South East Strategic Reservoir Option (SESRO)

Supporting Document A-2:

Cost Report

Notice

Position Statement

This document has been produced as the part of the process set out by RAPID for the development of the Strategic Resource Options (SROs). This is a regulatory gated process allowing there to be control and appropriate scrutiny on the activities that are undertaken by the water companies to investigate and develop efficient solutions on behalf of customers to meet future drought resilience challenges.

This report forms part of suite of documents that make up the 'Gate 2 submission.' That submission details all the work undertaken by Thames Water and Affinity Water in the ongoing development of the proposed SROs. The intention of this stage is to provide RAPID with an update on the concept design, feasibility, cost estimates and programme for the schemes, allowing decisions to be made on their progress and future funding requirements.

Should a scheme be selected and confirmed in the companies' final Water Resources Management Plan, in most cases it would need to enter a separate process to gain permission to build and run the final solution. That could be through either the Town and Country Planning Act 1990 or the Planning Act 2008 development consent order process. Both options require the designs to be fully appraised and in most cases an environmental statement to be produced. Where required that statement sets out the likely environmental impacts and what mitigation is required.

Community and stakeholder engagement is crucial to the development of the SROs. Some high level activity has been undertaken to date. Much more detailed community engagement and formal consultation is required on all the schemes at the appropriate point. Before applying for permission Thames Water and Affinity Water will need to demonstrate that they have presented information about the proposals to the community, gathered feedback and considered the views of stakeholders. We will have regard to that feedback and, where possible, make changes to the designs as a result.

The SROs are at a very early stage of development, despite some options having been considered for several years. The details set out in the Gate 2 documents are still at a formative stage and consideration should be given to that when reviewing the proposals. They are for the purposes of allocating further funding not seeking permission.

Disclaimer

This document has been written in line with the requirements of the RAPID Gate 2 Guidance and to comply with the regulatory process pursuant to Thames Water's and Affinity Water's statutory duties. The information presented relates to material or data which is still in the course of completion. Should the solution presented in this document be taken forward, Thames Water and Affinity Water will be subject to the statutory duties pursuant to the necessary consenting process, including environmental assessment and consultation as required. This document should be read with those duties in mind.

Contents

Figures and Tables

Executive Summary

This report provides an overview of the cost estimates at Gate 2 for the six South East Strategic Reservoir Option (SESRO) variants. The key outputs of this are presented in the tables below which are also presented in the Gate 2 Report.

Option Name	Units	150 Mm³	125 Mm³	100 Mm³	75 Mm³	30 + 100 Mm³	80 + 42 Mm³
Option Benefit	MLD	271	230	185	149	239	224
Capex (20/21)							
Base Capex	£m	1,455	1,363	1,244	1,144	1,563	1,554
Costed Risk	£m	335	314	286	263	359	357
Optimism Bias	£m	406	380	347	319	436	434
Total Gate 2 Capex	£m	2,195	2,057	1,878	1,726	2,358	2,345
Total Gate 1 Capex	£m	2,002	1,868	1,732	1,601	2,290	2,273
Change G1 to G2	%	9.64%	10.12%	8.42%	7.83%	2.97%	3.18%
OPEX (20/21)							
Gate 2 Fixed	£m/ annum	3.80	3.74	3.66	3.57	4.38	4.36
Fixed: G1 to G2	%	-16.15%	-9.85%	-3.28%	3.47%	-15.35%	-16.07%
Gate 2 Variable	£/ML	10.06	9.52	9.11	8.03	11.10	10.28
Variable: G1 to G2	%	7.96%	-2.68%	-12.01%	-21.75%	-11.00%	-21.14%

80 year planning period costs and benefits	Units	150 Mm³	125 Mm³	100 Mm³	75 Mm³	30 + 100 Mm³	80 + 42 Mm³
Option Benefit (DYAA)	MLD	271	230	185	149	239	224
Option Benefit (DYAA)	Ml	1,587,370	1,344,286	1,121,504	906,438	855,567	1,131,941
Capex NPV	£m	1,398	1,317	1,230	1,137	1,240	1,341
Estimated Utilisation (38%) *							
Opex NPV	£m	67	65	65	62	63	72
Total NPV	£m	1,465	1,381	1,295	1,200	1,302	1,413
AIC	p/m³	92.29	102.76	115.43	132.34	152.23	124.85
Maximum Utilisation (100%) **							
Opex NPV	£m	77	73	71	67	68	79
Total NPV	£m	1,475	1,389	1,301	1,204	1,308	1,420
AIC	p/m³	92.91	103.35	115.99	132.83	152.86	125.43
Gate 1 AIC (20/21)	p/m³	80.48	90.44	103.20	120.39	134.92	114.49

Note * 38% utilisation is assumed for these calculations to enable comparison between options: 1 in 500 year deployable output for 365 days / year, and 38% of the estimated maximum variable operating cost, based upon output of long-term water resources modelling. There is no comparative AIC for Gate 1 as these utilisation calculations were not available at Gate 1.

Note ** 100% utilisation is assumed for these calculations to enable comparison between options: 1 in 500 year deployable output for 365 days / year, and estimated maximum variable operating cost.

1. Introduction

1.1 In the final determination of the 2019 water industry price review (PR19) Ofwat set out a formal gated process and allocated funds to develop integrated strategic regional water resource solutions (SROs) during the 2020-2025 planning period (AMP7). The South East Strategic Reservoir Option (SESRO) / Abingdon Reservoir has been included in successive Water Resource Management Plans (WRMPs) developed by Thames Water and was selected in the Thames Water and Affinity Water WRMP19 preferred plans; therefore, the PR19 final determination allocated funds to these two water companies to develop SESRO through the Ofwat gated process.

1.2 This report provides an overview of the current cost estimate for the scheme and supports the Gate 2 submission to the Regulators' Alliance for Progressing Infrastructure Development (RAPID), which includes Ofwat, the Environment Agency (EA) and the Drinking Water Inspectorate (DWI). [1]

1.1 Scheme Overview

1.3 SESRO would deliver a new reservoir to store water abstracted during periods of high flow in the River Thames for use during periods of low river flow or high demand for water. The reservoir could be used by the customers of multiple water companies across the South East of England. Further details of the scheme are provided in Supporting Document A1, Concept Design Report, with a summary of the key components provided below:

- Provision of a fully bunded reservoir in Oxfordshire, 5km south-west of Abingdon (with total storage capacity between 75 Mm^3 and 150 Mm^3) within the area bounded by the A34 and Steventon to the east; the Great Western Main Line (London to Bristol) to the south; the A338 and East Hanney to the west; and the River Ock to the north.
- Pumping station at the toe of the embankment (on the north-east side of the reservoir) containing pumps for filling the reservoir and turbines for energy recovery during periods when the reservoir releases water to the River Thames.
- 3.3 km long conveyance tunnel to transfer flows via the pumping station to and from an intake / outfall structure on the right bank of the River Thames near Culham.
- Raw water to be abstracted from the river when water levels are high, using pumps to fill the reservoir. The maximum quantity abstracted in any day would not exceed 1,000 Ml.
- Flows to be discharged into the river when the reservoir is releasing water via the energy recovery turbines (working assumption maximum rate of 600 Ml/d, but

[1] Strategic Regional Water Resource Solutions Guidance for Gate Two. RAPID, Ofwat, EA, DWI. April 2022. Strategic-regional-water-resource-solutions-guidance-for-gate-two_RAPID.pdf (ofwat.gov.uk)

typical release rate between ~165 Ml/d and ~320 Ml/d depending on the size of the reservoir selected).

- Auxiliary drawdown channel which would also form a rehabilitated, navigable section of the Wilts & Berks Canal, available to allow release of additional water from the reservoir in emergency scenarios. The Wilts & Berks Canal was taken out of operation ~100 years ago but may be reinstated in the future.
- Main access road (from A415) and diversion of the East Hanney to Steventon Road.
- Temporary rail siding to facilitate delivery of construction materials by freight train.
- Recreation facilities, public education facilities, landscaping and creation of aquatic / grassland habitats.
- Channel and floodplain construction as required to mitigate the impact of the reservoir on local watercourses and floodplains.

1.4 This report provides details on the carbon assessment at Gate 2 for the six SESRO variants. These include four single phase variants and two dual phase variants:

- 150Mm^3 capacity reservoir
- 125Mm^3 capacity reservoir
- 100Mm^3 capacity reservoir
- 75Mm^3 capacity reservoir
- 30+100Mm^3 capacity phased reservoir
- 80+42Mm^3 capacity phased reservoir

1.2 Cost Overview

1.5 The base capital cost for the SESRO variants has been developed as outlined in Section 2. A bottom-up capital cost estimate, which originates from the design work carried out for the WRMP09 submission of the 150Mm^3 scheme, is used as the basis for the capital cost estimate. Some of the rates for key items in the WRMP09 estimate were revisited and updated for the WRMP19 submission. The base capital cost estimate has been inflated to a 2020/21 cost base.

1.6 The bottom-up capital cost estimate has been divided into the asset life categories defined by the All Company Working Group (ACWG - the water companies involved in the SRO programme). This allows for replacement capital cost to be estimated throughout an 80-year assessment period.

1.7 Section 3 provides a summary of the quantitative costed risk assessment (QCRA) carried out for SESRO, while Section 4 outlines the process followed for estimating an allowance for optimism bias. The approach adopted for QCRA and optimism bias

aligns with the approach developed for SROs on behalf of the ACWG.

1.8 The assumptions applied to develop the operational cost estimate for the SESRO variants are outlined in Section 5. These include annual energy estimates as well as assumptions for annual maintenance costs, abstraction licences and employees.

1.9 Construction capital cost (including QCRA and optimism bias) and operational cost estimates have then been used to generate Net Present Value (NPV), Average Incremental Cost (AIC) and Net Present Cost (NPC) estimates for the SESRO variants, as described in Section 6. This has been carried out using the Treasury Green book with a declining schedule of discount rates (Annex 6, Table 8) and an 80-year assessment period.

2. Capital Cost

2.1 Base Capital Cost Estimate Components

2.1 The current capital cost estimates for the SESRO variants are based on a bottom-up estimate developed during the design work for the 150Mm^3 size variant as part of the WRMP09 submission, alongside adjustments made to this for some of the key scheme components carried out for the WRMP19 submission. The WRMP19 adjustments also allowed for high level estimates for land acquisition. The estimate was reviewed and assured for the Gate 1 submission and this Gate 2 submission.

2.2 For this Gate 2 submission, quantities for all SESRO size variants have been estimated, typically by prorating from 150Mm^3 variant quantities (as described in Section 2.1.1). These quantities have then been used alongside the rates from WRMP09 and WRMP19 with inflation to a 2020/21 cost base (as described in Section 2.1.2) to develop base capital cost estimates for all SESRO variants.

2.1.1 Quantity Estimates

2.3 At Gate 2, the bottom-up cost estimate is formed of approximately 300 cost items as set out during the WRMP09 and WRMP19 design development.

2.4 While there have not been significant adjustments to the overall layout for the 150Mm^3 scheme since the design development in WRMP09, quantity estimates for key components have been revisited. Examples include (but are not limited to):

- The volume of excavation of clay from the borrow pit and subsequent use of the excavated material as structural fill for the reservoir embankments is based on an updated model.
- The estimate of the volume for riprap and riprap bedding material (required for protection of the inner face of the embankment against wave erosion) is based on an updated assessment that takes wind modelling into account.
- Updates to the SESRO masterplan have resulted in changes to the alignments of the A415 to SESRO access road, the conveyance tunnel and the various watercourse diversions. Lengths of these components have therefore been updated for use in the cost estimate.

2.5 As well as updating quantity estimates for key components of the 150Mm^3 scheme, the quantities for the other SESRO size variants have been estimated for all cost items. For many components, quantities are the same regardless of the size variant, for example: A415 to SESRO access road, Steventon to East Hanney road diversion, the river intake / outfall structure and the pumping station. However, for other items quantities have been estimated for each variant, or scaled from the 150Mm^3 scheme, for example:

- The volume of excavation of clay from the borrow pit and subsequent use of the excavated material as structural fill for the reservoir embankments is based on high-level models for each SESRO variant.
- The volume of riprap and riprap bedding material has been estimated for the other SESRO variants by scaling the quantity for the 150Mm^3 scheme by the ratio of the inner face embankment area.
- The number of main inlet / outlet towers and secondary outlet towers varies for the dual phase SESRO variants.

