

# Newhaven East Wastewater System - Outline Options Appraisal

Generic Option	Location of Risk	Planning Objective and Description of Risk	Option Reference	Description	Further Description	Unconstrained Option?	Constrained Option?	Feasible Option?	Net Benefits	Estimated Cost	Preferred Option	Best value / Least cost or Reasons for Rejection
Control/ Reduce surface water entering the sewers	NEWE FC01_1 - Blatchington Road,	PO4 and PO7 Flooding	NEWE.SC01.1	Surface Water Separation	DAP Option.	No						
Control/ Reduce surface water entering the sewers	NEWE FC01_2 - Blatchington Road,	PO4 and PO7 Flooding	NEWE.SC01.2	Surface Water Separation	DAP Option.	No						
Control/ Reduce surface water entering the sewers	NEWE FC02_1 - Riverside	PO4 and PO7 Flooding	NEWE.SC01.3	Surface Water Separation	DAP Option.	No						
Control/ Reduce surface water entering the sewers	NEWE FC03_1 - Vale Road	PO4 and PO7 Flooding	NEWE.SC01.4	Surface Water Separation	DAP Option.	No						
Control/ Reduce surface water entering the sewers	NEWE FC04_1 - Chyngton Gardens,	PO4 and PO7 Flooding	NEWE.SC01.5	Surface Water Separation	DAP Option.	No						
Control/ Reduce surface water entering the sewers	NEWE FC05_1 - Avis Way	PO4 and PO7 Flooding	NEWE.SC01.6	Surface Water Separation	DAP Option.	No						
Control/ Reduce surface water entering the sewers	NEWE FC05_2 - Avis Way	PO4 and PO7 Flooding	NEWE.SC01.7	Surface Water Separation	DAP Option.	No						
Control / Reduce groundwater infiltration												
Improve quality of wastewater entering sewers (inc reducing FOG, RAG, pre-treatment, trade waste)												
Control / Reduce the quantity / flow of wastewater entering sewer system	NEWHAVEN EAST WTW	PO8 (2050)- Dry Weather Flow	NEWE.SC04.1	Water Efficient Appliance / Measures	Southern Water aims to reduce water consumption to 100 l/h/d by 2040.	No						Deliver the required outcome
Network Improvements (eg increase capacity, storage, conveyance)	Ham Lane Lewes New Wps,	PO2- Pollution Risk	NEWE.PW01.1	Maintenance Programme WPS	An efficient maintenance programme for pumping stations to eliminate the risk of a pollution incident due to an operational failure.	Yes	Yes	Yes	Minor Positive +	£235K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	Catchment Wide	PO3- Sewer Collapse	NEWE.PW01.2	Pipe Rehabilitation Programme	Targeted CCTV / electroscan surveys and proactive sewer rehabilitation to reduce risk of sewer collapse.	Yes	Yes	Yes	Minor Positive +	£1,310K	No	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	Catchment Wide	PO8 (2050)- Dry Weather Flow	NEWE.PW01.3	Pipe Rehabilitation Programme	Relining/improving structural grades of sewers across the catchment.	No						Cost Effective
Network Improvements (eg increase capacity, storage, conveyance)	Southover- Inner & Outer Zone TCZ	PO12- Ground Water Pollution	NEWE.PW01.4	Pipe Rehabilitation Programme	Total length of sewer within protection zones- 79.	Yes	Yes	Yes	Minor Positive +	£4,660K	No	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	Catchment Wide	PO2- Pollution Risk	NEWE.PW01.5	Pipe Rehabilitation Programme	Pipe Rehabilitation Programme.	No						Technically feasibleCost Effective
