questioned whether Mr V Barker was unsatisfied with the Board's operations? Mr V Barker confirmed he was not dissatisfied but has observed the increasing work load within the catchment. Mr P Nicholson added that if there any areas that the members are aware of that require the attention of the workforce then please inform the officers as they are not always aware.

The Chairman added that he felt the Board are very lucky for the incredible job and work the workforce have put in.

The Chief Executive acknowledged that there is an increased amount of work, i.e. bank slips. However, they are being monitored and prioritised. If the officers feel that work is not getting done and are falling behind then consideration will be given to employ additional workforce and hire in additional equipment. However, the Chief Executive believed the operations team are currently on top of the workload.

Mr P Holmes also noted that, as landowners, it has to be realised that the Board will have priorities within the catchment and so the work will get done but maybe not immediately.

Mr K Casswell referred to the financial implication of more staff and how typically the Board would usually have concern about the council paying the special levy, but actually it may be agricultural ratepayers that struggle to pay after the wet year encountered.

(b) THANK-YOU

Mr A Branton, of Welland and Deepings IDB, expressed his thanks for the invitation to attend the inspection tour and meeting, noting he found it very interesting. He added there are some striking similarities, but also differences due to the different catchment areas covered.

Mr A Branton voiced his one suggestion of using a drone to fly along drains, as it is very time saving and not particularly expensive. The Chairman noted that this technique has been used by the Board before.

There being no further business the meeting closed at 17:09.