CABINET

<u>13 February 2013</u>

HOUSING SEWAGE TREATMENT WORKS IMPROVEMENTS

REPORT OF HEAD OF ACCESS AND INFRASTRUCTURE

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RECENT REFERENCES:

CAB2281 – Housing Sewage Treatment Works Improvements – 8th February 2012

EXECUTIVE SUMMARY:

The Council has a long-term responsibility to maintain private (that is non-mains drainage connected) sewage treatment works held within the Housing Revenue Account.

This report details the position on current projects within the capital programme for Housing Sewage Treatment Works, expenditure for 2012/13 and a programme for 2013/14.

RECOMMENDATIONS:

- 1. That the Head of Access and Infrastructure, in consultation with the Head of Landlord Services, be authorised to progress the programme for 2013/14 as outlined in the report, subject to approval of the Capital Programme by Council in February 2013.
- 2. That, if the capital programme is approved, authority be given to incur expenditure for the Schemes in the proposed capital programme as set out in paragraph 4.1 of the Report, in accordance with Financial Procedure Rule 6.4.
- 3. That the Head of Access and Infrastructure be given delegated authority to make minor adjustments to the programme (including the substitution of identified reserve schemes) to meet the maintenance and operational needs of the City Council Sewage Treatment Works as required in consultation with the Head of Finance and Head of Landlord Services.

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DETAIL:

1. Introduction

1.1. The Council has a long-term responsibility to maintain the private sewage treatment works (STWs) held within the Housing Revenue Account. The primary purpose of this maintenance programme is to ensure that the operation of the STWs meet the Council's legal responsibility to comply with Environment Agency determined discharge standards. This report updates Cabinet on progress in the last year and details the position on current projects within capital programme for Housing Sewage Treatment Works with expenditure for 2012/13 and sets out a programme for 2013/14.

2. Update on Current Projects

2.1. Couch Green, Martyr Worthy

New sewage treatment plant installed in June 2011 and works to improve the pump station should be completed in this accounting year. The work was originally programmed for 11/12 but a technical problem with the pumping main caused a temporary postponement

2.2. The Pastures, Cheriton

A major pump failure combined with a lack of spare parts led to a need to replace the pumps with a pump/macerator set up which should overcome the blockages that this station also suffers from. This item was not identified in the programme but immediate action was required to overcome the critical situation.

2.3. Wine Cross

Replacement pipe work, compressor and electrics were identified as needing replacement when the plant failed to pass the EA quality requirement. This work was carried out as an emergency improvement and not identified in the programme.

When improvements are carried out on any site, telemetry will be installed as part of the works.

2.4. Southern Water Adoptions

The Council continues to pursue adoption with Southern Water; however no progress has been made in the past year. The Street Care Team fulfils the maintenance programme in a cost efficient manner which may not be the case

if the larger works were adopted. The smaller non adoptable works cost as much as the larger works to maintain and fewer works would lead to a less cost effective operation.

2.5. Sampling of STW

Sampling is now carried out on a monthly basis at 24 of the Council's 37 sewage treatment works, of which 16 are subject to Environment Agency Quality Consent Orders. This is a key performance indicator of how well a STW is performing. Samples are taken from works that offer secondary and tertiary treatment. Septic tanks will not reach a meaningful level of purity and are not tested: A programme of works is in hand to replace these with more environmentally friendly treatment works, which will be tested.

3. Actual Expenditure 2012/13

3.1. The original Capital Programme Budget for 2012/13 was £100,000. The report to Cabinet (Housing) Committee on 30 January 2013 on the HRA budget and Business Plan recommends that this budget be reduced to £60,000. It is now expected that £67,765 will be spent in this year, and it is recommended that the capital programme is adjusted to £68,000. The reduced expenditure compared to the original budget mostly relates to planned works of £20,000 at St Marys Close for which the easements (right to cross private land) are not complete. Warren Cottages and Railway Cottages are still in design stage. Construction of both will be deferred to 2013/14.

