

NORTH SOMERSET LEVELS INTERNAL DRAINAGE BOARD

FULL BOARD MEETING - 13 April 22

OPERATIONS AND ENGINEERING REPORT

Recommendations:

1. Resolution required to approve award of “**2022-23-23 North and South Area Maintenance and Operational Support Contracts**: Tender Assessment Paper will be presented at the Full Board meeting for discussion and approval”.

1. Introduction

This paper summarises the operational and engineering matters which have progressed since the last full Board meeting on the 2nd February 2022.

2. Water Levels

The IDB is now running at summer penning levels since **27th March** 2022. A summer penning (SP) meeting was held in the Cider Barn with the EA to confirm a SP date.

3. Improvement Works

Samson’s Sluice -: A new flood light has been fitted up stream of the structure which will make a *safer working environment in the Autumn/Winter months*.

Wick St Lawrence - Bridge repairs at Bourton Town structure completed with new tread boards and timber strengthening

Weston - Hewish New Rhyne needed tread boards and timber strengthening, this will be done in the very near future

Puxton - Blackstone Rhyne Puxton, Tilting Weir completed with tread boards and timber strengthening.

Hutton Rhyne - Gate and fence post repairs/renewed.

Hutton Moor - Persimmons site near Cross Rhyne has had the shackles replaced on the flap valves as the old ones were not suitable.

Fly Tipping - There has also been a notable increase of fly tipping in the local area, in which the Area Supervisors (A/S) have been removing and contacting the local councils to collect from site where ever possible.

4. Manpower and Machinery Issue

The A/S have done an outstanding job with regards to the Operational repairs this term with most of the small repair/renew tasks being completed just before the summer penning/weed cutting season which will soon be upon us. There has been a significant crossover of manpower from other Board areas to assist fellow A/S which has led to a greater understanding of the Consortium's general area throughout the A/S regions.

All A/S have completed spill kit training with a company called Darcy.

Anthony Brinson has also carried out an abrasive wheel course.

Finally, all A/S have been issued with a waste carrying license in accordance with EA policy for moving waste.

5. Contracted Rhyne Maintenance Work

2022-23-23 Maintenance and Operational Support Contracts: Tender prices have been received for all areas and a Tender Assessment Paper will be presented at the Full Board meeting for discussion and approval.

HMRC Red/White Diesel Update: The Boards have received a letter from ADA, dated 2 Mar 2022, outlining the general understanding of the use of red diesel by IDBs and their contractors to undertake routine watercourse maintenance activities within their areas.

"Where there is a fair argument that the activity will provide, at least in part, benefit to agriculture in the surrounding area red diesel may be used".

We wait to see the precise wording that will be used within guidance by HM Treasury and HMRC, such as within Excise Notice 75, we understand a further update on or before 1 April 2022 to reflect the new regulations coming into force on that date will become available.

Ongoing Increase in Fuel Price: Unprecedented global events are having a profound impact on the cost of fuel and concerns have been raised by some of our contactors that this may place an unfair financial burden on them whilst delivering the IDB's maintenance works.

To look into this matter Officers request a Sub Committee is set up with Members from all IDBs Finance & Works Committees to collectively consider this matter further, in addition, due to the start of the maintenance approaching Officers recommend that the Sub Committee is given delegated powers to agree how to proceed with addressing this matter.

Officers to provide a Paper with relevant information for this meeting.

Strawberry Line Vegetation Management: Vegetation management has been completed to ensure IDB maintenance access is available along the Strawberry Line later in the year. The works were undertaken by Sam Harris Tree Services using hand tools and were completed to a high environmental standard and without needing to close the footpath and cycleway.

