

BLACK SLUICE INTERNAL DRAINAGE BOARD

MINUTES

of the proceedings of a Joint Meeting of the
Northern and Southern Works Committees

held at the Offices of the Board on
4th October 2022 at 2pm

Northern Works Members

Chairperson - * Mr P Holmes

Cllr T Ashton	* Cllr R Austin
* Cllr P Bedford	* Mr M Brookes
* Mr D Casswell	Cllr M Cooper
Mr J Fowler	Cllr M Head
* Mr M Leggott	* Mr R Needham
Cllr F Pickett	* Mr J E Pocklington
Mr P Robinson	* Cllr P Skinner
* Mr R Welberry	

Southern Works Members

Chairperson - * 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
Mr M Mowbray	* Cllr R Reid
* Cllr S Walsh	* Mr C Wray

(* Member Present)

In attendance: Mr I Warsap (Chief Executive)
Mr P Nicholson (Operations Manager)
Mr K Methley (Pump Engineer)
Mr M Taylor (Guest)

Mr P Holmes chaired the meeting. The Chairperson welcomed Cllr R Reid to his first meeting.

2029 Recording the meeting – Agenda Item 1

Members were informed that the meeting would be recorded.

2030 Apologies for absence - Agenda Item 2

Apologies for absence were received from Mr K Casswell, Cllr M Head, Mr M Mowbray, Mr J Fowler, Cllr F Pickett, Mr P Robinson, Mr J Atkinson, Mr R Dorrington, Mr J Casswell, Cllr M Cooper and Mr D Withnall.

It was noted that Jessica Baxter, who would usually attend meetings to take minutes, was absent today due to her attending her graduation at Lincoln Cathedral. Mr V Barker, and committee, noted their congratulations.

2031 Declarations of interest - Agenda Item 3

Declarations of interest were received from:

- Mr D Casswell – Proposed works to Drain 14/2, Mill Green Farm, South Kyme – Minute 2036(a)
- Mr V Barker - Drainage and maintenance issues – land south of the Risegate Eau, Gosberton Fen – Minute 2040(d)

2032 To consider the Joint Works Committee Terms of Reference - Agenda Item 4

The Chairperson explained that the Joint Works Committee do not require a Terms of Reference as it is a joint meeting of the Southern Works Committee and Northern Works Committee which each have individual terms of reference.

The Chief Executive referred to the paragraph highlighted in red which refers to co-opted members, noting that, currently, there is no formal recognition of who is / how individuals become co-opted members.

The Chief Executive further noted that he invited three guests to the meeting, Mr A Miles, Mr M Taylor, and Mr D Leverton, who have attended the last few works inspection tours and felt they should be formally asked to become co-opted members of the Board. The Chairperson invited Mr M Taylor to become a co-opted member, who accepted.

All AGREED that there was no requirement for the Joint Works Committee to have their own terms of reference.

The committee RESOLVED to recommend that the new paragraph (shown below) regarding co-opted members be added to the Northern and Southern Works Committee Terms of Reference.

‘Co-opted Members will be appointed by the Committee at the triennial general meeting of the Board with each Co-opted Member receiving a written invitation to join a Works Committee for a three-year term. New Co-opted Members may be approached at any time throughout the year to take up any vacancies and thereafter appointed by the Committee. It is at the Chairperson’s discretion to remove Co-opted Members based on low attendance levels.’

2033 Minutes of the last meeting of the Southern Works Committee Meeting - Agenda Item 5

The Minutes of the last Meeting of the Southern Works Committee held on 5th July 2022, copies of which had been circulated, were considered by the Southern Works Committee Members and it was AGREED the Minutes should be signed as a true record.

(a) JCB Hydradig Demonstration

The Chairperson noted that he has heard negative reviews of the JCB Hydradig from Welland and Deepings IDB.

Mr C Wray referenced Witham 4th IDB who would like a Mecalec, which are supposed to be very good machines.

The Operations Manager noted that the Board currently operate Twiga's, one of which is due for replacement next year.

The Board had the opportunity to view Welland and Deeping IDB's new machine, the JCB Hydradig, which gave good first impressions, it is believed that it is not a machine that can cope with the amount of flailing required of it.

(b) Water Levels - Minute 2003(l)

The Chief Executive noted that following a recent meeting of the South Lincs Water Partnership (SLWP), Thomas Enright (Environment Agency (EA)) introduced himself as the current EA Drought Lead, noting that we are heading into 2023 in a significant drought. Also noting that of the 40mm of rain received in August 2022, only 4mm of that actually made it to ground water. Long term rainfall, at an average of +125% would be constantly required to relieve the drought status.