2.1.2 Rates

2.6 As noted above, the bottom-up capital cost estimate originates from the design work carried out for the WRMP09 submission of the 150Mm^3 scheme, alongside adjustments made to some key items for the WRMP19 submission.

2.7 During WRMP19 the rates associated with the bottom-up capital cost estimate which were used in WRMP09 were brought to a 2017 cost base by inflating by 38.4% based on RPI (Retail Price Index).

2.8 To present the cost estimate in a 2020/21 cost base[3] the rates have been inflated by a further 12.9%. The rate for inflation from the 2017 cost base to the 2020/21 cost base was based on inflation indices provided from the Water Resources South East (WRSE) regional investment modelling.

2.9 The rates are also increased by a fixed percentage to account for client and contractor indirect costs. This includes, for example: design cost, construction management, and surveys / investigations.

2.1.3 Benchmarking

2.10 At Gate 1 the capital costs for a selection of the items were benchmarked against independent cost intelligence. Over 70% of the principal items associated with the scheme were benchmarked. The capex costs for the options were found to be within 5% of the average benchmark costs.

2.11 The same approach to the bottom-up cost estimate has been used at Gate 1 and Gate 2, and therefore the benchmarking carried out at Gate 1 is still considered applicable to the Gate 2 cost estimate. Further review will take place at the next stage of design development.

2.2 Summary of Base Capital Cost Estimate

2.12 Based on the approach outlined in Section 2.1, the base capital cost estimates for the SESRO variants are presented in Table 2-1. These are provided to a 2020/21 cost base

[3] Based on September 2020 (mid-point of the 2020/21 financial year) as agreed by the ACWG

and do not include for costed risk and optimism bias.

2.13 The breakdown of the construction capital cost and replacement capital cost into the ACWG asset life categories is provided in Appendix A.

Table 2-1: Base Capital Cost Estimate for SESRO Variants (2020/21 cost base)

SESRO Variant	Base Capital Cost (£ Million) *
150 Mm^3	1,455
125 Mm^3	1,363
100 Mm^3	1,244
75 Mm^3	1,144
30 + 100 Mm^3, P1 **	994
30 + 100 Mm^3, P2	569
80 + 42 Mm^3, P1 **	1,196
80 + 42 Mm^3, P2	358

Note: * base capital cost estimate does not include costed risk and optimism bias

** the cost for P1 is higher than P2 as several key components of the dual schemes would be built as part of P1 (e.g. tunnels, pumping station, intake / outfall structure) and therefore these are not also required for P2

3. Qualitative Costed Risk Assessment

3.1 Approach to QCRA

3.1 The risk register and Quantitative Cost Risk Assessment (QCRA) developed during WRMP19 was revisited for Gate 1 and again for Gate 2 to take account of the review of the design components. Risks are described in the register, a probability of occurrence is estimated and a potential range for the minimum and maximum cost impact of the risk is assigned.

3.2 The method for carrying out the QCRA is in alignment with guidance set out by the ACWG on cost consistency. The ACWG template has been used to record the risks, with the minimum and maximum cost implications assigned in accordance with a 1 to 5 scoring system:

- 1 – Minimal effect on project cost (range from 0.25% to 1% of base capital cost)
- 2 – Small effect on project cost (range from 1% to 2% of base capital cost)
- 3 – Moderate effect on project cost (range from 2% to 5% of base capital cost)
- 4 – Significant effect on project cost (range from 5% to 15% of base capital cost)
- 5 – Major effect on project cost (range from 15% to 30% of base capital cost)

3.3 The probability distributions and associated cost impacts for the different risks are input to a Monte Carlo simulation using the @Risk Excel add-in. Monte Carlo is a recognised technique for considering uncertainty that simulates thousands of possible future outcomes, and the likelihood that they will occur. The 50th percentile (P50) total risk value is then identified for reporting and to be used in whole-life cost assessments.

3.2 Overview of Key Risks Identified

3.4 The current risk register considers 75 different risks covering a range of different aspects of the scheme. Risks that contribute most significantly to the costed risk estimate are listed in Table 3-1.

Table 3-1: Examples of Key Risks from Monte-Carlo Simulation

Aspect	Description
Reservoir Embankment	Poor weather conditions inhibit placement of fill to form the reservoir embankment.
Off-site compensation / On-site improvements	Biodiversity Net Gain (BNG) requirements result in a need for further onsite habitat creation and / or offsite land purchase.

Aspect	Description
Reservoir Borrow Pit	Excessive groundwater or surface water is encountered in the borrow pit excavation requiring extensive dewatering measures and works to dry out clay prior to placement.
Construction Plant	Use of low-carbon plant may cause a significant increase in rates used in the current capital cost build-up.
Material Delivery by Rail	Increased traffic on the railway line restricts ability to import construction materials by rail.
Inflation	Above-RPI inflation of key materials, particularly fuel for earthmoving plant.
Reservoir Embankment	The available clay in the borrow pit is less suitable for embankment construction than expected, requiring modification of the embankment design or processing of the clay.
Renewable Energy	More extensive renewable energy generation may be developed as part of scheme (above the currently included hydropower turbines).
Reservoir Embankment	Foundation of the perimeter embankment is weaker than expected requiring a modification to the section and increased cut and fill volumes.
Recreational Use	Recreation facilities are more costly than currently estimated.

3.3 Summary of P50 Costed Risk Estimates

3.5 The QCRA outputs at Gate 2 stage provide a P50 value which equates to 23% of the base capital cost for the 150Mm^3 variant. It is assumed that the same types of risk would apply regardless of reservoir size, and therefore a 23% risk allowance has been assigned to each SESRO variant, as presented in Table 3-2. P50 has been reported as this is what was requested for input into the WRSE regional modelling.

Table 3-2: P50 Costed Risk Estimate for SESRO Variants (2020/21 cost base)

SESRO Variant	P50 Costed Risk Estimate (£ Million)
150 Mm^3	335
125 Mm^3	314
100 Mm^3	286
75 Mm^3	263
30 + 100 Mm^3, P1	229
30 + 100 Mm^3, P2	131
80 + 42 Mm^3, P1	275
80 + 42 Mm^3, P2	82

Note: set at 23% of the base capital cost estimate, at 2020/21 cost base

4. Optimism Bias Assessment

4.1 Approach to Optimism Bias

4.1 The assessment of optimism bias has followed an approach developed for the ACWG.

- First Stage: Determine whether the option is a 'standard civil engineering' project or a 'non-standard civil engineering' project to set the 'Upper Bound Optimism Bias'. The SESRO variants are considered to be 'non-standard civil engineering' projects and therefore the 'Upper Bound Optimism Bias' is set at 66%.
- Second Stage: Determine whether any of the contributory factors for optimism bias can be scaled back to account for risks that have been identified, understood and managed.
- Third Stage: Reassess the scaling back of optimism bias carried out in the Second Stage each time the Quantitative Cost Risk Assessment (QCRA) is updated. Following the assessment of the QCRA outlined in Section 3, the Adjusted Optimism Bias for SESRO variants was 27.91%. This percentage has been applied to all SESRO variants.

4.2 Summary of Optimism Bias

4.2 The optimism bias estimates for the SESRO variants are presented in Table 4-1.

Table 4-1: Optimism Bias Estimate for SESRO Variants (2020/21 cost base)

SESRO Variant	Optimism Bias Estimate (£ Million)
150 Mm^3	406
125 Mm^3	380
100 Mm^3	347
75 Mm^3	319
30 + 100 Mm^3, P1	277
30 + 100 Mm^3, P2	159
80 + 42 Mm^3, P1	334
80 + 42 Mm^3, P2	100

Note: set at 27.91% of the base capital cost estimate, at 2020/21 cost base

5. Operational Cost Estimate

5.1 Operational Cost Estimate Components

5.1.1 Fixed Operational Costs

5.1 Annual civil works maintenance costs are based on 0.25% of the capital cost associated with civil works components, excluding components associated with the construction of the embankment and associated internal drainage. Annual E&M maintenance costs are based on 1.5% of the capital cost associated with E&M components. As these costs are estimated from the capital cost estimates they vary between the different SESRO size variants.

5.2 In addition to the maintenance work estimates, salary to cover 5.6 full time employees is included for all SESRO size variants.

5.3 The cost for the abstraction licence has been estimated based on Statutory Guidance: Environmental Permits and Abstraction Licences: tables of charges[4]. It has been assumed that the licence would cover a full refill of the reservoir.

5.4 Fixed energy requirements for the scheme have been allowed for:

- Operation of an air diffuser network to maintain reservoir water quality. Water quality modelling for the 150Mm^3 scheme has identified an annual energy requirement of 585MWh. The ratio of reservoir surface area has been used to estimate the equivalent energy requirement for the other SESRO variants.
- Operation of a sweetening flow pump during periods when water is neither being released from the reservoir or pumped into the reservoir. It was estimated that the pump of ~60kW would need to operate, on average, 3,900 hours per year. This results in an average annual energy requirement of approximately 234MWh.
- Miscellaneous energy requirements (e.g. buildings and lighting) have been estimated as 7.5% of the annual maximum utilisation energy requirements.
- A fixed rate for imported electricity has been used in the assessment to align with the 2020/21 cost base.

5.1.2 Variable Operational Costs

5.5 The amount of energy required to pump water into the reservoir, and the amount of energy that could be generated through the hydropower turbines, would vary from year to year based on utilisation of the scheme.

5.6 In a year with maximum scheme utilisation the reservoir would be drawn down from top water level to a low reservoir water level. While this will generate energy as the water discharges through the energy recovery turbines, there would be a larger

[4] Environmental permits and abstraction licences: tables of charges - GOV.UK (www.gov.uk) (Environment Agency, 2022)

amount of energy required for the subsequent pumping to refill the reservoir. Using the energy estimates outlined in Supporting Document A1, Concept Design Report, the variable costs have been estimated based on fixed rates for imported and exported electricity to align with the 2020/21 cost base.

5.2 Summary of Operational Cost Estimate

5.7 A summary of the estimated fixed and variable annual operating costs is provided in Table 5-1. The variable cost estimates are provided as cost per Ml as well as cost per year based on 100% utilisation and 38% utilisation.

Table 5-1: Summary of Operational Cost Estimate (2020/21 cost base)

Variant	Deployable Output (Ml/d)	Fixed Operational Annual Costs (£M/year)	Variable Operational Costs (£/Ml)	Variable Cost / year (£M/year) 100% utilisation	Variable Cost / year (£M/year) 38% utilisation
150 Mm^3	271	3.80	10.06	0.99	0.38
125 Mm^3	229.5	3.74	9.52	0.80	0.30
100 Mm^3	184.6	3.66	9.10	0.61	0.23
75 Mm^3	149.2	3.57	8.03	0.44	0.17
30 + 100 Mm^3, P1	65.5	2.95	7.49	0.18	0.07
30 + 100 Mm^3, P2**	173.1	1.43	12.47	0.79	0.30
30 + 100 Mm^3, P1 + P2	238.6	4.38	11.10	0.97	0.37
80 + 42 Mm^3, P1	155.1	3.87	8.31	0.47	0.18
80 + 42 Mm^3, P2**	68.9	0.49	14.70	0.37	0.14
80 + 42 Mm^3, P1 + P2	224	4.36	10.27	0.84	0.32

Note: ** the fixed operational cost for P1 is higher than P2 because estimated maintenance cost is directly related to the capital cost and several key components of the dual schemes would be built as part of P1 (e.g. tunnels, pumping station, intake / outfall structure) and therefore maintenance of these is covered under P1 and not P2

6. Gate 2 Cost Estimate Summary and Changes from Gate 1/WRSE

6.1 A summary of the Gate 2 estimates for option benefit, base capital cost, costed risk, optimism bias and operational cost (described in Sections 2, 3, 4 and 5 respectively) is provided in Table 6-1. Estimates for these have previously been developed at Gate 1 (in July 2021) and also for input to the WRSE Draft Regional Plan (which was provided in January 2022).