6. Improvement Works (Winter Maintenance) completed by Engineering Team

Improvement works completed

1. Western Drainage Rhyne Kenn Moor Tree work and De-Silt
2. Biddlestreet Rhyne Wemberham lane De-Silt.
3. Stowey Rhyne nr Stowey Road Pollarding and De-Silt.
4. Meer Wall Rhyne TW leak on the east side of the structure Investigated and concrete and sheet pile repair completed. Since this repair has been completed and raising the weir towards summer pen a new minor leak has appeared under the central section of the structure. This will be addressed post summer penn.
5. New Pump inlet screen which will now be maintainable on summer pen water feed from Oldbridge River into Wick St Lawrence catchment. The design completed, engineers organised offsite fabrication of inlet weed screen and access walkway. The Boards Contractor has now completed on site prior to summer pen on Oldbridge River.
6. Blindpool TW Access Bridge Replacement – Contract completed to replace the old wooden access bridge with a steel unit which now provides safe access to tilting weir which is fully operational.
7. Yatton Little River Bank slip.
8. Completion and removal of branches on Tannery Ditch Works.
9. Access Improvements for maintaining Westwick Flood alleviation ponds.
10. Masonry culvert Bridge Repair on Dolemoor Lane Puxton.

Improvement works to be completed spring /summer by the engineer.

11. Walton Brook Gordano Valley light De-Silt and re profile bank
12. River Kenn nr Backwell Lake access culvert
13. Biddle Street Rhyne access culvert repair
14. Strode Road Access Culvert Improvement for conveyance (Reviewing if removal only or new culvert required).
15. Bridge Repair (Sleeper deck) Middle Rhyne Yatton.(Landowner contribution being agreed).
16. Stowey Rhyne off Kenn Moor Road minor staking support to existing.
17. Jasmine Rhyne Nr Claverham remove old penning hatch and reinstate rhyne bed.
18. Parish Brook off West End Lane remove withy tree and reinstate bank with stakes.
19. Repair access hatch grid on Sampson's Sluice tidal side walkway access bridge.
20. Installation of 2 No Access Culvert on Puxton Moor

7. General Engineering and Operational Matters

Western Power Middle Rhyne Kenn moor Road the Area supervisor has had early pre-consent application discussions with their engineer regarding the routing of a new cable along the verge/bank of Middle Rhyne. As at the 29 March a subsequent LDC application had yet to be received and no site work had been undertaken.

8. Invasive Species Update

A Floating pennywort management plan for Somerset has been prepared by the IDBs and the Environment Agency. EA is using this plan to seek funding for additional resource for pennywort control. Initially, the funding will be used in North Somerset, around Banwell Moor and Weston-super-Mare, where the problem is especially severe. North Somerset IDB has made good progress with biosecurity and the development and testing of control methods that are proving to be effective. This work will continue in 2022 and the Board's Officers are hopeful the continued spread of pennywort can be slowed and progress can be made towards eradication in some systems. Awareness raising and engagement are important components of our invasive species work. This includes the Board's Ecologist working with partners on a national floating pennywort strategy and attending local meetings and events to highlight the problem and share our work. Information and training on invasive species and biosecurity will again be provided to staff and contractors at the start of the 2022 maintenance contracts.

9. Environment Update

The joint IDB Environment Committee has not met since the last full Board meeting. Board Members and Officers have been working with Defra and local partners on a strategy for lowland peat conservation and restoration in Somerset and the development of a new agri-environment payment scheme (ELM) for farming on the Somerset Levels. This is significant to the IDBs as changes to water level management are likely to be required. The work on ELM has now identified 5 areas where farmers have expressed an interest in taking part in a 'Test and Trail' for peat conservation and restoration: This includes 1 area in Parrett, 3 areas in the Axe Brue and 1 area in the North Somerset: Tickenham, Nailsea and Kenn Moors.

10. Environment Agency Matters

Milleaze Outfall - Broadstone Rhyne Drainage & Siltation: The EA has still to plan and commence works on the tidal flap and plan the de-silting of the flow channel on the tidal side. The N Area Supervisor was awaiting response from Daryl Parker from the EA. However due to a change in staff responsibilities in the EA the engineer has now spoken with the EA catchment lead officer on the 31 March 2022 and the action is to arrange a new meeting with the stand in EA staff member.