The Chief Executive further added that himself, the Operations Manager and Pump Engineer have been reviewing the Board's water level pumping regime, in light of the current drought situation.

The Chief Executive referred to pumping stations where there is no gravity channel explaining that because there is no gravity, the Board therefore must pump.

The Chief Executive explained the proposed plans to dramatically lift water levels to the Soffit levels of each suction bay platform and control the water at that height, which dramatically reduces the frequency of pumping. This not only helps aquatic biodiversity and assists in water for irrigation in the Spring, but also reduces pumping costs to the Board. The Chief Executive reassured the committee, that if a lot of rainfall was received, or an event declared, then levels would be reduced to be able to cater at normal event levels.

The Operations Manager added that the new proposed levels are only for in periods of drought. Further displaying on screen, a spreadsheet showing current target summer levels, winter levels and the emergency profile level (EPL). Taking these levels into consideration, the operations team have estimated the deck levels at the pumping stations.

The Operations Manager further explained that at some pumping stations there is no control over the gravitation, some pumping stations have a tilting gate which is a control mechanism to lift and lower to stop the outfall being at the same level as the outfall source i.e., South Forty Foot Drain.

The Operations Manager noted there are some circumstances such as Wyberton Marsh Pumping Station which doesn't gravitate, but is classed as a critical watercourse, and therefore the Board has got to consider whether increasing levels in this particular case would be beneficial, the operations team being of the opinion that it wouldn't be suitable.

The Operations Manager referred to those highlighted in green on screen, noting these are the pumping stations where it is proposed to raise levels in those catchments.

The Operations Manager noted another benefit of increased levels, protecting the environment, e.g., the required oxygenation levels for fish.

The Chief Executive noted that, generally the Board pump down 300mm from the commencement level, which is based on historic figures. The operations team have therefore considered what level it could be allowed up to, as opposed to what level to allow it to go down to. The suction bay being the maximum levels for future water retention.

An example pumping trend for Dunsby was displayed on screen, Dunsby pumps every two days currently, it being thought that it would take an estimated 18.5 days to reach the proposed increased start level (0.6, increased from -0.2).

Mr M Brookes questioned how much longer it will take to pump down to the stop level when required from the increased levels?

Mr V Barker noted that in around three weeks' time, the EA will reduce the level in the South Forty Foot Drain to around -0.6, which would allow gravitation. It was clarified that the pumps where it is proposed to increase the levels are not gravitational.

Cllr R Austin noted his surprise that there isn't a direct relationship between the volume of water and electricity cost, noting that surely the electricity cost will remain the same as there is still the same volume of water to pump?

Mr V Barker noted the sharp increase on the ammeter when the pumps are started, before it settles again, therefore noting that if the number of times it is started up can be reduced then there will be a cost saving.

The Chief Executive noted the in relation to a one pump pumping station, if the Board were to move forward to the proposed new pumping profile, it is a £250 a year saving per pump.

The Chief Executive noted the public perception and concern that levels are higher.

The Chief Executive concluded that the notion is that on the non-gravitational pumping stations that Board's Officers would like to trial the new proposed levels, if the weather allows i.e., there is no significant rainfall.

Mr W Ash questioned if catchments have been surveyed, in reference to low points? The Operations Manager confirmed that the new levels are only proposed for dry times.

Mr C Wray questioned if the levels should be, perhaps, 50mm less, to allow for any sudden rainfall? The pumps could then be run when electricity is cheapest, as opposed to waiting until it reaches the top point and then having to pump immediately. Mr K Methley agreed that he had also thought about a night period lower level.

Mr J Pocklington felt it was a good idea, questioning if there is a business cap on the electricity for six months? The Chief Executive confirmed that although it is capped, it is believed that the Board's energy price is going to be double.

Mr M Brookes noted that there is still the same volume of water to pump, just over a longer period? In the case of Dunsby, over an 18-day period instead of every 2 days? The Operations Manager noted that they have completed calculations, and it is a trial, so if it doesn't work to the extent expected, the Board's Officers can re-think.

The Chairperson also noted the consideration of the continuous running of the pumps.

All AGREED to trial the proposed new pumping profiles.

2035 Minutes of the last meeting of the Northern Works Committee Meeting - Agenda Item 7

The Minutes of the last Meeting of the Northern Works Committee held on 19th July 2022, copies of which had been circulated, were considered by the Northern Works Committee Members and it was AGREED the Minutes should be signed as a true record.

2036 Matters arising from the Northern Works Committee Meeting - Agenda Item 8

(a) Proposed works to Drain 14/2, Mill Green Farm, South Kyme - Minute 2012(a)

The Chief Executive referenced this, and Mr D Casswell's proposal for the Board to give up the drain. It being confirmed that the field adjacent to the drain has been gripped and runs away from the drain and Mr D Casswell farms all the surrounding land to the drain.