6.2 The following sub-sections provide an overview of the key changes made at these different stages which have resulted in the current Gate 2 estimates. The estimates at both Gate 1 and Gate 2 stage are presented in Table 6-1 for comparison.

6.1 Changes from Gate 1 to the WRSE Draft Regional Plan Submission

6.3 The key changes that were made to the estimates between Gate 1 and the WRSE Draft Regional Plan Submission were:

- **Option benefit** for all variants was reduced following more detailed Deployable Output modelling which accounted for climate change.
- The **Quantitative Costed Risk Assessment** was revisited resulting in an increase in costed risk (as a percentage of base capex) from ~20% at Gate 1 to ~25% for the WRSE Draft Regional Plan submission. The most significant additional risk that was identified was to account for potential further onsite habitat creation and / or offsite land purchase to respond to Biodiversity Net Gain (BNG) requirements.
- **Optimism bias** was revisited, resulting in a slight decrease from 28.22% to 27.91%. This small change was a result of increasing the mitigation applied to the 'Environmental Impact' contributory factor for optimism bias. This increased mitigation was applied to reduce risk of double counting the risk associated with additional land required for BNG requirements.

6.2 Changes from WRSE Draft Regional Plan Submission to Gate 2

6.4 The key changes that have been made to the estimates between the WRSE Draft Regional Plan Submission and for this Gate 2 submission are:

- An increase in the **base capital cost** for the SESRO variants following updates to quantity estimates, as discussed in Section 2. In summary, the change from Gate 1 to Gate 2 is:
  - An increase of between ~6% and ~8% for the single phase variants.
  - An increase of between ~2.4% and ~3.7% for Phase 1 of dual phase variants.
  - An increase of between ~0.8% and ~1.06% for Phase 2 of dual phase variants

- The key risks within the **Quantitative Costed Risk Assessment** were revisited with expert judgement used to estimate the likelihood of occurrence and the potential minimum and maximum cost impact. Following these updates the Monte-Carlo simulation was re-run and provided a costed risk of ~23% (as a percentage of base capex). This was a slight reduction to the ~25% used in the WRSE Draft Regional Plan Submission.
- The **operational cost** estimates for SESRO were updated resulting in changes to fixed and variable costs as presented in Table 6-1. Key changed included:
  - Energy requirements (and turbine energy generation potential) was more accurately estimated using outputs from the updated Deployable Output modelling.
  - Abstraction licence costs were updated based on new guidance from the Environment Agency, which was available from April 2022.

Table 6-1: SESRO Benefit, Capex, Opex – comparison of Gate 2 to Gate 1 (2020/21 cost base)

	Units	150 Mm^3	125 Mm^3	100 Mm^3	75 Mm^3	30 Mm^3P1	80 Mm^3P1	30 + 100 Mm^3 (P1 +P2)	80 + 42 Mm^3 (P1+P2)
G2 Option Benefit	Ml/d	271	230	185	149	66	155	239	224
Capex (2020/21)									
G2 Base Capex	£m	1,455	1,363	1,244	1,144	994	1,196	1,563	1,554
G2 Costed Risk	£m	335	314	286	263	229	275	359	357
G2 Optimism Bias	£m	406	380	347	319	277	334	436	434
Total G2 Capex	£m	2,195	2,057	1,878	1,726	1,500	1,805	2,358	2,345
G2 Replacement Capex (80-years)	£m	517	510	499	490	462	497	493	520
Opex (2020/21)									
G2 Fixed Opex	£m/ annum	3.80	3.74	3.66	3.57	2.95	3.87	4.38	4.36
G2 Variable Opex	£/Ml	10.06	9.52	9.11	8.03	7.49	8.31	11.10	10.28
G1 Option Benefit	Ml/d	293	244	195	155	68	163	254	238
Capex (2020/21)									
G1 Base Capex	£m	1,355	1,262	1,169	1,079	971	1,153	1,550	1,538
G1 Costed Risk	£m	265	250	234	217	197	230	303	301
G1 Optimism Bias	£m	382	356	330	304	274	325	437	434
Total G1 Capex	£m	2,002	1,868	1,732	1,601	1,442	1,709	2,290	2,273
Opex (2020/21)									
G1 Fixed Opex	£m/ annum	4.53	4.15	3.79	3.45	3.02	3.95	5.17	5.19
G1 Variable Opex	£/Ml	9.32	9.79	10.35	10.26	9.79	10.30	12.47	13.03
Change Option Benefit G1 to G2		-7.51%	-5.94%	-5.33%	-3.74%	-3.68%	-4.85%	-6.06%	-5.88%
Change Base Capex G1 to G2		7.36%	8.01%	6.50%	6.00%	2.40%	3.71%	0.82%	1.06%
Change Costed Risk G1 to G2		26.26%	25.47%	22.42%	21.11%	15.86%	19.35%	18.66%	18.62%
Change Optimism Bias G1 to G2		6.18%	6.82%	5.33%	4.84%	1.28%	2.57%	-0.29%	-0.05%
Change Total G1 Capex to Total G2 Capex		9.64%	10.12%	8.42%	7.83%	4.03%	5.60%	2.97%	3.18%
Change Fixed G1 Opex to Fixed G2 Opex		-16.15%	-9.85%	-3.28%	3.47%	-2.29%	-2.18%	-15.35%	-16.07%
Change Variable G1 Opex to Variable G2 Opex		7.96%	-2.68%	-12.01%	-21.75%	-23.51%	-19.34%	-11.00%	-21.14%

7. Whole-Life Cost Assessment

7.1 Spend Profiles

7.1 To assess the whole life cost for the SESRO variants the cost estimates outlined in the above sections have been spread over an 80-year investment period. This has required spend profiles to be developed for the following phases:

- Pre-construction Phase (assumed to be 6 years)
- Construction and Commissioning Phase (assumed to be between 7 years and 9 years depending on size of variant)
- Operation and Asset Replacement Phase

7.2 Assumptions made to develop the spend profiles are provided in the following sub-sections. It should be noted that spend profiles are indicative only to facilitate multi-solution decision making and will be refined at Gate 3.

7.1.1 Spend Profile during Pre-Construction and Construction

7.3 The Base Capital Cost, Costed Risk and Optimism Bias are presented in Table 6-1 and combined to give the Total Capex. This Total Capex was spread across the pre-construction and construction phases using the following assumptions:

- 2% of the Total Capex spread evenly across first 3 years of pre-construction.
- 5% of the Total Capex spread evenly across second 3 years of pre-construction.
- 93% of the Total Capex spread evenly across the construction phase (7 to 9 years).

7.1.2 Spend Profile during Operation and Asset Replacement Phase

7.4 For each year of operation the fixed operational cost (Section 5.1.1) and the variable operational cost (Section 5.1.2) have been applied, assuming 100% utilisation.

7.5 To estimate the scale of replacement capital cost throughout the life of the project each item of the bottom-up cost estimate (described in Section 2) has been assigned to one of the ACWG asset life categories presented in Table 7-1.

7.6 Each category has an associated proposed asset life in years. It has been assumed that at the end of an item's asset life, the item will be replaced and the initial capital cost for that item will be incurred again. The breakdown of the base capital cost estimate into these ACWG asset life categories is provided in Appendix A alongside the breakdown of the replacement capital cost. The total replacement capital cost across the 80-year assessment period is provided in Table 6-1.

Table 7-1: ACWG Asset Life Categories used for SESRO

ACWG Asset Life Category	Asset Life (years)
Fencing	10
ICA (Instrumentation, Control & Automation)	10
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works	20
Landscaping/Environmental Works	30
Steel/Timber/GRP Structures	30
Bridges	40
Roads and Car Parks	60
Treatment and Pumping Station Civils (incl. Intakes)	60
Reinforced Concrete Tanks / Service Reservoirs	80
Tunnels	100
Pipelines	100
Weirs	100
Embankment Works	250
Other Non-Depreciating Assets (Non depreciating)	N/A
Land (Non depreciating)	N/A

7.7 The spend profiles across the 80-year appraisal period are presented in Environment Agency Table 5a and 5b format in Appendix B.

7.2 Net Present Value and Average Incremental Cost Estimates

7.8 Net Present Value (NPV) and Average Incremental Cost (AIC) has been estimated for each SESRO variant using the spend profiles discussed above. The assessment has been carried out using ACWG templates and the Environment Agency Table 5a and 5b (with outputs presented in Appendix B). The template uses HM Treasury Green book with a declining schedule of discount rates (HMT Green Book: Annex 6, Table 8) and an 80-year assessment period.

7.9 Estimates for the NPV and AIC for each SESRO variant are provided in Table 7-2 and a comparison between AIC at Gate 1 and Gate 2 is shown in Figure 7-1. There has been an increase in AIC as a result of the changes to the estimates outlined in the above sections of this report. While the changes have differed between SESRO variants this has not resulted in a change to the AIC ranking of variants.

7.10 The highest planning period indicative capital cost (NPV capex) is for the 150Mm^3 variant (the largest single phase variant). However, this variant (due to a proportionally higher deployable output and highest planning period benefit) is able to deliver water at the lowest unit cost, with an AIC of 92.91p/m^3.

7.11 The opportunity for phasing provided by the dual phase options does enable a more gradual investment to allow for future uncertainty. However, when phasing in this way the realisation of the full water resource benefit occurs later in the programme. This means that the dual phased options tend to be the least cost-effective (i.e. they have lower planning period benefit and higher AIC costs).

Figure 7-1 – Average Incremental Cost Comparison between SESRO Variants (2020/21 cost base)

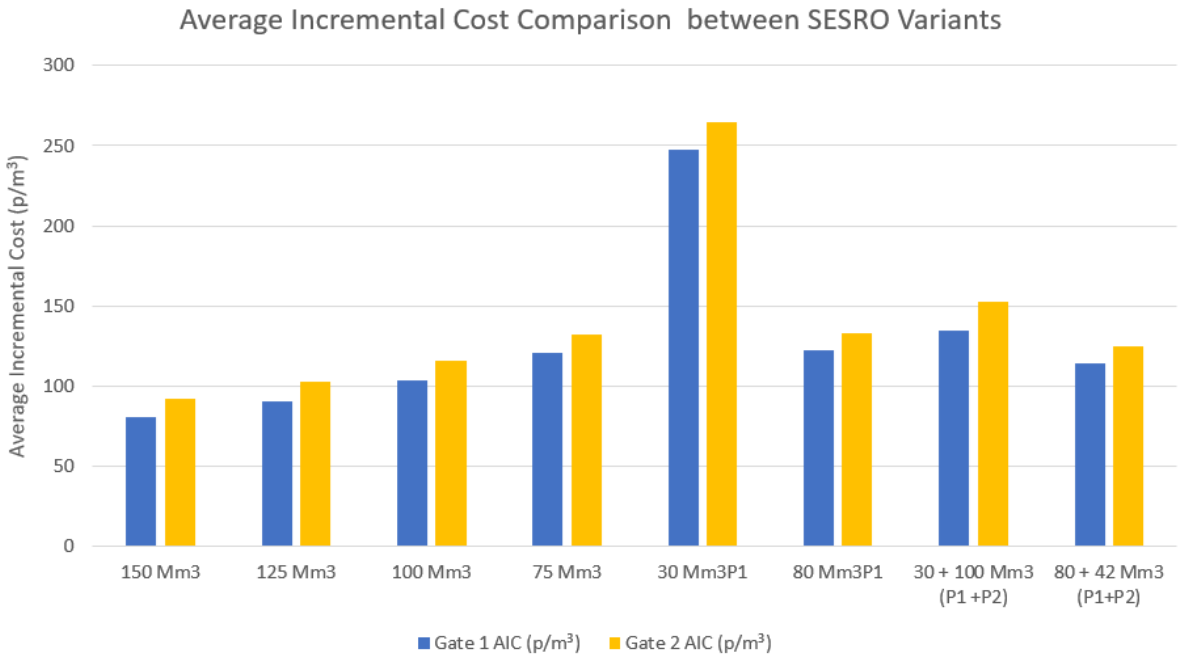

Table 7-2: SESRO Net Present Value and Average Incremental Cost Estimates – comparison of Gate 2 to Gate 1 (2020/21 cost base)

