

Provided by the Middle Level Commissioners		Item No:	8
Meeting:	RAMSEY UPWOOD & GREAT RAVELEY IDB (Hereafter referred to as the Board)	Subject:	CONSULTING ENGINEERS REPORT: CHIEF ENGINEER'S SUMMARY & CAPITAL PROGRAMME
Date:	Friday 29th May 2026	Officer Responsible:	Nicola Oldfield

RECOMMENDATIONS

The Board is asked to:

- A. Consider the recommendations for the development of an investment plan for asset refurbishment/replacement and grant funding and to confirm acceptance of recommendations to the Consulting Engineer.**
- B. Authorise the refurbishment in 2026 for Green Dyke Pumping Station.**

1. Summary of Key Planning Issues

We will, when possible, seek the Board's input, rather than wait for Board meetings. This will be done via correspondence with the Chair, Vice Chair, District Officer and any appropriate sub-committees.

2. Technical Services Overview

A new Senior Planning & Consenting Officer, Emma Ryder, joined the team at the beginning of March. She had been working for us on a consultancy basis since November last year and she has extensive experience in flood risk, economics and sustainable drainage. Emma is the first appointment in an ongoing recruitment campaign to better manage the increased planning and consenting workload resulting from new development across the Middle Level.

3. New FCERM grant funding guidance

The Government published new FCERM funding guidance on 3 March 2026.

To be eligible for funding a project must deliver strategic objectives and government policy. Governments' objectives most relevant to IDBs include:

- value for money (Net Present Value)
- reducing flood risk
- focusing on deprived areas
- prioritising projects with contributions from others (this would include funding provide by IDBs themselves)
- a percentage investment in Natural Flood Management (NFM) across the programme

Project types that are eligible for grant funding include:

- refurbishing or replacing existing assets
- building new assets
- NFM projects
- Sustainable Urban Drainage Systems (SuDS)

Asset Refurbishment Projects

Asset refurbishment is a significant renewal to one or more components in an existing asset that is not covered by routine maintenance.

It includes work to mitigate for the loss of asset performance. This covers issues that asset maintenance cannot manage and that would be significant and permanent if not fixed.

It does not include asset replacement projects where an existing asset at the end of its life is replaced with another like for like asset which sustains the standard of service.

Under the new FCERM funding policy existing FCERM assets are eligible for 100% of funding for refurbishment.

New or Improved Asset Projects

Projects that are not refurbishment are eligible for 100% for the first £3 million, and 90% for costs above £3 million.

These include:

- projects replacing existing assets with a like for like replacement
- projects building new or improved assets
- projects with combined asset interventions

Projects cannot be artificially split into smaller components to fall below the £3 million fully funded threshold.

Applying for funding

It should be noted that there will be more projects that are eligible for investment than funding available. Projects will need to be prioritised to meet government targets and achieve best value for money.

Therefore, it is recommended that should the Board wish to apply for FCERM grant funding, they consider part-funding projects. This is similar to the funding rules that were in place prior to 2011 when IDBs only received 45% of project costs.

Should the Board wish to submit a new project to be considered for funding, the first step is to collate relevant cost and benefit data to submit to the Environment Agency from 1 July 2026. This requires collating costs and benefits and other relevant data required by the EA to determine a project's eligibility and prioritise the programme. The Consulting Engineer can provide resources to do this and this will be recharged to the Board.

If a project already appears on the FCERM investment programme with an allocation for future years, an application for grant funding approval/business case will need to be submitted. The Consulting Engineer can provide resources to do this.

Timescales

The Consulting Engineer currently has limited resources to develop and deliver projects, although recruitment is currently in progress to address this. The likely timescales for project delivery are:

- submit for funding consideration July 2026 onwards

- prepare and submit applications for subsequent funding approval onwards
- delivery 2027/28 onwards

The Consulting Engineer will prioritise workload based primarily on Key Health Indicators.

The Board is asked to:

- **Consider the development of an investment plan for asset refurbishment/replacement taking account of the recommendations made in the M&E Report in Appendix 3,**
- **Liaise with the Consulting Engineer to determine project suitability and timescales,**
- **Consider and agree to making a contribution towards the project costs to aid funding prioritisation, and**
- **Confirm acceptance of recommendations so we can prioritise developing funding bids ASAP.**