Milleaze Rhyne EA Access Culvert into Congresbury Yeo – The culvert on the end of the rhyne at Yeo Bank Farm has a collapsed headwall on the upstream face. The main Armco pipe was installed in the 1970's and is likely to need replacement. As with the item above in this report the engineer has spoken with the EA catchment Lead officer and our concerns

have been raised and a meeting will be held shortly. ***This item was Action No 20220202-1 from the 02 Feb Board Meeting under item 9 Engineering and Operation Report***

Old River Kenn – EA not carrying out Maintenance: The Area supervisor has recently reminded the EA that a length of the Old Kenn River has not been cleaned from the B3133 to the Motorway for approximately 10 years due to access difficulties. This is important because the EA can only empty the River Kenn at Kenn Pier as the tilting weir at the coastal end is broken. The Area Supervisor also reported to the EA that the top end of the River Kenn is not keetched by machine because the culvert the EA were going to install has never been done and the weed boat used to do this section is currently not in use by them.

11. Schemes Programme (Refer to attached 3 Year Works Programme V7.0 dated 29 March 2022)

North Area Capital Projects Updates

Elver Passes: Confirmation of sites purchase of units and installation due in 2022/23.

Tickenham Causeway Otter Pass: Design complete & quotations being sought for installation winter 2021/22. NSC Highways have approved the design.

Crossman's Hatch: Invitations to quote for the tilting weir supply issued to 4 potential suppliers; return date 11 April 2022. Preliminary work on design of concrete substructure continues.

South Yatton Phase 2: All work complete including reinstatement. The scheme which routes certain town surface water outfalls to the IDB network is now fully operational. Subsequent to completion of the works a large quantity of wet wipes was found at the northern new outfall. Wessex Water responded to a request to inspect the relevant surface water sewer but found nothing out of order. The material thus appears to be a case of fly tipping which will be dealt with in the normal way-IDB to remove from watercourse; NSC should then collect and dispose.

Gauge Board Refurbishment: Preliminary checking of sites has been undertaken by the Rhyne Supervisor to identify need for repairs. Check levelling of all sites by the term survey contractor is being arranged.

Maintaining Favourable Condition: A provisional allowance was included in the current budget year for any measures required to progress or restore "favourable condition" in the SSSI areas. This budget has now been rolled into 2022-23 Engineers are reviewing with the ecologist.

Water level management in the SSSI areas: Engineers are reviewing with the ecologist. The budget which is included with the Maintaining Favourable Condition above has been rolled into 2022-23

South Area Capital Projects Updates

Elver Passes: Kewstoke TW quotation being sort for the purchase of a unit and installation. A service of the existing elver pass on Waterloo TW site operated by NSLIDB on the River Banwell.

Sampson's Sluice Tidal Outfall Oldbridge River: The works to carry out essential masonry mortar repairs to two sections of the tidal face of the sluice has now been completed by one of the Boards contractors. This work was required prior to the major works that will be carried out for the North Somerset Council Cycleway project. North Somerset council have their contractors working on the access upgrades for the project and also will be carrying out extensive upgrades with new security and safety fencing on the sluice which will improve both operational and ~~third-party~~third-party safety overall. This work is the subject of a Land Drainage Consent Application and the Engineer has spent considerable time reviewing the details to obtain positive outcomes for the Boards asset.

As a result of the location of the existing main power feed cable which runs from a junction box on the EA Tutshill Structure to Sampson Sluice and the foundations for the proposed bird screening fence required under the NSC Cycleway project NSC are looking at the option of replacing the existing cable on a new alignment. The engineer has insisted that any works carried out cannot compromise the operation of Sampsons Sluice as we are now on summer penn and require power to lift the main penning door and to power the water pump to feed the Wick St Lawrence Catchment.