	Units	150 Mm^3	125 Mm^3	100 Mm^3	75 Mm^3	30 Mm^3P1	80 Mm^3P1	30 + 100 Mm^3 (P1 +P2) #	80 + 42 Mm^3 (P1+P2) #
G2 Option Benefit (DYAA)	Ml/d	271	230	185	149	66	155	239	224
G2 Total planning period benefit	Ml	1,587,370	1,344,286	1,121,504	906,438	397,934	942,282	855,567	1,131,941
G2 Total planning period indicative capital cost (CAPEX NPV)	£m	1,398	1,317	1,230	1,137	1,004	1,189	1,240	1,341
Estimated Utilisation (38%) (2020/21) **									
Total planning period indicative operating cost (OPEX NPV)	£m	67	65	65	62	50	67	63	72
Total planning period indicative total cost (NPV)	£m	1,465	1,381	1,295	1,200	1,054	1,256	1,302	1,413
Average Incremental Cost (AIC)	p/m^3	92.29	102.76	115.43	132.34	264.80	133.28	152.23	124.85
Maximum Utilisation (100%) (2020/21) *									
Total planning period indicative operating cost (OPEX NPV)	£m	77	73	71	67	52	72	68	79
Total planning period indicative total cost (NPV)	£m	1,475	1,389	1,301	1,204	1,056	1,261	1,308	1,420
Average Incremental Cost (AIC)	p/m^3	92.91	103.35	115.99	132.83	265.27	133.80	152.86	125.43
G1 Option Benefit (DYAA)	Ml/d	293	244	195	155	68	163	254	238
G1 Total planning period benefit	Ml	1,766,284	1,470,899	1,219,484	969,333	425,256	1,019,364	991,940	1,255,757
G1 Total planning period indicative capital cost (CAPEX NPV)	£m	1,330	1,247	1,181	1,098	995	1,167	1,257	1,344
Maximum Utilisation (100%) (2020/21) *									
Total planning period indicative operating cost (OPEX NPV)	£m	91	83	77	69	56	78	81	93
Total planning period indicative total cost (NPV)	£m	1,421	1,330	1,258	1,167	1,051	1,245	1,338	1,438
Average Incremental Cost (AIC)	p/m^3	80.48	90.44	103.20	120.39	247.23	122.15	134.92	114.49
Change in Option Benefit (DYAA) G1 to G2		-7.51%	-5.94%	-5.33%	-3.74%	-3.68%	-4.85%	-6.06%	-5.88%
Change in total planning period benefit G1 to G2		-10.13%	-8.61%	-8.03%	-6.49%	-6.42%	-7.56%	-13.75%	-9.86%
Change in total planning period indicative capital cost (CAPEX NPV) G1 to G2		5.09%	5.54%	4.12%	3.59%	0.81%	1.85%	-1.37%	-0.23%
Maximum Utilisation (100%) *									
Change in total planning period indicative operating cost (OPEX NPV) G1 to G2		-15.72%	-12.17%	-8.16%	-3.43%	-6.82%	-7.72%	-16.38%	-15.77%
Change in total planning period indicative total cost (NPV) G1 to G2		3.75%	4.44%	3.37%	3.18%	0.40%	1.25%	-2.28%	-1.24%
Change in Average Incremental Cost (AIC) G1 to G2		15.45%	14.28%	12.40%	10.33%	7.29%	9.54%	13.29%	9.56%

Note * 100% utilisation is assumed for these calculations to enable comparison between options: 1 in 500 year deployable output for 365 days / year, and estimated maximum variable operating cost. Required utilisation to be confirmed through WRSE modelling.
Note ** 38% utilisation is assumed for these calculations to enable comparison between options: 1 in 500 year deployable output for 365 days / year, and 38% of the estimated maximum variable operating cost.
Note #: Assumes a period of 10 years between completion of P1 and the start of planning for P2.

Appendix A Capital Cost Estimate

Table A-1: Initial Construction Capital Cost breakdown to ACWG Asset Life Categories (2020/21 cost base) (£m)

Asset Life Category	150 Mm^3	125 Mm^3	100 Mm^3	75 Mm^3	30 Mm^3P1	30 + 100 Mm^3 (P1 +P2)	80 Mm^3P1	80 + 42 Mm^3 (P1+P2)
Fencing	£0.34	£0.34	£0.34	£0.34	£0.19	£0.15	£0.19	£0.15
ICA (Instrumentation, Control & Automation)	£2.7	£2.6	£2.4	£2.2	£1.6	£1.7	£2.3	£1.3
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works	£53.9	£53.5	£52.8	£52.1	£49.3	£7.8	£50.7	£4.9
Landscaping/Environmental Works	£56.1	£55.9	£55.6	£55.2	£58.3	£6.7	£59.6	£6.1
Steel/Timber/GRP Structures	£17.9	£17.9	£17.9	£17.9	£17.9	£0.0	£17.9	£0.0
Bridges	£9.0	£9.0	£9.0	£9.0	£9.0	£0.0	£9.0	£0.0
Roads and Car Parks	£130.8	£127.0	£121.1	£116.7	£98.7	£55.5	£119.3	£40.7
Treatment and Pumping Station Civils (incl. Intakes)	£45.9	£45.1	£44.2	£43.3	£40.8	£6.0	£43.3	£3.4
Reinforced Concrete Tanks / Service Reservoirs	£43.6	£43.6	£43.6	£40.0	£42.1	£37.8	£49.8	£25.4
Tunnels	£73.8	£73.8	£73.8	£73.8	£88.6	£0.0	£88.6	£0.0
Pipelines	£11.0	£11.0	£10.4	£9.8	£22.9	£6.5	£23.7	£5.9
Weirs	£3.7	£3.7	£3.7	£3.7	£3.7	£0.0	£3.7	£0.0
Embankment Works	£584.2	£509.2	£419.2	£348.1	£213.7	£359.8	£343.0	£219.1
Other Non-Depreciating Assets (Non depreciating)	£153.0	£149.1	£144.1	£138.6	£110.8	£46.9	£134.0	£26.0
Land (Non depreciating)	£179.3	£178.3	£171.1	£164.1	£179.3	£0.0	£179.3	£0.0
Planning and Development (Non depreciating)	£89.3	£82.9	£75.1	£68.6	£57.0	£39.8	£71.2	£25.1
Total	£1,454.6	£1,363.1	£1,244.5	£1,143.7	£994.1	£568.5	£1,195.8	£358.0

Table A-2: Replacement Construction Capital Cost breakdown to ACWG Asset Life Categories (2020/21 cost base) (£m)

Asset Life Category	150 Mm^3	125 Mm^3	100 Mm^3	75 Mm^3	30 Mm^3P1	30 + 100 Mm^3 (P1 +P2)	80 Mm^3P1	80 + 42 Mm^3 (P1+P2)
Fencing	£2.4	£2.4	£2.4	£2.4	£1.3	£0.8	£1.3	£0.8
ICA (Instrumentation, Control & Automation)	£19.0	£18.1	£16.7	£15.7	£11.5	£8.5	£16.4	£6.5
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works	£161.6	£160.5	£158.4	£156.3	£147.8	£15.5	£152.2	£9.8
Landscaping/Environmental Works	£112.2	£111.8	£111.3	£110.4	£116.6	£6.7	£119.2	£6.1
Steel/Timber/GRP Structures	£35.9	£35.9	£35.9	£35.9	£35.9	£0.0	£35.9	£0.0
Bridges	£9.0	£9.0	£9.0	£9.0	£9.0	£0.0	£9.0	£0.0
Roads and Car Parks	£130.8	£127.0	£121.1	£116.7	£98.7	£0.0	£119.3	£0.0
Treatment and Pumping Station Civils (incl. Intakes)	£45.9	£45.1	£44.2	£43.3	£40.8	£0.0	£43.3	£0.0
Total	£516.9	£509.8	£499.0	£489.8	£461.7	£31.5	£496.6	£23.3

Appendix B Environment Agency Table 5a and 5b

Cost Profile WRMP24 Table

Water Company	Thames Water / Affinity Water: South East Strategic Reservoir Option - 150 Variant	Version	Gate 2 - V1	Back to title page

Table 5a: WC Level - Option Level Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.	Total/Fixed/Variable	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51
Complete for all options (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Capex			Total				8.50	8.50	8.50	81.02	81.02	81.02	131.78	131.78	131.78	131.78	131.78	131.78	131.78	131.78	131.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.06	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Opex			Total				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Financing Cost			Total				0.16	0.48	0.79	2.47	5.49	8.52	13.03	19.04	25.05	31.06	37.06	43.07	49.08	55.09	61.09	79.73	79.27	78.81	78.34	77.88	77.42	76.95	76.49	76.03	75.62	75.22	74.75	74.29	73.83
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Discount Rate			Total				0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Discount Factor			Total				0.97	0.93	0.90	0.87	0.84	0.81	0.79	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.47	0.45	0.44	0.42	0.41	0.40	0.38	0.37
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Capex	Costed Risk		Total				0.00	0.00	0.00	0.00	0.00	0.00	37.17	37.17	37.17	37.17	37.17	37.17	37.17	37.17	37.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Capex	Optimism Bias		Total				2.37	2.37	2.37	22.61	22.61	22.61	36.78	36.78	36.78	36.78	36.78	36.78	36.78	36.78	36.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Net Present Cost (NPC)			Total				0.15	0.44	0.72	2.15	4.62	6.93	10.24	14.46	18.38	22.02	25.39	28.50	31.38	34.03	36.47	48.75	46.84	45.01	43.24	41.55	39.92	38.35	36.84	35.40	34.03	32.71	31.42	30.18	28.99
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Total NPC			Total					1474.81																											

Cost Metric (£m)	Cost Sub-metric (£m)	Total/Fixed/Variable	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82
Capex		Total	0.00	0.00	0.00	0.00	0.00	56.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.97	0.00	0.00	0.00	0.00	0.00
Opex		Total	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79
Financing Cost		Total	73.36	72.90	72.44	71.97	71.51	72.11	72.71	72.25	71.78	71.32	70.85	70.39	69.93	69.46	69.00	69.98	70.95	70.49	70.03	69.56	69.10	68.64	68.17	67.71	67.25	68.02	68.78	68.32	67.86	67.39	66.93
Discount Rate		Total	0.035	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Discount Factor		Total	0.36	0.35	0.34	0.33	0.32	0.31	0.30	0.29	0.28	0.27	0.27	0.26	0.25	0.24	0.24	0.23	0.22	0.22	0.21	0.20	0.20	0.19	0.19	0.18	0.18	0.17	0.17	0.16	0.16	0.15	0.15
Capex	Costed Risk	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capex	Optimism Bias	Total	0.00	0.00	0.00	0.00	0.00	15.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.41	0.00	0.00	0.00	0.00	0.00
Net Present Cost (NPC)		Total	27.84	26.87	25.94	25.03	24.15	23.63	23.12	22.32	21.54	20.78	20.05	19.35	18.67	18.02	17.38	17.10	16.82	16.23	15.66	15.11	14.58	14.06	13.57	13.09	12.63	12.39	12.16	11.73	11.31	10.91	10.53
Total NPC		Total																															

Cost Metric (£m)	Cost Sub-metric (£m)	Total/Fixed/Variable	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Capex		Total	0.00	0.00	0.00	0.00	3.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	307.69	0.00	0.00	0.00	0.00	0.00			
Opex		Total	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79	4.79			
Financing Cost		Total	66.47	66.00	65.54	65.08	64.67	64.26	63.80	63.34	62.87	62.41	61.95	61.48	61.02	60.56	65.84	71.12	70.66	70.20	69.73	69.27			
Discount Rate		Total	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.025	0.025	0.025	0.025	0.025			
Discount Factor		Total	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.08			
Capex	Costed Risk	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Capex	Optimism Bias	Total	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	85.88	0.00	0.00	0.00	0.00	0.00			
Net Present Cost (NPC)		Total	10.15	9.80	9.45	9.11	8.80	8.49	8.19	7.89	7.61	7.34	7.08	6.82	6.58	6.34	6.65	6.98	6.77	6.56	6.36	6.17			
Total NPC		Total																							