Author Name: Nicola Oldfield

Role: Chief Engineer

Appendix 1: Capital Improvement Programme

Appendix 2: Planning applications since last meeting

Appendix 3: M&E Report

Appendix 1

Ramsey Upwood & Great Raveley Internal Drainage Board														
Capital Improvement Programme (2026/2027)		PREVIOUS YEARS	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	FUTURE YEARS	ALL YEARS
		Pre Yr 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Post Year 10	Total Expenditure
Green Dyke p/s	Pumping station replacement (includes surveys, detailed design, construction)	0	0.0	0.0	0.0	0.0	0.0	300.0	2,500.0	2,500.0	0.0	0.0	0.0	5300.0
	Pumping station pumping and control equipment replacement	0	0	0.0	15.0	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0
	Pumping station automatic weedscreen cleaning equipment	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Pumping station Control building refurbishment/replacement	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Pumping station compound/surrounds improvements	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Fen p/s	Pumping station replacement (includes surveys, detailed design, construction)	0	0	0.0	0.0	0.0	0.0	0.0	700.0	5,000.0	5,000.0	0.0	0.0	10700.0
	Pumping station pumping and control equipment replacement	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Pumping station automatic weedscreen cleaning equipment	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Pumping station Control building refurbishment/replacement	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Pumping station compound/surrounds improvements	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upwood Common p/s	Pumping station replacement (includes surveys, detailed design, construction)	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6,000.0	6000.0
	Pumping station pumping and control equipment replacement	0.4	0	0.0	14.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	24.4
	Pumping station automatic weedscreen cleaning equipment	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Pumping station Control building refurbishment/replacement	0	0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
	Pumping station compound/surrounds improvements	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drainage Channels	Upwood Common/Green Dyke catchment	0	0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
	Refurbishment of inlets/outfalls	0	0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
		0	0	0	49	65	0	310	3,200	7,500	5,000	0	6,000	22,124

Appendix 2

There have been 2 planning applications since the last meeting.

There has been 1 Byelaw Consent (to discharge to a watercourse) application granted since the last meeting.

There have been 1 infiltration device applications granted since the last meeting.

There have been no Byelaw Consent (to undertake works in and around watercourses) granted since the last meeting.

Provided by the Middle Level Commissioners		Item No:	8
Meeting:	RAMSEY UPWOOD & GREAT RAVELEY IDB (Hereafter referred to as the Board)	Subject:	CONSULTING ENGINEERS REPORT: MECHANICAL & ELECTRICAL
Date:	Friday 29 th May 2026	Officer Responsible:	Dave Bantoft

1. M&E key messages and advice

Other than the matters previously reported or described below, only routine maintenance has been carried out since the last meeting and the pumping plant at each of the stations is mechanically and electrically in a satisfactory condition. The stations and pumps are at an age where reliability is a concern and a plan should be put in place to overhaul or replace items as necessary to ensure ongoing reliability.

The Board is strongly advised to consider the development of an investment plan for asset refurbishment/replacement. The Board is asked to instruct the Consulting Engineer accordingly.

1.1 M&E Equipment Key Health Indicators

Over the past 2 years we have been compiling and verifying Pumping Station Key Date to allow easier identification of equipment age and the need for refurbishment to assist in developing an investment plan for asset refurbishment or replacement. The details below include any works already scheduled and funded to be completed this year. To ensure reliability, resilience and longevity of the pumping equipment it needs to be refurbished or replaced at suitable intervals. We have experienced examples lately of pumps being left too long and failing, or when they are removed for overhaul the condition is very poor and the pump overall lifetime has been reduced significantly, which is not cost-effective use of the asset. The same is true for control panels, component failures often damage other components incurring costly repairs and machine downtime. Overall, it is more cost effective to run well maintained equipment.

The pictures below are of pump bolts that have been in situ for 20 years and have corroded to the point of failure as shown by the gap between the flanges. Although now rebuilt with stainless steel bolts they were not in the past. The pump tubes are also heavily corroded which reduces pump life considerably. Ideally pumps should be refurbished every 10 years because by the time they reach 15 to 20 years it is likely the corrosion will heavily impact their overall residual life.



Table 1: Key Health Indicators

Please review the pumping station key dates below, if there are any discrepancies or you can add any details, please let me know. The key dates are an important reference and will feed into the upcoming Key Health Indicators, District Studies and development of an investment plan for asset refurbishment/replacement.

	Station			
Station	Built	Pump	Pump Overhaul	Controls
Green Dyke	1954	1954/1977	1986	2026
New Fen	1949	1964 (1) 2005 (2)	2021 (1) 2005 (2)	2005
Upwood Common	1966	1966	2014	2026

The Key Health Indicators table above shows the critical area for concern and improvement is the pumps. The pumps range from 20 to 60 years old with last refurbishments ranging from 5 to 40 years ago. The Board is advised to develop and start a pump refurbishment/replacement plan for the pumps that are overdue refurbishment. Having a plan in place and underway helps to secure further grant funding when it comes available, such as the recent IDB Recovery Fund.

1.2 Electricity Readings

Taking regular and accurate manual electricity meter readings is very important; even for sites with meters that are read remotely. There have been cases of significant variances between bills and actual usage, regular meter readings and pump hours readings are essential for verifying bills and forecasting usage.

Moving forward it is requested that the Pump Attendants/District Officers take electricity meter readings and pump run hours readings monthly (as close to the 1st of each month as they can) and then forward them onto the M&E Engineer David Bantoft on david.bantoft@middlelevel.gov.uk or 07768 026119.

Without regular monthly electricity meter readings, the MLC cannot verify electrical bills

2. **Maintenance and minor works**

2.1 Upwood Common Pumping Station

The Pump Control Panel complete with Pulsar Ultimate has been installed as part of the IDB Fund Tranche 2B – IDB Asset Resilience GIA package.

The last routine inspection carried out at Upwood Common was 19th November 2025.
Recommendations / remarks include:

1) Weedscreen corroded at the top, monitor for further deterioration.