Hurst Pool Rhyne New TW Structure to replace old Hatch Door: Design is in progress installation will be in this financial year 2022-23. The existing penning door hatch has been lowered to secure this summer penning to the Hurst Pool Rhyne and the SSSI area.

Hutton and Locking TW Replacement Access Bridge: The galvanised steel structure is now complete and fully operational and provides safe access for operation this structure is critical in controlling the Hutton Moor area and is adjacent to the South Superpond critical to the Weston Villages Strategic Flood solution.

Hurst Pool Rhyne localised Bank Slips Downstream of Pillhay Siphon Upstream of Hurst Pool Rhyne TW: A site inspection has been carried out and identified two short sections of the bank which will need future stabilisation work, Although the work will need to be carried out it was not deemed a priority and is now programmed for post summer penning in winter 2022-23.

Nailsea Wall Access Bridge Repair: Design being finalised contractor site visits being carried out to get realistic quotations. Completion expected in May/June 2022.

Milleaze Rhyne Yeo Bank Outfall Headwall Repair: Design being finalised the work area is close to works being undertaken on the NSC Cycleway Project and our contract will be programmed this summer not to clash with the Cycleway Project activities.

Maintaining Favourable Condition: A provisional allowance was included in the current budget year for any measures required to progress or restore "favourable condition" in the

SSSI areas. This budget has now been rolled into 2022-23 Engineers are reviewing with the ecologist.

Water level management in the SSSI areas: Engineers are reviewing with the ecologist. The budget which is included with the Maintaining Favourable Condition above has been rolled into 2022-23

12. Other Engineering Projects Updates (Including external organisations, RMA Partners and Developers)

Section 106 and Rechargeable Work

Bloor Homes Yatton Connection Ditch to Little River: The Boards contractor has completed the S106 funded offsite ditch improvements. This now includes a new access culvert which was relocated due to an existing badger site. The work is now complete and the developer Bloor Homes have been informed.

Bloor Homes Yatton Horscastle Farm Ditch Improvements: The ditch works has now been completed. The cost of the works will be recoverable from the developer Bloor's who have been informed that they are now clear to make the associated surface water connection in accordance with their existing consent. No response received up to 29 March 2022.

Curo Site East of North End, Yatton: Design of the replacement control sluice and local rhyme improvements can now progress as the Section 106 funding has been received. A contract for the ground investigation is being arranged.

Other Development Works

Smart Systems, Yatton: DCO has objected to two recent applications for extensions to the factory. Reassurance is sought on issues relating to the surface water aspects of these and previous applications. The NSC Flood Risk team has also objected, on similar grounds. Smarts have constructed the long-awaited new ditch to the Little River but the N Area Consultant Engineer has written expressing concerns about the standard of the workmanship and incomplete items. No response received by 29 March 2022.

Ventham Yeo Bank Offices: Another enquiry has been received concerning the vacant plot on the Yeo Bank Offices site, Kenn Rd, Clevedon. The Board's interests remain access to the adjacent watercourse and surface water disposal. N Area Consultant Engineer and the Area Supervisor met the developer's engineer on site on 25th January. The existing Phase 1 offices are situated immediately northwest of the proposal site and the SW from this is currently piped unattenuated through the proposal site in a pipe running to the head of the IDB rhyme. This was subject to a previous IDB consent. It is intended to abandon this pipe and re-route the SW on a new alignment through the proposed office complex. The IDB viewed rhyme on the northeast side of the access road will receive (attenuated) SW from the proposal site. The discharge should be consented with appropriate conditions on discharge rate etc. The proposed storage system (underground in the stone fill) has been selected as the site has to be raised in any case to meet EA tidal flood risk criteria.

Box Bush Farm Yatton: A pre-app enquiry has been received in respect of a housing development covering this site and an adjacent field. The proposal zone would straddle the Little River and there are significant issues affecting the Board's channel maintenance access. The proposals will require significant modification in order to meet IDB requirements.