A map showing the drain was shown on screen, with Mr D Casswell confirming that he would pipe the section shown in red initially (115 metres) and take on riparian maintenance of the remaining 280 metres, shown in green.

The Operations Manager noted that there will be a formal process to go through in order to give up a maintained drain.

Opinions were invited, no members had anything further to say.

The Chief Executive noted that the Board's Officer's will be in contact with Mr D Casswell regarding this.

2037 To receive a report on Engineering Works for 2022 - Agenda Item 9

The Operations Manager presented the Report on Engineering Works, and referred the Committee to the Capital Scheme Budget mentioned within the report:

2022/23 Defra/EA Funded Grant in Aid (GiA) Schemes

(a) North Forty Foot Cleansing / Revetment & Langrick Road pipeline, lining/replacement works

This scheme is still ongoing, the majority of the 85m section of piped watercourse 12/2 from manhole chamber 5 has been replaced. Tenders having been requested for the 78m section through the garden of 24 Langrick Road and the 30m section from the last manhole chamber to the outfall into the North Forty Foot. The last 30m section being the responsibility of LCC who have agreed to contribute when costs are established. This was shown in red on the map displayed on screen.

The Operations Manager referred to the North Forty Food Drain (NFFD) and the maintenance and desilting of it, particularly noting the section of it that is residential either side (Cooks Lock), making maintenance of it more difficult. Photographs of structures on the bank sides, both consented and unconsented, were displayed on screen. All adjacent property owners were written to, informing them of their responsibility should any structure fail and enter the watercourse, outlining that they would be responsible for the cost to the Board for removing it.

Mr D Casswell questioned if any unconsented structures had to be removed? The Operations Manager responded no, as there was nothing causing immediate concern of failure.

The Operations Manager continued that the silt was pumped into a holding lagoon, in which the silt separates from the water and sits on the base of the lagoon, whilst the clean water is then transferred back into the watercourse. The lagoon is left to dry and then spread over the farmland. This has been completed and the land now being cropped again. Mr J Pocklington, who farms the land noted that there is one wet spot and a section of watercourse that requires cleaning out, however, other than that, it has been completed well. The Operations Manager noted that discussion needs to be had around what the Board are responsible for, noting that they will maintain the watercourse back to its original state before the Board were on site, but anything beyond that requires further discussion.

The Operations Manager concluded that it is anticipated that this scheme will be completed this financial year.

(b) Sempringham Fen Weedscreen Cleaner / Pumping Station refurbishment

The Operations Manager noted the challenge experienced around the land lease agreement with The Crown Estate. The land is required as this is where the dump area is proposed to be built.

The Board do own land the other side of the pumping station, however, it is not suitable for the dump area. Drawings were displayed on screen; it being noted that this scheme is estimated to be completed by March 2023.

(c) Remote monitoring, telemetry H&S Scheme

All the Board's pumps are now remotely operational, meaning that pump profiles can be changed from a mobile / laptop / tablet.

All sites have now also got CCTV and so can be monitored.

(d) Black Sluice Catchment Study

Funding has now been achieved for this scheme for £385,000. It will bring the individual catchment studies together to give an overall view of the Board's catchment, enabling identification of potential funding opportunities and merging of catchments, reducing the number of pumping stations required.

The Chairperson noted the potential impact of the South Lincs Reservoir (SLR).

(e) South Forty Foot Upper Catchment Natural Flood Management (NFM)

This work is still ongoing, Lesley Sharpe, appointed by the Board to conduct the surveys and be the landowner / farmer consultant has provided lots of information and identified various sites which would be suitable to implement some of the proposed interventions. It was noted that the materials are ready to implement some of these works but have not yet been achieved.

(f) Swaton Natural Flood Management (NFM) Schemes

The first of three sites identified to attenuate flows in the Swaton catchment has been completed, it estimated that the remaining two sites will be complete by March 2023. A map showing the sites was displayed on screen.

Mr V Barker noted that the South Lincs Reservoir (SLR) could wipe out these works, suggesting that no more works should continue in light of this. The Operations Manager noted that it is the Environment Agency (EA) funding the work. Mr V Barker referenced the Terms of Reference – '*To promote and maintain value for money*'. The Operations Manager noted that it has been discussed with the EA, noting that the agreements with the landowners for this scheme are for ten years, noting that it is estimated that the reservoir will not be in operation for another 17 years.

Mr M Rollinson noted that he often travels by the site on the A52, noting that it is making good progress and is quite some engineering.