Table 5b: WC Level - Option Level Unit Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51
Complete for all options >£100m (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Opex	Cost		Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Opex	Cost		Variable				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Land (Non depreciating)			Fixed				0.00	0.00	0.00	76.44	76.44	76.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Planning and Development (Non depreciating)			Fixed				10.88	10.88	10.88	27.19	27.19	27.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Other Non-Depreciating Assets (Non depreciating)			Fixed				0.00	0.00	0.00	0.00	0.00	0.00	21.74	21.74	21.74	21.74	21.74	21.74	21.74	21.74	21.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Fencing (10)		10	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	ICA (Instrumentation, Control & Automation) (10)		10	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.48	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		20	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Steel/Timber/GRP Structures (30)		30	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Landscaping/Environmental Works (30)		30	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	7.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Bridges (40)		40	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Treatment and Pumping Station Civils (incl. Intakes) (60)		60	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Roads and Car Parks (60)		60	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	18.60	18.60	18.60	18.60	18.60	18.60	18.60	18.60	18.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Reinforced Concrete Tanks / Service Reservoirs (80)		80	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Weirs (100)		100	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Pipelines (100)		100	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Tunnels (100)		100	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Embankment Works (250)		250	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	83.03	83.03	83.03	83.03	83.03	83.03	83.03	83.03	83.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon150(lon)	Costed Risk			Fixed				0.00	0.00	0.00	0.00	0.00	0.00	37.17	37.17	37.17	37.17	37.17	37.17	37.17	37.17	37.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cost Metric (£m)	Cost Sub-metric (£m)	Fixed/Variable	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82
Opex	Cost	Fixed	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80
Opex	Cost	Variable	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Land (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planning and Development (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Depreciating Assets (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fencing (10)		Fixed	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00
ICA (Instrumentation, Control & Automation) (10)		Fixed	0.00	0.00	0.00	0.00	0.00	3.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.48	0.00	0.00	0.00	0.00	0.00
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		Fixed	0.00	0.00	0.00	0.00	0.00	68.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.92	0.00	0.00	0.00	0.00	0.00
Steel/Timber/GRP Structures (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping/Environmental Works (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bridges (40)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.55	0.00	0.00	0.00	0.00	0.00
Treatment and Pumping Station Civils (incl. Intakes) (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roads and Car Parks (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reinforced Concrete Tanks / Service Reservoirs (80)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weirs (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pipelines (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tunnels (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Embankment Works (250)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Costed Risk		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cost Metric (£m)	Cost Sub-metric (£m)	Fixed/Variable	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Opex	Cost	Fixed	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80			
Opex	Cost	Variable	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99			
Land (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Planning and Development (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Other Non-Depreciating Assets (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Fencing (10)		Fixed	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00			
ICA (Instrumentation, Control & Automation) (10)		Fixed	0.00	0.00	0.00	0.00	3.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.48	0.00	0.00	0.00	0.00	0.00			
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.92	0.00	0.00	0.00	0.00	0.00			
Steel/Timber/GRP Structures (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.93	0.00	0.00	0.00	0.00	0.00			
Landscaping/Environmental Works (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.73	0.00	0.00	0.00	0.00	0.00			
Bridges (40)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Treatment and Pumping Station Civils (incl. Intakes) (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.72	0.00	0.00	0.00	0.00	0.00			
Roads and Car Parks (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	167.36	0.00	0.00	0.00	0.00	0.00			
Reinforced Concrete Tanks / Service Reservoirs (80)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Weirs (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Pipelines (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Tunnels (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Embankment Works (250)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Costed Risk		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			

Cost Profile WRMP24 Table

Water Company	Thames Water / Affinity Water: South East Strategic Reservoir Option - 125 Variant	Version	Gate 2 - V1

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Table 5a: WC Level - Option Level Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.	Total/Fixed/Variable	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Complete for all options (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Capex			Total				7.90	7.90	7.90	79.17	79.17	79.17	122.43	122.43	122.43	122.43	122.43	122.43	122.43	122.43	122.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	302.36	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Opex			Total				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Financing Cost			Total				0.15	0.44	0.74	2.36	5.32	8.28	12.55	18.14	23.73	29.32	34.91	40.50	46.09	51.68	57.27	75.18	74.73	74.28	73.83	73.39	72.94	72.49	72.04	71.59	71.20	70.81	70.36	69.91	69.46	69.02	68.57	68.12	67.67	67.23	67.83	68.44	67.99	67.54	67.09	66.65	66.20	65.75	65.30	64.85	65.84	66.83	66.38	65.93	65.48	65.04	64.59	64.14	63.69	63.24	64.02	64.79	64.35	63.90	63.45	63.00	62.55	62.11	61.66	61.21	60.82	60.42	59.98	59.53	59.08	58.63	58.19	57.74	57.29	56.84	62.04	67.24	66.79	66.34	65.90	65.45			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Discount Rate			Total				0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.025	0.025	0.025	0.025	0.025			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Discount Factor			Total				0.97	0.93	0.90	0.87	0.84	0.81	0.79	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.47	0.45	0.44	0.42	0.41	0.40	0.38	0.37	0.36	0.35	0.34	0.33	0.32	0.31	0.30	0.29	0.28	0.27	0.27	0.26	0.25	0.24	0.24	0.23	0.22	0.22	0.21	0.20	0.20	0.19	0.19	0.18	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.08			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Capex	Costed Risk		Total				0.00	0.00	0.00	0.00	0.00	0.00	34.83	34.83	34.83	34.83	34.83	34.83	34.83	34.83	34.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Capex	Optimism Bias		Total				2.20	2.20	2.20	22.10	22.10	22.10	34.17	34.17	34.17	34.17	34.17	34.17	34.17	34.17	34.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.39	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Net Present Cost (NPC)			Total				0.14	0.41	0.67	2.06	4.48	6.73	9.86	13.78	17.41	20.79	23.91	26.80	29.47	31.93	34.18	45.97	44.17	42.43	40.77	39.16	37.62	36.14	34.71	33.34	32.05	30.80	29.59	28.41	27.29	26.21	25.29	24.40	23.54	22.72	22.24	21.77	21.01	20.27	19.56	18.87	18.21	17.56	16.94	16.34	16.09	15.84	15.29	14.75	14.23	13.72	13.24	12.77	12.32	11.88	11.67	11.45	11.05	10.66	10.28	9.91	9.56	9.22	8.89	8.57	8.28	7.99	7.70	7.42	7.16	6.90	6.65	6.41	6.18	5.96	6.27	6.60	6.40	6.20	6.01	5.83			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Total NPC			Total	1389.37																																																																																								

Table 5b: WC Level - Option Level Unit Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Complete for all options >£100m (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Opex	Cost		Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Opex	Cost		Variable				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Land (Non depreciating)			Fixed				0.00	0.00	0.00	76.01	76.01	76.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Planning and Development (Non depreciating)			Fixed				10.10	10.10	10.10	25.26	25.26	25.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Other Non-Depreciating Assets (Non depreciating)			Fixed				0.00	0.00	0.00	0.00	0.00	0.00	21.19	21.19	21.19	21.19	21.19	21.19	21.19	21.19	21.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Fencing (10)		10	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	ICA (Instrumentation, Control & Automation) (10)		10	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.32	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		20	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.43	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Steel/Timber/GRP Structures (30)		30	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.93	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Landscaping/Environmental Works (30)		30	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	7.95	7.95	7.95	7.95	7.95	7.95	7.95	7.95	7.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.52	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Bridges (40)		40	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Treatment and Pumping Station Civils (incl. Intakes) (60)		60	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.63	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Roads and Car Parks (60)		60	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	18.06	18.06	18.06	18.06	18.06	18.06	18.06	18.06	18.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	162.50	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Reinforced Concrete Tanks / Service Reservoirs (80)		80	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Weirs (100)		100	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Pipelines (100)		100	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Tunnels (100)		100	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49	10.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Embankment Works (250)		250	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	72.37	72.37	72.37	72.37	72.37	72.37	72.37	72.37	72.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon125(lon)	Costed Risk			Fixed				0.00	0.00	0.00	0.00	0.00	0.00	34.83	34.83	34.83	34.83	34.83	34.83	34.83	34.83	34.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			

Cost Profile WRMP24 Table

Water Company	Thames Water / Affinity Water: South East Strategic Reservoir Option - 100 Variant	Version	Gate 2 - V1

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Table 5a: WC Level - Option Level Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.	Total/Fixed/Variable	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37
Complete for all options (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Capex			Total					7.16	7.16	7.16	74.94	74.94	74.94	124.77	124.77	124.77	124.77	124.77	124.77	124.77	124.77
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Opex			Total					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Financing Cost			Total					0.13	0.40	0.67	2.20	5.00	7.80	12.05	17.76	23.46	29.17	34.87	40.58	46.28	51.99
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Discount Rate			Total					0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Discount Factor			Total					0.97	0.93	0.90	0.87	0.84	0.81	0.79	0.76	0.73	0.71	0.68	0.66	0.64	0.62
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Capex	Costed Risk		Total					0.00	0.00	0.00	0.00	0.00	0.00	35.78	35.78	35.78	35.78	35.78	35.78	35.78	35.78
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Capex	Optimism Bias		Total					2.00	2.00	2.00	20.91	20.91	20.91	34.82	34.82	34.82	34.82	34.82	34.82	34.82	34.82
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Net Present Cost (NPC)			Total					0.13	0.37	0.60	1.92	4.21	6.34	9.47	13.48	17.21	20.68	23.88	26.85	29.59	32.12
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Total NPC			Total	1300.86																	

Cost Metric (£m)	Cost Sub-metric (£m)	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71
Capex		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.31	0.00	0.00	0.00	0.00
Opex		4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27
Financing Cost		69.27	68.84	68.41	67.98	67.56	67.13	66.70	66.27	65.85	65.47	65.09	64.67	64.24	63.81	63.38	62.96	62.53	62.10	61.67	62.28	62.89	62.46	62.04	61.61	61.18	60.75	60.33	59.90	59.47	60.47	61.47	61.04	60.61	60.18
Discount Rate		0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Discount Factor		0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.47	0.45	0.44	0.42	0.41	0.40	0.38	0.37	0.36	0.35	0.34	0.33	0.32	0.31	0.30	0.29	0.28	0.27	0.27	0.26	0.25	0.24	0.24	0.23	0.22	0.22	0.21
Capex	Costed Risk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capex	Optimism Bias	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.30	0.00	0.00	0.00	0.00
Net Present Cost (NPC)		43.90	42.17	40.50	38.90	37.36	35.89	34.46	33.10	31.78	30.55	29.35	28.19	27.06	25.99	24.95	23.95	23.11	22.29	21.50	21.07	20.64	19.91	19.21	18.53	17.87	17.24	16.63	16.04	15.47	15.25	15.03	14.50	13.99	13.49

Cost Metric (£m)	Cost Sub-metric (£m)	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Capex		0.00	0.00	0.00	0.00	0.00	64.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	294.38	0.00	0.00	0.00	0.00	0.00	0.00		
Opex		4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27		
Financing Cost		59.76	59.33	58.90	58.47	58.05	58.82	59.60	59.18	58.75	58.32	57.89	57.47	57.04	56.61	56.18	55.81	55.43	55.00	54.57	54.15	53.72	53.29	52.86	52.44	52.01	57.08	62.15	61.72	61.29	60.87	60.44	60.01		
Discount Rate		0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.025	0.025	0.025	0.025	0.025		
Discount Factor		0.20	0.20	0.19	0.19	0.18	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.08327		
Capex	Costed Risk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0		
Capex	Optimism Bias	0.00	0.00	0.00	0.00	0.00	18.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.16	0.00	0.00	0.00	0.00	0.00	0		
Net Present Cost (NPC)		13.01	12.55	12.10	11.67	11.25	11.06	10.87	10.48	10.11	9.75	9.40	9.06	8.74	8.42	8.12	7.84	7.56	7.29	7.02	6.77	6.52	6.29	6.06	5.84	5.63	5.95	6.26	6.07	5.88	5.70	5.52	5.35318		