Youngwood Lane Nailsea Housing Development: Site work has commenced. Development proposals are for the erection of up to 450 dwellings to be delivered over three phases, with 168 dwellings proposed during Phase one, in addition to site wide infrastructure including primary roads, attenuation ponds, associated engineering works and safeguarding of future link road provision.

Engine Lane Nailsea Housing Development

Work on site has commenced but this does not yet include the agreed offsite works which include a new culvert under West End Lane.

13. Major Projects affecting the Boards Area and Operations

New Coastal Cycleway over Sampson's Sluice Oldbridge River: As part of the NSC Cycleway Project North Somerset Council have submitted a draft of a Permissive access licence agreement document to the Clerk for review and comment. The document is intended to set out the legal agreement between NSLIDB the owner of the Sluice and the Council right of access over the Sluice. Prior to the cycleway project there was no formal third party access to or over the Sluice only the local landowner. The new cycleway will permit the general public both on foot, on cycle and equestrian access to and across both Sampsons Sluice on the Oldbridge River and the Environment Agency Tidal Outfall Tutshill Sluice on the Congresbury Yeo. The legal agreement is intended to mirror the agreement between the North Somerset Council and the Environment Agency for the Tutshill Tidal Outfall. The engineer has passed on the draft agreement to the Clerk who is currently seeking legal advice from the Boards Solicitors.

Highways Agency Motorway Culvert 13 Acre Rhyne near Kenn: The North Area engineer continues early stage involvement with consultants regarding proposals for a cycleway through the 13 Acre Rhyne motorway culvert. The detail design stage is being commenced by Messrs Keir on behalf of Highways England. A digital meeting on their proposals held last year was attended by both engineers where current NSLIDB maintenance operations around the existing culvert on the rhyne network were discussed. No further information has been received since this meeting.

North Somerset Levels & Moors project: The engineers maintain liaison with projects of mutual interest including Nailsea storm discharge treatment facility ("Nailsea Constructed Wetland") at Tickenham Causeway. An outline design has been completed by the Wildfowl and Wetlands Trust and funded by Wessex Water. A site meeting of interested parties was held on 25th November when the North Area Consultant Engineer repeated his earlier concerns about the potential for the scheme to cause adverse consequences for adjacent third party interests.

Further information was promised and has been received and assessed; however this was insufficient to provide the requisite reassurance and further more detailed calculations have been requested. These are reportedly being put in place

Other projects under discussions include Land Yeo and Banwell Wetlands NSLM Partnership works.

14. Development Control

Development control items covered by Project Engineer

Weston Villages Parklands Keepmoat Housing Site: As part of a major section of the Parklands development which is bordered by Grumblepill Rhyne to the east and Cross Rhyne to the south the engineer has attended a number of meetings and site visits and submitted correspondence with both the developer and the LPA North Somerset Council (NSC) ensuring that our existing and future proposed maintenance access routes are available and useable. Most recently there was concern over access routes being maintained while the site is being surcharged (ground raising to consolidate existing ground) during early construction phase.

Weston Villages Parklands St Modwens Housing Site: This Parklands site is south of the Cross Rhyne and bordered to the east by the Grumblepill Rhyne. The engineer has reviewed a land drainage consent for the diversion of a new foul rising main and the temporary works involved. A site meeting is arranged with the NSC Flood Risk Team and the developer to discuss the IDB site maintenance access corridors in relation to the multisite boundaries with other developments around both the Grumblepill Rhyne and Cross Rhyne. As is the case on this site and all the main Weston villages development sites they rely on the serviceability of the critical rhyne network to convey water to the remote attenuation areas of the superponds and the River Banwell flood spillway area.

North Somerset Council Banwell Bypass: Since the last Board meeting the engineer has attended two meetings with the NSC design team regarding the drainage arrangements and access requirements for the new road. The input given should be reflected in the Flood Risk Assessment and design documents going forward on the project. Further meetings and consultations and planning responses are expected as the project moves forward.