2012/13	Proposed Budget	Comment
St Mary's Close, Droxford		Awaiting grant of easement. No work commenced
Warren Cottages, Micheldever Station		No work commenced
Railway Cottages, West Meon		No work commenced
The Pasture Pump Station	£18,065	Replacement pump/macerator
Wine Cross STW	£4,700	Replacement electrical work
Couch Green PS	£25,000	Replacement pump and rising main
Bishops Sutton	£20,000	Installation of new system
Planned Expenditure	£67,765	
Proposed Capital Programme Budget	£68,000	

3.2. It had been observed that two works at Woodlane Close, Bramdean and Hobbs Close, Bishops Sutton had been suffering from continual pump failure and high consumption of electricity. £20,000 was used to install a new system on the sites which reduced the number of pumps needed and the replacement

- compressors are low consumption units. It is anticipated that with lower energy cost and no pumps to replace the cost will be recovered in a few years.
- 4. Proposed Capital Programme Budget 2013/14
- 4.1. The report on the HRA Budget 2013/14 and HRA Business Plan 2013/14 to 2043/44 includes £100,000 for Sewage Treatment Works in 2013/14.

2013/14	Proposed Budget	Comment
St Mary's Close, Droxford	£20,000	Pump station and pump main to connect to The Park STW once easement has been agreed.
Warren Cottages, Micheldever Station	£50,000	Replace septic tank with package treatment plant
Railway Cottages, West Meon	£30,000	Replace septic tank with package treatment plant
Proposed Capital Programme	100,000	
Reserve site	£50,000	The Hallways, Littleton

5. Conclusion

5.1. Appendix A of this report provides a summary of the current situation and future required improvements with regards to all of the Council's 37 sewage treatment works.

OTHER CONSIDERATIONS:

6. FUTURE CAPITAL EXPENDITURE

- 6.1. Now the treatment plant at Couch Green has been replaced all the major sewage treatment plants that are owned by Winchester City Council have been replaced or upgraded to an environmentally acceptable standard. Several small septic tanks will require replacing over the next few years and the proposed budget of £100,000 (plus inflation) per year should be adequate for this purpose.
- 7. <u>SUSTAINABLE COMMUNITY STRATEGY AND CORPORATE BUSINESS PLAN (RELEVANCE TO)</u>:
- 7.1. To maintain the Council's assets and to promote a high quality environment.
- 8. RESOURCE IMPLICATIONS:
- 8.1. The Council's Capital Programme includes a provision for sewage treatment works improvements and this will be recharged through the Housing Revenue Account. Staff resources to design and implement the improvements will be funded from within existing resources.

9. RISK MANAGEMENT ISSUES

9.1. All treatment plants are subject to Environment Agency discharge consent and failure to meet the consent conditions may lead to prosecution. By continual upgrading of elderly works, the risk of plant failure and therefore the risk of prosecution is considerably reduced.

10. TACT Comment

10.1. TACT Committee Group confirmed in 2012 that the keeping of the City Council sewage treatment works up to the required standards and they be replaced when the time comes, continues to be important. It is understood that this is a costly business and the capital programme as TACT is aware bears the brunt of this cost. TACT hopes whenever possible private residents will share in the cost. TACT therefore supports this programme of essential work for what is in fact classed as an HRA asset.

BACKGROUND DOCUMENTS:

None.

APPENDICES:

Appendix A – Current review of all Sewage Treatment Works.