Table 5b: WC Level - Option Level Unit Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37
Complete for all options >£100m (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Opex	Cost		Fixed					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Opex	Cost		Variable					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Land (Non depreciating)			Fixed					0.00	0.00	0.00	72.97	72.97	72.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Planning and Development (Non depreciating)			Fixed					9.15	9.15	9.15	22.88	22.88	22.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Other Non-Depreciating Assets (Non depreciating)			Fixed					0.00	0.00	0.00	0.00	0.00	0.00	23.04	23.04	23.04	23.04	23.04	23.04	23.04	23.04
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Fencing (10)		10	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	ICA (Instrumentation, Control & Automation) (10)		10	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		20	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	8.44	8.44	8.44	8.44	8.44	8.44	8.44	8.44
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Steel/Timber/GRP Structures (30)		30	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Landscaping/Environmental Works (30)		30	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	8.90	8.90	8.90	8.90	8.90	8.90	8.90	8.90
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Bridges (40)		40	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Treatment and Pumping Station Civils (incl. Intakes) (60)		60	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	7.07	7.07	7.07	7.07	7.07	7.07	7.07	7.07
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Roads and Car Parks (60)		60	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	19.36	19.36	19.36	19.36	19.36	19.36	19.36	19.36
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Reinforced Concrete Tanks / Service Reservoirs (80)		80	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Weirs (100)		100	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Pipelines (100)		100	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Tunnels (100)		100	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Embankment Works (250)		250	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	67.02	67.02	67.02	67.02	67.02	67.02	67.02	67.02
	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100(lon)	Costed Risk			Fixed					0.00	0.00	0.00	0.00	0.00	0.00	35.78	35.78	35.78	35.78	35.78	35.78	35.78	35.78

Cost Metric (£m)	Cost Sub-metric (£m)		2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71
Opex	Cost	Fixed	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66
Opex	Cost	Variable	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61
Land (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planning and Development (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Depreciating Assets (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fencing (10)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00
ICA (Instrumentation, Control & Automation) (10)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.06	0.00	0.00	0.00	0.00
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Steel/Timber/GRP Structures (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.93	0.00	0.00	0.00	0.00
Landscaping/Environmental Works (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.17	0.00	0.00	0.00	0.00
Bridges (40)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Treatment and Pumping Station Civils (incl. Intakes) (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roads and Car Parks (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reinforced Concrete Tanks / Service Reservoirs (80)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weirs (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pipelines (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tunnels (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Embankment Works (250)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Costed Risk		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cost Metric (£m)	Cost Sub-metric (£m)		2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Opex	Cost	Fixed	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66	3.66		
Opex	Cost	Variable	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61		
Land (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Planning and Development (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Other Non-Depreciating Assets (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Fencing (10)		Fixed	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00		
ICA (Instrumentation, Control & Automation) (10)		Fixed	0.00	0.00	0.00	0.00	0.00	3.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.06	0.00	0.00	0.00	0.00	0.00	0.00		
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		Fixed	0.00	0.00	0.00	0.00	0.00	67.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	67.54	0.00	0.00	0.00	0.00	0.00	0.00		
Steel/Timber/GRP Structures (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.93	0.00	0.00	0.00	0.00	0.00	0.00		
Landscaping/Environmental Works (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	71.17	0.00	0.00	0.00	0.00	0.00	0.00		
Bridges (40)		Fixed	0.00	0.00	0.00	0.00	0.00	11.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Treatment and Pumping Station Civils (incl. Intakes) (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.54	0.00	0.00	0.00	0.00	0.00	0.00		
Roads and Car Parks (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	154.86	0.00	0.00	0.00	0.00	0.00	0.00		
Reinforced Concrete Tanks / Service Reservoirs (80)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Weirs (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Pipelines (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Tunnels (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Embankment Works (250)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Costed Risk		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

Cost Profile WRMP24 Table

Water Company	Thames Water / Affinity Water: South East Strategic Reservoir Option - 75 Variant	Version	Gate 2 - V1

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Table 5a: WC Level - Option Level Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.	Total/Fixed/Variable	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36
Complete for all options (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Capex			Total				6.53	6.53	6.53	71.02	71.02	71.02	113.88	113.88	113.88	113.88	113.88	113.88	113.88	113.88
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Opex			Total				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Financing Cost			Total				0.12	0.37	0.61	2.06	4.71	7.36	11.30	16.51	21.72	26.94	32.15	37.36	42.58	47.79
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Discount Rate			Total				0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Discount Factor			Total				0.97	0.93	0.90	0.87	0.84	0.81	0.79	0.76	0.73	0.71	0.68	0.66	0.64	0.62
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Capex	Costed Risk		Total				0.00	0.00	0.00	0.00	0.00	0.00	32.88	32.88	32.88	32.88	32.88	32.88	32.88	32.88
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Capex	Optimism Bias		Total				1.82	1.82	1.82	19.82	19.82	19.82	31.78	31.78	31.78	31.78	31.78	31.78	31.78	31.78
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Net Present Cost (NPC)			Total				0.12	0.34	0.55	1.79	3.97	5.99	8.88	12.54	15.94	19.10	22.02	24.73	27.22	29.52
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Total NPC			Total	1204.05																

Cost Metric (£m)	Cost Sub-metric (£m)	Total/Fixed/Variable	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65
Capex		Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Opex		Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Financing Cost		Total	64.21	63.80	63.39	62.98	62.58	62.17	61.76	61.35	60.94	60.58	60.22	59.81	59.40	58.99	58.58	58.17	57.76	57.35	56.94	57.55	58.16	57.75	57.35	56.94	56.53	56.12	55.71	55.30	54.89
Discount Rate		Total	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Discount Factor		Total	0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.47	0.45	0.44	0.42	0.41	0.40	0.38	0.37	0.36	0.35	0.34	0.33	0.32	0.31	0.30	0.29	0.28	0.27	0.27	0.26	0.25	0.24
Capex	Costed Risk	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capex	Optimism Bias	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Present Cost (NPC)		Total	40.72	39.10	37.55	36.06	34.63	33.25	31.93	30.66	29.44	28.28	27.17	26.09	25.04	24.04	23.08	22.15	21.36	20.60	19.87	19.49	19.11	18.43	17.77	17.14	16.53	15.94	15.37	14.82	14.29

Cost Metric (£m)	Cost Sub-metric (£m)	Total/Fixed/Variable	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Capex		Total	75.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	287.89	0.00	0.00	0.00	0.00	0.00	0.00			
Opex		Total	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00			
Financing Cost		Total	55.89	56.90	56.49	56.08	55.67	55.26	54.85	54.44	54.03	53.62	54.40	55.18	54.77	54.37	53.96	53.55	53.14	52.73	52.32	51.91	51.55	51.19	50.78	50.37	49.96	49.55	49.14	48.73	48.32	47.91	52.88	57.85	57.44	57.03	56.62	56.21	55.80			
Discount Rate		Total	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.025	0.025	0.025	0.025	0.025			
Discount Factor		Total	0.24	0.23	0.22	0.22	0.21	0.20	0.20	0.19	0.19	0.18	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.08			
Capex	Costed Risk	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Capex	Optimism Bias	Total	21.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.35	0.00	0.00	0.00	0.00	0.00	0.00			
Net Present Cost (NPC)		Total	14.11	13.93	13.43	12.95	12.49	12.04	11.61	11.19	10.79	10.40	10.24	10.07	9.71	9.36	9.03	8.70	8.39	8.08	7.79	7.51	7.24	6.99	6.73	6.49	6.25	6.02	5.80	5.59	5.39	5.19	5.52	5.83	5.65	5.47	5.30	5.14	4.98			

Table 5b: WC Level - Option Level Unit Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36
Complete for all options >£100m (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Opex	Cost		Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Opex	Cost		Variable				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Land (Non depreciating)			Fixed				0.00	0.00	0.00	69.96	69.96	69.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Planning and Development (Non depreciating)			Fixed				8.35	8.35	8.35	20.88	20.88	20.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Other Non-Depreciating Assets (Non depreciating)			Fixed				0.00	0.00	0.00	0.00	0.00	0.00	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Fencing (10)		10	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	ICA (Instrumentation, Control & Automation) (10)		10	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		20	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Steel/Timber/GRP Structures (30)		30	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Landscaping/Environmental Works (30)		30	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	8.82	8.82	8.82	8.82	8.82	8.82	8.82	8.82
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Bridges (40)		40	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Treatment and Pumping Station Civils (incl. Intakes) (60)		60	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Roads and Car Parks (60)		60	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	18.66	18.66	18.66	18.66	18.66	18.66	18.66	18.66
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Reinforced Concrete Tanks / Service Reservoirs (80)		80	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Weirs (100)		100	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Pipelines (100)		100	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Tunnels (100)		100	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Embankment Works (250)		250	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	55.66	55.66	55.66	55.66	55.66	55.66	55.66	55.66
	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon75(lon)	Costed Risk			Fixed				0.00	0.00	0.00	0.00	0.00	0.00	32.88	32.88	32.88	32.88	32.88	32.88	32.88	32.88

Cost Metric (£m)	Cost Sub-metric (£m)		2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65
Opex	Cost	Fixed	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57
Opex	Cost	Variable	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Land (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planning and Development (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Depreciating Assets (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fencing (10)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ICA (Instrumentation, Control & Automation) (10)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Steel/Timber/GRP Structures (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping/Environmental Works (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bridges (40)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Treatment and Pumping Station Civils (incl. Intakes) (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roads and Car Parks (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reinforced Concrete Tanks / Service Reservoirs (80)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weirs (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pipelines (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tunnels (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Embankment Works (250)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Costed Risk		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cost Metric (£m)	Cost Sub-metric (£m)		2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Opex	Cost	Fixed	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57			
Opex	Cost	Variable	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44			
Land (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Planning and Development (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Other Non-Depreciating Assets (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Fencing (10)		Fixed	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00			
ICA (Instrumentation, Control & Automation) (10)		Fixed	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00			
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.66	0.00	0.00	0.00	0.00	0.00	0.00			
Steel/Timber/GRP Structures (30)		Fixed	22.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.93	0.00	0.00	0.00	0.00	0.00	0.00			
Landscaping/Environmental Works (30)		Fixed	70.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.59	0.00	0.00	0.00	0.00	0.00	0.00			
Bridges (40)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Treatment and Pumping Station Civils (incl. Intakes) (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.44	0.00	0.00	0.00	0.00	0.00	0.00			
Roads and Car Parks (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	149.30	0.00	0.00	0.00	0.00	0.00	0.00			
Reinforced Concrete Tanks / Service Reservoirs (80)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Weirs (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Pipelines (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Tunnels (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Embankment Works (250)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Costed Risk		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			

Cost Profile WRMP24 Table

Water Company	Thames Water / Affinity Water: South East Strategic Reservoir Option - 30P1 Variant	Version	Gate 2 - V1	Back to title page

Table 5a: WC Level - Option Level Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.	Total/Fixed/Variable	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36
Complete for all options (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Capex			Total				5.43	5.43	5.43	73.34	73.34	73.34	94.72	94.72	94.72	94.72	94.72	94.72	94.72	94.72
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Opex			Total				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Financing Cost			Total				0.10	0.30	0.51	1.98	4.72	7.46	11.01	15.39	19.76	24.13	28.50	32.88	37.25	41.62
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Discount Rate			Total				0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Discount Factor			Total				0.97	0.93	0.90	0.87	0.84	0.81	0.79	0.76	0.73	0.71	0.68	0.66	0.64	0.62
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Capex	Costed Risk		Total				0.00	0.00	0.00	0.00	0.00	0.00	28.58	28.58	28.58	28.58	28.58	28.58	28.58	28.58
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Capex	Optimism Bias		Total				1.52	1.52	1.52	20.47	20.47	20.47	26.44	26.44	26.44	26.44	26.44	26.44	26.44	26.44
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Net Present Cost (NPC)			Total				0.10	0.28	0.46	1.72	3.97	6.07	8.66	11.68	14.50	17.11	19.52	21.76	23.82	25.71
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Total NPC			Total	1055.59																