Willow Close St Georges Weston Super Mare (Potential Enforcement): Action 20220202-2 from the 02 Feb 2022 Board Meeting under item 11 Any Other Business. The action from the Board Meeting was for Officers to work with an appointed sub-group and report back to the Board. Since the last Board meeting the SDBC Officers have been investigated the issue and have contacted the Flood Risk Team at NSC and requested information from Highways England regarding ownership of the land affected. A Briefing note written by the SDBC officers will be given to the appointed sub-group members ahead of a future site visit.

15. Land Drainage Consents

Applications for land Drainage Consent for hedgerow and tree planting as part of the National Grid environmental mitigation obligations continue to be received and are being processed in line with established protocols.

Further land drainage consent applications from other sources have also been received and are currently being assessed; they are listed in the attached report.

NSLIDB 3 Year Programme Schemes EP V7.0 29 March 2022 Final

Scheme Name	Engineer	Year 1 (2021/22)				Committed costs	Year End Forecast	Vired Budget	Estimated Year end Rollover or Reserves	Year 2	22/23 New Funds Required	Year 3	Future	RAG	Comments/status
		Works cost estimate	Funds raised in previous years	Funds raised this year	Spend to date					Forecast Spend 22/23	23/24	Years	Status		
Sampsons Sluice (No Code)	GO	15000	0	10000	1200	0	1200	8800	23800	15000					Sampsons Sluice requires a full condition survey and assessment of function for existing and future operation some essential works are required in year but a major future spending should be based on the outcome of the detailed investigations. As part of the North Somerset Council Cycleway Project in year some parapet and fencing works are required to be carried out funded by NSC to enable the cycle route to transit the structure with increased third party use. The Sluice remains a critical part of the NSLIDB water level management infrastructure and has to be operational at all times. Quotes and proposals for Appraisal Consultant Works Required 2022-23 . Mortar works to tidal face of structure completed cost £1200
Pages Outlet TW and Culvert (300021)	DGA	332	202			202	202	0	0	0					Main works complete in 2020-21 Reseeding now completed in 2021-22
Crossmans Hatch Project (300002)	DGA	90000	64250	0	3250	0	3250	61000	86000	0					Major Refurbishment of Water Control Structure detailed design continue this financial year. Geotechnical Investigation Works completed and Tilting Weir Unit Quotations sought. Currently we have £64250 raised up to end of March 2021. 2022/23 Substructure and Weir Installation now deferred to 2022/23 - Geotechnical Investigation was delayed by the poor winter ground conditions.
Crossmans Sluice Gate(See Above)	DGA														Specification complete. Procurement proceeding estimated value for TW is £35,0000 in budget figures above. Tender invitations issued closing date April 11
Crossmans Substructure (See Above)	DGA														Design Work in hand. Tender prep to follow. Construction needs to be completed in 2022-23 before end of dry ground conditions.
South Yatton Scheme Phase 2 (300022)	DGA	10000	9532	0	0	10330	9862	330	0	0					All works complete scheme operational.