(g) Information on site inspection at Trinity College

A meeting has been held with the Environment Agency (EA), at which the recommendations for all four sites (Trinity College, Damford, South Kyme and Ewerby), were discussed. Stantec have provided a quote to provide the specification of the works at £50,000. The EA wish to investigate with their own consultants.

2022/23 BSIDB Funded Capital Schemes

(h) Major Slip Repairs

The Operations Manager highlighted 'yellow shield' symbol shown on the map, which identifies the bank slips in need or repair. Some slips have already been completed, however, almost all the allocated budget has been used already.

(i) Jetting to Major Pipelines – Estimate £20,000

It is anticipated that the remaining works in Kirton and Donington will be completed this year.

(j) Alternative programme access works – Estimate £20,000

Works are to continue this year to enable this programme of alternate bank maintenance.

(k) Pumping Station Schemes

(i) Dyke Fen Pumping Station refurbish 1 pump motor – Estimate £3,000

One of the electric motors that drives the pump will be removed for refurbishment.

(ii) Dunsby Fen Pumping Station refurbish 1 pump motor – Estimate £3,000

This has now been completed.

(iii) Gosberton Fen Pumping Station refurbish 1 pump motor – Estimate £4,000

One of the electric motors that drives the pump will be removed for refurbishment.

2023/24 Defra / EA FCERM GiA Schemes

(l) Natural Flood Management (NFM) Studies - £150,000

It is anticipated that another bid will be made for further funding for these studies, it being believed that there are more sites for potential NFM work.

(m) Central Catchment Amalgamation Study - £100,000

This is a continuation of the whole catchment study, to go into further detail and concepts from the initial study.

2023/24 Board Funded Capital Schemes

(n) Quadrang North Fen roadside revetment - Estimate £24,000

Repair is required to some bank slippage along the roadside and the road will be required to be closed to complete the works.

A meeting has been held with Lincolnshire County Council (LCC), but another will be held prior to commencing works.

- (o) Dyke Fen Pumping Station pump and pump motor refurbishment - Estimate £25,000

Part of ongoing preventative maintenance at this pumping station, includes the refurbishment of the pump and pump motor to one of the pumps.

- (p) Jetting to major pipelines - Estimate £75,000

It is proposed that these works should go out to tender for completion in 2023/24.

- (q) Pumping Station Schemes

- (i) Great Hale Pumping Station Pump Refurbishment – Estimate £75,000

It is proposed to replace the moving parts to include the trolley and control cabling.

- (ii) Kirton Marsh Pumping Station New Roof - Estimate £11,000

A new Apex design roof is proposed for this station. This has been deferred from 2022/23.

Drain Maintenance

- (r) Annual Summer Flailmowing/Cutting

A map showing works was shown on screen, indicating that 355km has been cut and 482km has been flailed to date.

- (s) Proposed Desilting, Bushing, and Cleansing Works

The Operations Manager referenced the map within the agenda outlining proposed cleaning works.

The total length of proposed watercourse for 2022/23 is 48 km. The total length of watercourses cleansed over the 2021/22 season was 42 km. Ideally, the Board promotes a 10-year cycle for desilting, however, some may require doing more frequently than this and some less frequently.

Mr J Pocklington noted that letters have been sent to landowners / occupiers adjacent, noting that he is a landowner and has not received a letter. The Operations Manager noted that he will review this.

Pumping Station Maintenance

- (t) At the end of September (Period 5) the budget for maintenance works is £165,613 with the actual expenditure being £151,874 which includes estimated electricity payments.

Health and Safety

- (u) A new five-year contract with Cope Safety Management commenced June 2019.

External Partnerships, Strategies & Agreements

- (v) EA/BSIDB Public Sector Cooperation Agreement (PSCA)

A map showing the Environment Agency (EA) PSCA cutting works was displayed on screen.

Within the last month, the Board has also been asked to provide a quote to flail the banks from water line to top of field side crest level from Black Hole Drove up to the A52.

The Operations Manager noted the previous good work, around 4/5 years ago to remove the vegetation, but noted that it is starting to get established again in the margin that the Board's machine can't reach.

The Operations Manager also noted that the Board is trying to encourage the EA to remove some of the fringes of the watercourse that are starting to encroach again.

The Operations Manager added that he is now in receipt of the outstanding report, which has indicated that there is more silt to be removed between the A52 and the A17 (9km), the EA has suggested they would like to spread the work out over three years, however, this would not be the preference of the Board's contractor who would rather do the work continuously.

Mr M Rollinson noted that it was actually debushed for a further section than the 9km, to the Helpringham Eau, questioning whether the Board will be providing a price to maintain that section also? The Operations Manager confirmed this.