Cost Metric (£m)	Cost Sub-metric (£m)	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57
Capex		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.10	0.00
Opex		3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13
Financing Cost		56.76	56.37	55.99	55.60	55.22	54.84	54.45	54.07	53.69	53.34	52.99	52.60	52.22	51.84	51.45	51.07	50.68	50.30	49.92	50.49	51.06
Discount Rate		0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.03	0.03	0.03	0.03	0.03
Discount Factor		0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.47	0.45	0.44	0.42	0.41	0.40	0.38	0.37	0.36	0.35	0.34	0.33	0.32	0.31
Capex	Costed Risk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capex	Optimism Bias	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.26	0.00
Net Present Cost (NPC)		35.74	34.31	32.94	31.62	30.35	29.13	27.96	26.83	25.75	24.73	23.75	22.79	21.86	20.98	20.13	19.31	18.61	17.94	17.30	16.97	16.65
Total NPC																						

Cost Metric (£m)	Cost Sub-metric (£m)	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81
Capex		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.14	0.00	0.00	0.00	0.00	0.00
Opex		3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13
Financing Cost		50.67	50.29	49.91	49.52	49.14	48.76	48.37	47.99	49.06	50.14	49.75	49.37	48.99	48.60	48.22	47.84	47.45	47.07	47.81	48.55	48.16	47.78	47.40	47.01
Discount Rate		0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Discount Factor		0.30	0.29	0.28	0.27	0.27	0.26	0.25	0.24	0.24	0.23	0.22	0.22	0.21	0.20	0.20	0.19	0.19	0.18	0.18	0.17	0.17	0.16	0.16	0.15
Capex	Costed Risk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capex	Optimism Bias	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.78	0.00	0.00	0.00	0.00	0.00
Net Present Cost (NPC)		16.05	15.48	14.92	14.38	13.86	13.35	12.87	12.40	12.29	12.18	11.74	11.32	10.91	10.51	10.13	9.76	9.40	9.06	8.93	8.79	8.47	8.17	7.87	7.58
Total NPC																									

Cost Metric (£m)	Cost Sub-metric (£m)	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Capex		0.00	0.00	0.00	0.00	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	266.86	0.00	0.00	0.00	0.00	0.00	0.00			
Opex		3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13			
Financing Cost		46.63	46.24	45.86	45.48	45.13	44.78	44.39	44.01	43.63	43.24	42.86	42.48	42.09	41.71	46.31	50.91	50.52	50.14	49.76	49.37	48.99			
Discount Rate		0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.025	0.025	0.025	0.025	0.025			
Discount Factor		0.15	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.08			
Capex	Costed Risk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Capex	Optimism Bias	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.48	0.00	0.00	0.00	0.00	0.00	0.00			
Net Present Cost (NPC)		7.30	7.04	6.78	6.53	6.29	6.07	5.84	5.63	5.42	5.22	5.02	4.84	4.66	4.48	4.80	5.09	4.93	4.78	4.63	4.48	4.34			
Total NPC																									

Table 5b: WC Level - Option Level Unit Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36
Complete for all options >£100m (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Opex	Cost		Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Opex	Cost		Variable				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Land (Non depreciating)			Fixed				0.00	0.00	0.00	76.44	76.44	76.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Planning and Development (Non depreciating)			Fixed				6.95	6.95	6.95	17.37	17.37	17.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Other Non-Depreciating Assets (Non depreciating)			Fixed				0.00	0.00	0.00	0.00	0.00	0.00	17.72	17.72	17.72	17.72	17.72	17.72	17.72	17.72
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Fencing (10)		10	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	ICA (Instrumentation, Control & Automation) (10)		10	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		20	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Steel/Timber/GRP Structures (30)		30	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Landscaping/Environmental Works (30)		30	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Bridges (40)		40	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Treatment and Pumping Station Civils (incl. Intakes) (60)		60	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.52
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Roads and Car Parks (60)		60	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	15.78	15.78	15.78	15.78	15.78	15.78	15.78	15.78
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Reinforced Concrete Tanks / Service Reservoirs (80)		80	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Weirs (100)		100	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Pipelines (100)		100	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Tunnels (100)		100	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	14.16	14.16	14.16	14.16	14.16	14.16	14.16	14.16
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Embankment Works (250)		250	Fixed				0.00	0.00	0.00	0.00	0.00	0.00	34.17	34.17	34.17	34.17	34.17	34.17	34.17	34.17
	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon30P1(lon)	Costed Risk			Fixed				0.00	0.00	0.00	0.00	0.00	0.00	28.58	28.58	28.58	28.58	28.58	28.58	28.58	28.58

Cost Metric (£m)	Cost Sub-metric (£m)	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57
Opex	Cost	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95
Opex	Cost	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Land (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planning and Development (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Depreciating Assets (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fencing (10)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00
ICA (Instrumentation, Control & Automation) (10)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.00
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.02	0.00
Steel/Timber/GRP Structures (30)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping/Environmental Works (30)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bridges (40)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Treatment and Pumping Station Civils (incl. Intakes) (60)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roads and Car Parks (60)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reinforced Concrete Tanks / Service Reservoirs (80)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weirs (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pipelines (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tunnels (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Embankment Works (250)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Costed Risk		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cost Metric (£m)	Cost Sub-metric (£m)	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81
Opex	Cost	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95
Opex	Cost	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Land (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planning and Development (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Depreciating Assets (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fencing (10)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00
ICA (Instrumentation, Control & Automation) (10)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.00	0.00	0.00	0.00	0.00
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.02	0.00	0.00	0.00	0.00	0.00
Steel/Timber/GRP Structures (30)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping/Environmental Works (30)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bridges (40)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.55	0.00	0.00	0.00	0.00	0.00
Treatment and Pumping Station Civils (incl. Intakes) (60)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roads and Car Parks (60)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reinforced Concrete Tanks / Service Reservoirs (80)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weirs (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pipelines (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tunnels (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Embankment Works (250)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Costed Risk		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cost Metric (£m)	Cost Sub-metric (£m)	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Opex	Cost	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95			
Opex	Cost	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18			
Land (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Planning and Development (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Other Non-Depreciating Assets (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Fencing (10)		0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00			
ICA (Instrumentation, Control & Automation) (10)		0.00	0.00	0.00	0.00	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.00	0.00	0.00	0.00	0.00	0.00			
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.02	0.00	0.00	0.00	0.00	0.00	0.00			
Steel/Timber/GRP Structures (30)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.93	0.00	0.00	0.00	0.00	0.00	0.00			
Landscaping/Environmental Works (30)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74.59	0.00	0.00	0.00	0.00	0.00	0.00			
Bridges (40)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Treatment and Pumping Station Civils (incl. Intakes) (60)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.17	0.00	0.00	0.00	0.00	0.00	0.00			
Roads and Car Parks (60)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	126.27	0.00	0.00	0.00	0.00	0.00	0.00			
Reinforced Concrete Tanks / Service Reservoirs (80)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Weirs (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Pipelines (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Tunnels (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Embankment Works (250)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Costed Risk		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			

Cost Profile WRMP24 Table

Water Company	Thames Water / Affinity Water: South East Strategic Reservoir Option - 80P1 Variant	Version	Gate 2 - V1

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Table 5a: WC Level - Option Level Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.	Total/Fixed/Variable	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49
Complete for all options (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Capex			Total					6.78	6.78	6.78	76.70	76.70	76.70	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.53	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Opex			Total					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Financing Cost			Total					0.13	0.38	0.63	2.19	5.06	7.92	12.06	17.48	22.90	28.31	33.73	39.15	44.57	49.98	67.14	66.72	66.29	65.86	65.43	65.00	64.57	64.15	63.72	63.34	62.96	62.53
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Discount Rate			Total					0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Discount Factor			Total					0.97	0.93	0.90	0.87	0.84	0.81	0.79	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.47	0.45	0.44	0.42	0.41
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Capex	Costed Risk		Total					0.00	0.00	0.00	0.00	0.00	0.00	34.38	34.38	34.38	34.38	34.38	34.38	34.38	34.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Capex	Optimism Bias		Total					1.89	1.89	1.89	21.41	21.41	21.41	32.98	32.98	32.98	32.98	32.98	32.98	32.98	32.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Net Present Cost (NPC)			Total					0.12	0.35	0.57	1.91	4.26	6.44	9.48	13.27	16.80	20.07	23.10	25.91	28.50	30.88	42.67	40.98	39.35	37.79	36.29	34.85	33.46	32.13	30.85	29.64	28.47	27.34
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Total NPC			Total	1260.74																													

Cost Metric (£m)	Cost Sub-metric (£m)	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77
Capex		0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.28
Opex		4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34
Financing Cost		62.10	61.67	61.24	60.81	60.39	59.96	59.53	60.10	60.66	60.23	59.81	59.38	58.95	58.52	58.09	57.67	57.24	58.30	59.37	58.94	58.51	58.09	57.66	57.23	56.80	56.37	55.94	56.68
Discount Rate		0.035	0.035	0.035	0.035	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Discount Factor		0.40	0.38	0.37	0.36	0.35	0.34	0.33	0.32	0.31	0.30	0.29	0.28	0.27	0.27	0.26	0.25	0.24	0.24	0.23	0.22	0.22	0.21	0.20	0.20	0.19	0.19	0.18	0.18
Capex	Costed Risk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capex	Optimism Bias	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.38
Net Present Cost (NPC)		26.24	25.19	24.18	23.21	22.39	21.59	20.82	20.40	19.98	19.27	18.58	17.92	17.28	16.66	16.07	15.49	14.94	14.75	14.57	14.05	13.55	13.06	12.60	12.14	11.71	11.29	10.88	10.69
Total NPC																													

Cost Metric (£m)	Cost Sub-metric (£m)	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Capex		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	293.46	0.00	0.00	0.00	0.00	0.00	0.00		
Opex		4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34	4.34		
Financing Cost		57.41	56.99	56.56	56.13	55.70	55.27	54.84	54.42	53.99	53.61	53.23	52.80	52.37	51.94	51.51	51.09	50.66	50.23	49.80	54.85	59.90	59.48	59.05	58.62	58.19	57.76		
Discount Rate		0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.025	0.025	0.025	0.025	0.025		
Discount Factor		0.17	0.17	0.16	0.16	0.15	0.15	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.08327		
Capex	Costed Risk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0		
Capex	Optimism Bias	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	81.90	0.00	0.00	0.00	0.00	0.00	0		
Net Present Cost (NPC)		10.51	10.13	9.77	9.42	9.08	8.75	8.43	8.13	7.83	7.56	7.29	7.02	6.77	6.52	6.28	6.05	5.83	5.62	5.41	5.74	6.05	5.87	5.68	5.51	5.34	5.17111		
Total NPC																													