Jasmine Rhyne Improvements Project (300011)	DGA	4000	3895	0	0	1607	1607	-330	1958	0	-1958				Scheme complete and operational.
Jasmine Troughs	DGA	995	995	0	995	0	995	0	0	0					Part of above scheme. Completed on site. Cattle troughs were installed in the spring 2021 in lieu of planned replacement of penning structure
Hurst Pool Rhyne Tilting Weir(30008)	GO	30000	29250	0	0	2295	2295	26955	26955	0					New tilting weir to replace old Hatch Door Design to progress 2021-22 . Geotechnical Investigation Contract completed in September. Tilting Weir purchased out of previous budget. Main works in 2022-23 has existing budget.
Causeway Otter Pass north Area (Winter Job)(300025)	DGA	1500	1500	0	0	0	0	1500	1500	0					Design of the works complete quotations to be sought. Works to be completed winter 2021/22 Winter level required.
Elver Passes across Boards South Area(300005)	GO	7500	7000	500	0	0	0	7500	10000	2500					Budget Works will include service of existing Waterloo Sluice Elver Pass and New Elver Pass on Kewstoke TW as new Huckers Bow Tidal outfall structure has Eel friendly Flap New Elver Pass on Old Yeo Rhyne TW Ebdon off R Banwell all now moved into 2022-23.
Elver Passes across Boards North Area (300005)	DGA	30000	10000	20000	0	0	0	30000	30000	0					12 Sites have been identified in the North Area at a cost of 2.5K each Total 30K. 20K has been raised for 2021-22 Budget plus 10K rollover. Allowed for 5k in 2021-22 budget to purchase and fit 2 sites and 25K rolled over into 2022-23. 2021-22 Budget not spent by year end.
Gauge Boards North Area (winter job)(300007)	DGA	6000	2848	3200	0	0	0	6048	6048	0					North Area requires Survey 2021-22 and then purchase and installation for completion during winter 2021-22 includes new sites for gauge boards. Survey to be arranged with new term survey contractor. Awaiting availability of new Framework survey contractor. 2021-22 Budget not spent by year end.
Telemetry South Area(300023)	GO	9000	9000	0	0	0	0	9000	9000	0					Sampsons Sluice Site Telemetry and or CCTV and Huckers Bow Telemetry Site Both are Critical 24 Hour Operation with Tidal outfalls Now Budget moved to fully investigate options 2022-23
Gauge Boards South Area (300007) Phase 1	GO	2500	2500	0	0	0	0	2500	5000	2500					Survey and Gauge Board Installation for South Area Phase 1 programmed in 2022-23
Maintaining Favourable Conditions South Area 9 (300006)	GO-PB	1250	1250	0	0	0	0	1250	1250	0					Works Required within SSSI to maintain favourable Conditions No new budget requested funds now for 2022-23 Works
Maintaining Favourable Conditions North Area(300006)	DGA-PB	1250	1250	0	0	0	0	1250	1250	0					Works Required within SSSI to maintain favourable Conditions No new budget requested funds now for 2022-23 Works
Improvements to South Area Water Control Structures(No Code)	GO	19650	0	20000	0	0	0	-350	19650	19650	0				Major Improvements to South Area Water Control Structure. Works form updated Asset Surveys and Public Safety Risk Assessments
Parish Brook Weedscreen Improvements Nr Nailsea (No Code)	DGA	10000	0	10000	0	0	0	10000	10000	0					Parish Brook Culvert requires an upgrade to the weed screen as it is an operational issue. 2021-22 Budget not spent by year end.