An inspection was due in March 2026 but not carried out – due to decommissioning of old control panel and installation of new panel that month.

2.2 New Fen Pumping Station

The ground stability is a major concern at this site as there is movement of the surge chamber and the slab for the control room.

The last routine inspection carried out at New Fen was on 9th March 2026. The only comment was the subsidence gauge spacing is still 10.8mm.

2.3 Green Dyke

The Pump Control Panel complete with Pulsar Ultimate has been installed as part of the IDB Fund Tranche 2B – IDB Asset Resilience GIA package.

The last routine inspection carried out at Green Dyke on 19th November 2025. Recommendations / remarks include:

- 1) Grease pump needs a new flexible coupling
- 2) Weedscreen heavily corroded at the top and around the waterline
- 3) Flap door knocking on pump shutdown
- 4) Concrete breaking up around outlet piles

An inspection was due in March 2026 but not carried out – due to decommissioning of old control panel and installation of new panel that month.

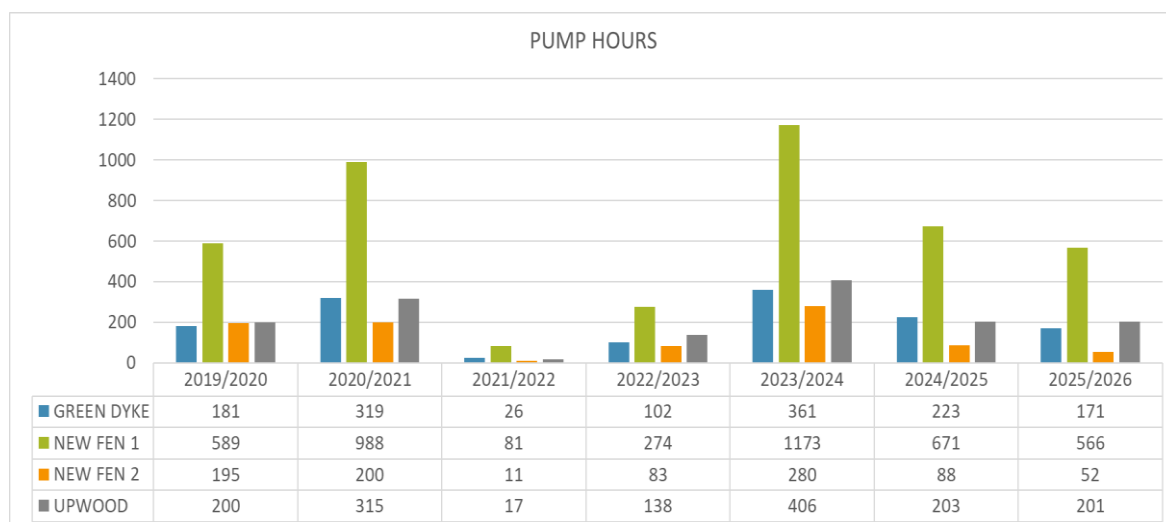
The last recorded overhaul of the pump is 1986. It had issues with noises and vibration which are thought to have been caused by something trapped within the pump. **The pump is currently running ok, due to age is due for complete overhaul. which is likely to cost in the region of £40k to £60k.** This depends on the amount of wear and how complexity of the removal and reinstallation.

The discharge flap door is noisy which was inspected while the water level was down for works at Bevills Leam, this highlighted there is wear in the in the pivots which allows the door to vibrate when closing. Due to the design of the station to undertake work on the flap door the valve in the station has to be closed. As there is no record of overhaul of this valve it would make sense to have this overhauled at the same time as the pump to then allow it to be used when the flap door is removed for repair. Removal of the flap door will require the discharge are to be dammed off to allow access.

Specialist contractors have quoted that removal, overhaul and refitting of the pump, motor and valve will be in the region of £50k, depending on pump condition.

Please confirm if the Board would like to authorise this for refurbishment in 2026

3. Pumping summary (Up to April 2026)



4. Inspections

- 4.1 The mandatory site Electrical Installation Condition Reports (due every 5 years) are in date as shown below.

Ramsey Upwood & Great Raveley	Green Dyke	12-Jul-2022	12-Jul-2027
Ramsey Upwood & Great Raveley	New Fen	12-Jul-2022	12-Jul-2027
Ramsey Upwood & Great Raveley	Upwood Common	12-Jul-2022	12-Jul-2027

5. Water level Management

The pumping stations have summer and winter pump level references based on historic values which serve as very good reference points. I would actively encourage pump attendants to vary these to suit their current catchment conditions. For example, running pump start and stop levels at intermediate settings above the base winter settings during times of high Soil Moisture Deficit and then reducing towards winter level setpoints as the SMD reduces or if there is heavy rainfall forecast. This needs to be balanced with ensuring the pump has a good operating range so it is never short cycling (hunting). This can also be used to ensure maximum benefit of the lower night electricity rate.

Ultimately this takes more operator time but will produce more efficient running and reduce costs. We can advise on this if needed and show some good and bad examples to help with setting and monitoring your pumps.

Author Name: Dave Bantoft

Role: M&E Engineer