Current Review of all Sewage Treatment Works

STW	SWS Adoption	No. Prop	E.Agency Discharge	Cost £'000	Poss Adoption Year	Comments
Oak Close Upham	No	6	2.34	49.9	N/A	New works commissioned 2006
Elm Crescent Upham	No	6	3.5	54	N/A	As Above
Basingstoke Rd Old Alresford	No	6	3.5		N/A	New Pumping Station installed in October 2009 and effluent being sent to The Brook for Treatment.
Pound lane Meonstoke	No	25	20		N/A	Refurbishment carried out in 2006 and life expectancy extended by approx 9 years.
St Andrew's Green Meonstoke	No	12	5.85	50	N/A	Existing works to be replaced in next few years.
Baring Close Itchen Stoke	No	12	2.34	TBA	N/A	Works to be investigated and scheme prepared in negotiation with land owner Land negotiations continuing.
Cricket Close Crawley	No	9	6		N/A	New works completed & commissioned 04/05
Woodlark Cottages Bishop's Sutton	No	4	2.34	32	N/A	Replacement STW commissioned in 2006.
Hobbs Close Bishop's Sutton	Possible	28	13			New Works completed & commissioned 04/05.
Couch Green Martyr Worthy	Possible	22	16.5	120		New STW and renovated Pump Station 2011/12
Railway Cottages West Meon	No	6	?		N/A	Septic tank failing. Possibility of connection to new development being investigated.
North Drive Littleton	No	10	10	10	N/A	New treatment plant installed May 2009.
Westwood View Kilmerston	No	10	5.85		N/A	Underground suction pipe laid in Feb 2004. No further work envisaged.
Itchen View Itchen Stoke	No	6	4.5		N/A	No works planned.
Lambourne Close Sparsholt	No	4	2.34		N/A	No works planned.
The Hallways Littleton	No	14	8.8		N/A	Replacement works required in next two years.
Crawley Cottages STW Crawley	No	8	3.5	0	N/A	Septic Tank - No works planned at present.

STW	SWS Adoption		E.Agency Discharge	Cost £'000	Poss Adoption Year	Comments
The Goodens STW Cheriton	No	8	6	25	N/A	Land purchase for access road completed and boundary fenced in 2008.
Stratton Close STW East Stratton	No	6	3.5		N/A	New soakaway completed 2002.
Warren Cottages STW Micheldever Station	No	4	2.34	32	N/A	Septic tank & soakaway system requires replacement in 2011/12 programme.
St Mary's Close STW Droxford	No	6	3.5	20	N/A	Septic tank at end of useful life. Proposal to pump effluent to The Park STW dependant on land acquisition that is progressing. In 11/12 programme.
Gorse Down STW Owslebury	No	6	3.5		N/A	No works planned.
Old Stoke Road STW Stoke Charity	No	6	3.5		N/A	Underground sludge suction pipe required – consent being sought from the land owner.
Big Tree Cottages STW Soberton	No	14	8.2	0	N/A	Works to reduce ingress of water into plant completed May 04.
Kiln Lane STW Old Alresford	yes	14	14, 40/60		N/K	Inconsistent test results. May need reed bed to polish final effluent.
Wine Cross STW Boarhunt	No	8	8, 20/30		N/A	Improved 1996, not adoptable. Land is lease hold.
Long Priors STW West Meon	yes	40	40, 40/60			Reed bed installed during March 2004 – monitoring of plant carried out to establish success.
The Park STW Droxford	yes	34	19.9, 40/60		N/K	New compressor installed at works has improved quality of effluent so that it is within EA quality standard.
Birch Hill STW Boarhunt	No	14	11, 40/60		N/A	Improved 1997, not adoptable no freehold access. New sample chamber installed.
Widley Walk STW Widley	No	8	6, 20/30		N/A	Improved 1999, not adoptable no freehold Problems with meeting EA consent standards required alterations to aeration system that appears to be effective.
Woodlane Close STW Bramdean	yes	26	20, 40/60			Initially completed in 2000, SW required additional works. Which were completed in 2004/05.
Beech Grove STW Owslebury	No	71	49.5, 20/30/2.5		N/A	Completed 1999, not suitable for adoption for legal reasons. Additional work to reed beds required to meet EA standard completed in October 2004.
The Pastures STW Cheriton	Probable	19	12			Improved 2001.
The Brook Old STW Alresford	yes	15	15, 20/30			Completed & awaiting adoption. Humus tank and extension to reed bed 2009.

STW	SWS Adoption		E.Agency Discharge *	Cost £'000	Poss Adoption Year	Comments
Woodman Close Sparsholt	Probable	86	48			Improved 2002.
Southbrook Place STW Micheldever	Probable	56	46, 40/60			Completed 2002.

^{*}Environment Agency Consent is given as a volume that can be discharged from the works and on 11 treatment works they also require the effluent be below a minimum level set by themselves for Biochemical Oxygen Demand (BOD) and Suspended Solids (SS). Hence figures in this column are VOL,BOD/SS, Beech Grove has a further requirement for the amount of ammonia discharged.