Table 5b: WC Level - Option Level Unit Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49
Complete for all options >£100m (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Opex	Cost		Fixed					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Opex	Cost		Variable					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Land (Non depreciating)			Fixed					0.00	0.00	0.00	76.44	76.44	76.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Planning and Development (Non depreciating)			Fixed					8.67	8.67	8.67	21.67	21.67	21.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Other Non-Depreciating Assets (Non depreciating)			Fixed					0.00	0.00	0.00	0.00	0.00	0.00	21.42	21.42	21.42	21.42	21.42	21.42	21.42	21.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Fencing (10)		10	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	ICA (Instrumentation, Control & Automation) (10)		10	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.99	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		20	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	8.11	8.11	8.11	8.11	8.11	8.11	8.11	8.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Steel/Timber/GRP Structures (30)		30	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	2.87	2.87	2.87	2.87	2.87	2.87	2.87	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Landscaping/Environmental Works (30)		30	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Bridges (40)		40	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Treatment and Pumping Station Civils (incl. Intakes) (60)		60	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Roads and Car Parks (60)		60	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	19.08	19.08	19.08	19.08	19.08	19.08	19.08	19.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Reinforced Concrete Tanks / Service Reservoirs (80)		80	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	7.96	7.96	7.96	7.96	7.96	7.96	7.96	7.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Weirs (100)		100	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Pipelines (100)		100	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Tunnels (100)		100	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	14.16	14.16	14.16	14.16	14.16	14.16	14.16	14.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Embankment Works (250)		250	Fixed					0.00	0.00	0.00	0.00	0.00	0.00	54.85	54.85	54.85	54.85	54.85	54.85	54.85	54.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon80P1(lon)	Costed Risk			Fixed					0.00	0.00	0.00	0.00	0.00	0.00	34.38	34.38	34.38	34.38	34.38	34.38	34.38	34.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cost Metric (£m)	Cost Sub-metric (£m)	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77
Opex	Cost	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87
Opex	Cost	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
Land (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planning and Development (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Depreciating Assets (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fencing (10)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
ICA (Instrumentation, Control & Automation) (10)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.99
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.88
Steel/Timber/GRP Structures (30)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping/Environmental Works (30)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bridges (40)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.55
Treatment and Pumping Station Civils (incl. Intakes) (60)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roads and Car Parks (60)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reinforced Concrete Tanks / Service Reservoirs (80)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weirs (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pipelines (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tunnels (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Embankment Works (250)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Costed Risk		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cost Metric (£m)	Cost Sub-metric (£m)	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Opex	Cost	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87		
Opex	Cost	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47		
Land (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Planning and Development (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Other Non-Depreciating Assets (Non depreciating)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Fencing (10)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00		
ICA (Instrumentation, Control & Automation) (10)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.99	0.00	0.00	0.00	0.00	0.00	0.00		
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.88	0.00	0.00	0.00	0.00	0.00	0.00		
Steel/Timber/GRP Structures (30)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.93	0.00	0.00	0.00	0.00	0.00	0.00		
Landscaping/Environmental Works (30)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76.22	0.00	0.00	0.00	0.00	0.00	0.00		
Bridges (40)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Treatment and Pumping Station Civils (incl. Intakes) (60)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	55.44	0.00	0.00	0.00	0.00	0.00	0.00		
Roads and Car Parks (60)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	152.65	0.00	0.00	0.00	0.00	0.00	0.00		
Reinforced Concrete Tanks / Service Reservoirs (80)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Weirs (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Pipelines (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Tunnels (100)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Embankment Works (250)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Costed Risk		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

Cost Profile WRMP24 Table

Water Company	Thames Water / Affinity Water: South East Strategic Reservoir Option - 100P2 (10 year gap between P1 and P2)	Version	Gate 2 - V1

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Table 5a: WC Level - Option Level Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.	Total/Fixed/Variable	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47
Complete for all options (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Capex			Total	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.79	3.79	3.79	9.48	9.48	9.48
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Opex			Total	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Financing Cost			Total	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.21	0.35	0.60	0.96	1.31
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Discount Rate			Total	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Discount Factor			Total	0.97	0.93	0.90	0.87	0.84	0.81	0.79	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.47	0.45	0.44	0.42	0.41	0.40	0.38
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Capex	Costed Risk		Total	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Capex	Optimism Bias		Total	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	1.06	1.06	2.64	2.64	2.64
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Net Present Cost (NPC)			Total	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.09	0.15	0.25	0.38	0.50
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Total NPC			Total	252.20																											

Cost Metric (£m)	Cost Sub-metric (£m)	Total/Fixed/Variable	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75
Capex		Total	66.09	66.09	66.09	66.09	66.09	66.09	66.09	66.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.63
Opex		Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21
Financing Cost		Total	2.96	5.91	8.85	11.80	14.74	17.69	20.63	23.58	29.84	29.70	29.56	29.41	29.27	29.13	28.99	28.85	28.71	28.60	28.49	28.35	28.21	28.07	27.92	27.78	27.64	27.50	27.36	27.39
Discount Rate		Total	0.035	0.035	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Discount Factor		Total	0.37	0.36	0.35	0.34	0.33	0.32	0.31	0.30	0.29	0.28	0.27	0.27	0.26	0.25	0.24	0.24	0.23	0.22	0.22	0.21	0.20	0.20	0.19	0.19	0.18	0.18	0.17	0.17
Capex	Costed Risk	Total	16.35	16.35	16.35	16.35	16.35	16.35	16.35	16.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Capex	Optimism Bias	Total	18.45	18.45	18.45	18.45	18.45	18.45	18.45	18.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.69
Net Present Cost (NPC)		Total	1.09	2.10	3.06	3.96	4.81	5.60	6.34	7.04	9.29	8.98	8.67	8.38	8.10	7.83	7.57	7.32	7.07	6.84	6.62	6.40	6.18	5.97	5.77	5.58	5.39	5.21	5.03	4.89
Total NPC		Total																												

Cost Metric (£m)	Cost Sub-metric (£m)	Total/Fixed/Variable	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Capex		Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.63	0.00	0.00	0.00	0.00						
Opex		Total	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21						
Financing Cost		Total	27.43	27.29	27.15	27.01	26.86	26.72	26.58	26.44	26.30	26.31	26.33	26.19	26.05	25.91	25.76	25.62	25.48	25.34	25.20	25.24	25.27	25.13	24.99	24.85						
Discount Rate		Total	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.025	0.025	0.025	0.025	0.025						
Discount Factor		Total	0.16	0.16	0.15	0.15	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.08						
Capex	Costed Risk	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Capex	Optimism Bias	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.69	0.00	0.00	0.00	0.00						
Net Present Cost (NPC)		Total	4.75	4.59	4.44	4.29	4.14	4.00	3.87	3.74	3.61	3.51	3.41	3.29	3.18	3.07	2.97	2.87	2.77	2.67	2.58	2.52	2.46	2.39	2.32	2.25						
Total NPC		Total																														

Table 5b: WC Level - Option Level Unit Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47
Complete for all options >£100m (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Opex	Cost		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Opex	Cost		Variable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Land (Non depreciating)			Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Planning and Development (Non depreciating)			Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.85	4.85	4.85	12.12	12.12	12.12
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Other Non-Depreciating Assets (Non depreciating)			Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Fencing (10)		10	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	ICA (Instrumentation, Control & Automation) (10)		10	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		20	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Steel/Timber/GRP Structures (30)		30	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Landscaping/Environmental Works (30)		30	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Bridges (40)		40	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Treatment and Pumping Station Civils (incl. Intakes) (60)		60	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Roads and Car Parks (60)		60	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Reinforced Concrete Tanks / Service Reservoirs (80)		80	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Weirs (100)		100	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Pipelines (100)		100	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Tunnels (100)		100	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Embankment Works (250)		250	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon100P2(lon)	Costed Risk			Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cost Metric (£m)	Cost Sub-metric (£m)		2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75
Opex	Cost	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
Opex	Cost	Variable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Land (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Planning and Development (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Depreciating Assets (Non depreciating)		Fixed	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fencing (10)		Fixed	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
ICA (Instrumentation, Control & Automation) (10)		Fixed	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		Fixed	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.93
Steel/Timber/GRP Structures (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping/Environmental Works (30)		Fixed	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bridges (40)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Treatment and Pumping Station Civils (incl. Intakes) (60)		Fixed	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roads and Car Parks (60)		Fixed	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reinforced Concrete Tanks / Service Reservoirs (80)		Fixed	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weirs (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pipelines (100)		Fixed	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tunnels (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Embankment Works (250)		Fixed	57.53	57.53	57.53	57.53	57.53	57.53	57.53	57.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Costed Risk		Fixed	16.35	16.35	16.35	16.35	16.35	16.35	16.35	16.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cost Metric (£m)	Cost Sub-metric (£m)		2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Opex	Cost	Fixed	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43						
Opex	Cost	Variable	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79						
Land (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Planning and Development (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Other Non-Depreciating Assets (Non depreciating)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Fencing (10)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00						
ICA (Instrumentation, Control & Automation) (10)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18	0.00	0.00	0.00	0.00						
M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.93	0.00	0.00	0.00	0.00						
Steel/Timber/GRP Structures (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Landscaping/Environmental Works (30)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Bridges (40)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Treatment and Pumping Station Civils (incl. Intakes) (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Roads and Car Parks (60)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Reinforced Concrete Tanks / Service Reservoirs (80)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Weirs (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Pipelines (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Tunnels (100)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Embankment Works (250)		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Costed Risk		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						

Cost Profile WRMP24 Table

Water Company	Thames Water / Affinity Water: South East Strategic Reservoir Option - 42P2 (10 year gap between P1 and P2)	Version	Gate 2 - V1	Back to title page

Table 5a: WC Level - Option Level Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.	Total/Fixed/Variable	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Complete for all options (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Capex			Total	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.39	2.39	2.39	5.97	5.97	5.97	47.57	47.57	47.57	47.57	47.57	47.57	47.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.38	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Opex			Total	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Financing Cost			Total	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.13	0.22	0.38	0.60	0.82	2.00	4.12	6.24	8.36	10.48	12.60	14.72	19.03	18.94	18.84	18.74	18.65	18.55	18.45	18.36	18.26	18.19	18.12	18.03	17.93	17.83	17.74	17.64	17.54	17.45	17.35	17.37	17.40	17.30	17.20	17.11	17.01	16.91	16.82	16.72	16.62	16.67	16.71	16.62	16.52	16.43	16.33	16.23	16.14	16.04	15.94	15.97	15.99	15.89	15.80	15.70	15.60						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Discount Rate			Total	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.025	0.025	0.025	0.025	0.025						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Discount Factor			Total	0.97	0.93	0.90	0.87	0.84	0.81	0.79	0.76	0.73	0.71	0.68	0.66	0.64	0.62	0.60	0.58	0.56	0.54	0.52	0.50	0.49	0.47	0.45	0.44	0.42	0.41	0.40	0.38	0.37	0.36	0.35	0.34	0.33	0.32	0.31	0.30	0.29	0.28	0.27	0.27	0.26	0.25	0.24	0.24	0.23	0.22	0.22	0.21	0.20	0.20	0.19	0.19	0.18	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.14	0.14	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.08						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Capex	Costed Risk		Total	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.76	11.76	11.76	11.76	11.76	11.76	11.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Capex	Optimism Bias		Total	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.67	0.67	1.67	1.67	1.67	13.28	13.28	13.28	13.28	13.28	13.28	13.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.78	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Net Present Cost (NPC)			Total	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.09	0.15	0.24	0.31	0.74	1.47	2.16	2.81	3.42	3.99	4.52	5.94	5.74	5.54	5.35	5.17	5.00	4.83	4.66	4.50	4.36	4.22	4.07	3.93	3.80	3.67	3.54	3.42	3.31	3.19	3.10	3.02	2.91	2.81	2.72	2.62	2.53	2.45	2.36	2.28	2.22	2.16	2.09	2.01	1.94	1.88	1.81	1.75	1.69	1.63	1.59	1.55	1.50	1.46	1.41	1.37						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Total NPC			Total					159.08																																																																														

Table 5b: WC Level - Option Level Unit Cost Profile Table

Table Instruction	Option ID	Option Name	Cost Metric (£m)	Cost Sub-metric (£m)	Asset Life: Estimated average number of years an asset is considered useable before its value is fully depreciated.		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05
Complete for all options >£100m (Feasible and preferred)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Opex	Cost		Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Opex	Cost		Variable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Land (Non depreciating)			Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Planning and Development (Non depreciating)			Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.05	3.05	3.05	7.63	7.63	7.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Other Non-Depreciating Assets (Non depreciating)			Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.76	4.76	4.76	4.76	4.76	4.76	4.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Fencing (10)		10	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	ICA (Instrumentation, Control & Automation) (10)		10	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.67	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	M&E (Mechanical and Electrical) Works on Pumping Stations and Treatment Works (20)		20	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.30	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Steel/Timber/GRP Structures (30)		30	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Landscaping/Environmental Works (30)		30	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	1.12	1.12	1.12	1.12	1.12	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Bridges (40)		40	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Treatment and Pumping Station Civils (incl. Intakes) (60)		60	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Roads and Car Parks (60)		60	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.43	7.43	7.43	7.43	7.43	7.43	7.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Reinforced Concrete Tanks / Service Reservoirs (80)		80	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.63	4.63	4.63	4.63	4.63	4.63	4.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Weirs (100)		100	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Pipelines (100)		100	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07	1.07	1.07	1.07	1.07	1.07	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Tunnels (100)		100	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Embankment Works (250)		250	Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.04	40.04	40.04	40.04	40.04	40.04	40.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	TWU_STR_HI-RSR_RE1_CNO_abingdon42P2(lon)	Costed Risk			Fixed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.76	11.76	11.76	11.76	11.76	11.76	11.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						


Affinity Water
Taking care of your water


Thames
Water