Mr V Barker added that if the reeds are not kept from out of the bottom of the drain, when there is a fluvial event and there is water and silt going down, the reeds steady the water and causes more silt dropping out on the banks.

2038 Confidential – Update on the South Lincs Reservoir (SLR) - Agenda Item 10

It was agreed and thereby RESOLVED to exclude the public from the next part of the meeting due to the confidential nature of the business to be transacted, in accordance with section 1(2) of the Public Bodies (Admission to Meetings) Act 1960.

2039 Report on Rainfall - Agenda Item 11

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

2040 Any Other Business - Agenda Item 12

(a) 9 metre byelaw issue - Dyke Fen

The Operations Manager informed the committee of the unconsented fence along the south bank of drain 28/11, posing the following question, '*do the Board allow the unconsented fence to remain and issue letter to landowner regarding removal of fence given reasonable notice by Board, or do we issue enforcement notice to have the fence re-located to at least 9 metres away from bank top and have gates installed to allow Board access?*'

The Operations Manager noted that it has been erected because they have started to graze cattle on the adjacent field.

Mr D Casswell noted that if it was a hedge there is a height that is permissible.

Mr M Taylor added that there is another fence on the A151 west to Twenty Pumping Station and that it is all overgrown.

The Chairperson was of the opinion that a byelaw is a byelaw and should be adhered to.

Mr R Needham agreed, also noting the problems that may occur if the fence was damaged.

(b) Bourne Fen Integrated Catchment Water Management Pilot Project (Phase 1 & 2) 2022-24

The Operations Manager informed the committee of this project, noting its aim to redirect the Weir Dike around the site, which will be a wetland and low-level water polishing and transfer reservoir wetted area, showing an indicative layout on screen. There is also an expectation that the Board will be involved with delivering the works.

The Chief Executive highlighted the various elements of the scheme shown on the illustration, confirming that the new cut Weir Dike drain diversion will be maintained by the Board.

(c) Transformer Issues, Gosberton Pumping Station

The Operations Manager noted that the Board own a number of transformers at the larger pumping stations (9 in total).

The Board have had tests carried out on the transformers and the one at Gosberton, which also provides Dowsby Fen, is at point of failure.

Initial enquiries with EME power systems who completed the transformer testing have supplied a replacement price for 800kva of £65,120 and for a 500kva £57,900. EME have recommend that the 800kva is required as the transformer should not operate above 75% capacity. The Board's Officers have questioned and looked into this and found that the maximum demand required is 430kva and so it may be that the 800kva is required.

The Pump Engineer has also investigated the option of removing the transformer and having a direct LV connection supply installed. Western Power Distribution have estimated £141,000 subject to a site visit and a formal connection offer.

The Operations Manager noted that it is not known how long it will continue to work for, and it is also not known what will happen when it does stop working i.e., whether it could catch fire, blow up etc. It was confirmed that the current transformer is 750-800kva.

Mr V Barker questioned whether the electricity is cheaper because the Board are using their own transformer? It was noted that it is no cheaper, but that the Finance Manager has looked into it.

All AGREED to recommend that a replacement transformer (800kva) be installed.

(d) Drainage and maintenance issues – land south of the Risegate Eau, Gosberton Fen

The Operations Manager noted that this runs from Beech Bank across open farmland and outfalls into the Risegate Eau. Due to the low-lying land within the area, one of the landowners has asked whether there is anything the Board can do to improve the capacity / conveyance of the drain. Initially, the Operations Manager noted that maintenance can be increased and so that has been done, increasing from once a year to up to three times a year. It was also agreed to look at revisiting a survey of the site to see if there is any opportunity to putting a bucket on a machine and removing any silt. The survey has been carried out and results were displayed on screen, it being noted that at 300 metres there is a difference in level and so there may be opportunity to remove some of the bed at this section, however, it is not guaranteed that this will help with conveyance. There could possibly be opportunity to widen the drain, but that would only increase storage. The drain could also only be deepened if the outfall was lowered, however, a cost benefit exercise would need to be carried out to identify if the benefit would outweigh the cost.

Mr V Barker noted that it is a good survey but that it doesn't show the width of the bed in the watercourse, noting that when it gets to 400 metres away from the outfall, the watercourse is considerably wider, where the bed is high, its very narrow, of the opinion that if some were taken out of the bed and banks it would make a lot of difference. Mr V Barker thanked the Board for the survey.

The stability of the bank was noted, it being suggested that it may be beneficial to complete a little bit and asses the condition before continuing.

There being no other business the meeting closed at 16:37.