Network Improvements (eg increase capacity, storage, conveyance)	NEWE FC01_1 - Blatchington Road,	PO4 and PO7 Flooding	NEWE.PW01.6	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£1,395K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	NEWE FC01_2 - Blatchington Road,	PO4 and PO7 Flooding	NEWE.PW01.7	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£2,455K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	NEWE FC02_1 - Riverside	PO4 and PO7 Flooding	NEWE.PW01.8	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£585K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	NEWE FC03_1 - Vale Road	PO4 and PO7 Flooding	NEWE.PW01.9	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£540K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	NEWE FC04_1 - Chyngton Gardens,	PO4 and PO7 Flooding	NEWE.PW01.10	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£1,060K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	NEWE FC05_1 - Avis Way	PO4 and PO7 Flooding	NEWE.PW01.11	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£590K	Yes	Best Value
Network Improvements (eg increase capacity, storage, conveyance)	NEWE FC05_2 - Avis Way	PO4 and PO7 Flooding	NEWE.PW01.12	Storage	DAP Option.	Yes	Yes	Yes	Major Positive +++	£6,970K	Yes	Best Value
Improve treatment (capacity and quality at existing works or develop new WTWs)	NEWHAVEN EAST WTW	PO2- Pollution Risk	NEWE.PW02.1	Maintenance Programme WTW	An efficient maintenance programme for the treatment works to eliminate the risk of a pollution incident due to an operational failure.	Yes	Yes	Yes	Minor Positive +	£TBC - With Partners	Yes	Best Value
Improve treatment (capacity and quality at existing works or develop new WTWs)	NEWHAVEN EAST WTW	PO8 (2050)- Dry Weather Flow	NEWE.PW02.2	Permit Review	Proposed permit-16467m3.	Yes	Yes	Yes	Minor Positive +	£2,130K	No	Best Value
Wastewater Transfer	NEWHAVEN EAST WTW	PO8 (2050)- Dry Weather Flow	NEWE.PW03.1	Construct New WPS & Rising Main	No other WTWs are within a 20km radius of NEWHAVEN EAST WTW with spare capacity to take DWF.	No						Technically feasible, Cost EffectiveDeliver the required outcomeDo customer support it
Mitigate impacts on Air Quality (e.g. Carbon neutrality, noise, odour)												Not included in the first round of DWMPs
Improve Land and Soils												Not included in the first round of DWMPs
Mitigate impacts on Water Quality												
Reduce consequences Properties (e.g. Property Flood Resilience)												
Study/ investigation to gather more data	Catchment Wide	PO3- Sewer Collapse	NEWE.OT01.1	CCTV Investigation	CCTV Investigation.	No						Deliver the required outcome
Study/ investigation to gather more data	Catchment Wide	PO8 (2050)- Dry Weather Flow	NEWE.OT01.2	Infiltration Reduction Plan	Relining/improving structural grades of sewers across the catchment.	No						Deliver the required outcome
Study/ investigation to gather more data	Southover- Inner & Outer Zone TCZ	PO12- Ground Water Pollution	NEWE.OT01.3	Study and Investigations	Study and Investigations.	No						Deliver the required outcome
Study/ investigation to gather more data	HAM LANE LEWES NEW WPS	PO5 - Storm Overflow	NEWE.OT01.4	Storage.	Storage.	Yes	Yes	Yes	Minor Positive +	£1,000K	Yes	Best Value
Study/ investigation to gather more data	Catchment Wide	PO4- 1 in 50 year PO5- Storm Overflow PO7- Hydraulic Overload PO10- Surface Water Management	NEWE.OT01.5	Improve Hydraulic Model	Improve Hydraulic Model.	Yes	Yes	Yes	Minor Positive +	£340K	Yes	Best Value
Study/ investigation to gather more data	CLIFF END SEAFORD WPS	PO5 - Storm Overflow	NEWE.OT01.6	Storage	Storage.	Yes	Yes	Yes	Minor Positive +	£1,000K	Yes	Best Value
Study/ investigation to gather more data	NEWHAVEN MAIN WTW	PO5 - Storm Overflow	NEWE.OT01.7	Storage.	Storage.	Yes	Yes	Yes	Minor Positive +	£1,000K	Yes	Best Value