NSLIDB 3 Year Programme Schemes EP V7.0 29 March 2022 Final

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		Works cost estimate	Funds raised in previous years	Funds raised this year	Spend to date					Forecast Spend 22/23		23/24	Years	Status	
Old Yeo Rhyne New Access Culvert BM0033-017(300018)	GO	2995	2995	0	0	0	0	2995	2995	0					Contract in place delayed by ground conditions. Landowner issues and crops estimated spring start for good ground conditions
Oldbridge River Nr A370 3 No Bank Slips BM0034-004(300020)	GO	2000	2000	0	0	0	0	2000	2000	0					Review need an extent of Works required during winter pen 2021-22 Any work required winter 2022-23
Hurst Pool Rhyne Bank Slips D/S of Pilhay Siphon BM0043-003 (300009)	GO	6000	6000	0	0	0	0	6000	6000	0					Site appraisal carried out Dec 2021 as works not critical works now in winter pen 2022-23
Northfield Rhyne Investigate leak on Structure BM0065-005 (300016)	GO	3000	3000	0	0	0	0	3000	3000	0					Site appraisal to be carried as major leak detected to decide whether a new structure with better water control verses repair of the old is cost effective.
Kewstoke Rhyne Access Culvert BM0065-008 (300012)	GO	5500	5500	0	0	0	0	5500	5500	0					Review requirement and any alternative solution prior to design and installation. Moved to 2022-23 Works programme
Hutton and Locking TW Replace Access Bridge BM0065-009 (300010)	GO-GH	8350	8000	0	0	0	8350	350	0	0	0				Replace old wooden bridge with galvanised steel walkway bridge. Works now complete and fully operational.
Tynever Gout Rhyne Culvert for Safe Access BM0064-002 (300026)	GO	5900	5900	0	5900	0	5900	0	0	0	0				Works now complete contractor paid and Job closed in year
Signage of Structures North Area BM0033-008 (No Code)	GO	500	500	0	0	0	0	500	500	0					Update Health & Safety Signage of some north area structures
Middle Rhyne Access Culvert BM0040-001 (300014)	GO	3450	2766	0	0	0	0	2766	0	-2766					Actual engineering ground conditions very poor uneconomic to construct therefore £2766 balance.
Wenberham Lane Rhyne Access Improvements BM0040-008 (300027)	GO	3000	3000	0	0	0	1500	1500	0	-1500					Access to Tilting Weir required improvement to trackway now complete.
Ten Foot Rhyne Nailsea Wall BM0045-004 (300024)	GO	6000	6000	0	0	0	0	6000	6000	0					Essential Access Bridge requires repair to masonry abutments. Tender Documents being prepared to seek quotations.
Milleaze Rhyne Yeo Bank Outfall BM0054-005(300015)	GO	10000	10000	0	0	0	0	10000	10000	0					Repair or replace concrete headwall structure critical outlet to Kingston Seymour. Tender documents being prepared to seek quotations.
Totals					11345	14434	35161								
Year 2 Works 2022-2023															
Oldbridge River Dolecroft Lane Large Bank Slip BM0043-024 (30000)	GO	15000	15000	0				15000	15000	0					Large Bank Slip which has been monitored yearly review during winter pen 2021-22 Action in 2022-23
East Moor Rhyne New Control Structure BM0054-001 (No Code)	GH/GO	8000	8000	0				8000	8000	0					New Control Structure to improve penning of water in R Banwell U/S of Waterloo Sluice. Preliminary levels survey carried out to carry out outline design.
Liddy Yeo Rhyne West New feed culvert BM0065-001 (300013)	GO	5500	5500	0				5500	5500	0					New Culvert to improve feed across Banwell Moor install winter 2022-23
Totals									294948	13776					
Year 3 Works 2023-2024															
Old Yeo Rhyne New Tilting Weir Banwell Moor BM0067-002 (300019)	GO	15000	15000	0				15000			15000				Funds raised previously Full Appraisal of Site required and how future development will impact Banwell Moor existing budget now rolled into 2023-24
Cross Rhyne Conveyance Improvements Parklands South Area (No Code)	GO	7000	0	0				0			7000				Cross Rhyne Works to improve conveyance to existing main arterial route through major development area.
TOTAL ROLLOVER FROM 2021-2022 Forward								271172							
Elver Passes on 5 Tilting Weirs on Oldbridge and Banwell Catchment.	GO	10000									10000				Elver Passes on South Area River Banwell & Oldbridge Catchment 5 No Tilting Weir Sites
Telemetry Units Across North and South Critical Structures (No Code)	GO	25000									25000				Telemetry will provide remote monitoring and logging of data on Structures Critical to Flood Risk (Approximate Estimate to be reviewed)
Ham Bow Sluice	DGA	30000									30000				Existing old vertical gate Ham Lane Yatton to be modified / replaced
Western Drainage Rhyne Improvement	DGA	35000									35000				To improve drainage network in the area of Kenn Pier
Future Works															
Cranmoor Sluice Tilting Weir	DGA	20000										20000			New Site to further improve water level control in sensitive Kingston Seymour zone.

