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**Project:** PR24 Enhancement Review

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**Subject:** Sandown Benchmarking

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## 1 Executive Summary

Southern Water have engaged Mott MacDonald to benchmark their Sandown scheme. Though the benchmark has been generated using top-down models at a high level, the scope has been progressed to Level 2, allowing for a granular approach. This enables models to be aligned more closely, improving confidence in the benchmark output, and helping to determine where the Sandown costs lie with respect to the industry standard.

The Sandown scope totals £81.09m in Net Direct Works. Of this, £51.10m has been benchmarked at Level 2, with an additional £23.26m attributed to quotations from the delivery partners. The two sum to £74.36m, which accounts for 91.70% of the scope having cost confidence.

Against the £74.36m of scope benchmarked, the benchmark outputs a cost of £71.92m, indicating that the Sandown scope is 3.39% more expensive than the industry benchmark. Of the £51.10m within the scope that is at Level 2, the benchmark is £48.66m, which gives a 5.01% variance. This accounts for 63.01% of the overall scope, or 88.36% of the scope available at Level 2. The costs attributed to quotations have then been included in both the scope benchmarked, and the benchmark, to give an overall cost confidence position.

Overall, £74.36m worth of scope could be costed using Level 2 benchmarking or supplier quotations, which accounts for 91.70% of the scope. Against this scope, the benchmark is £71.92m which outputs a variance of 3.39%. This illustrates that the Sandown costs are in line with the industry.

## 2 Methodology

The Sandown scope has been progressed to Level 2 which has allowed for top-down cost models from the Mott MacDonald database to be aligned to the varying asset and equipment level models and their outputs. To ensure comparability with the benchmark models, particular care has been taken to examine the inclusions and exclusions of the Southern Water models, especially for the higher-level asset models. Once the models have been aligned, a comparable benchmark cost has been outputted using the same scope as the estimate. That is, the quantities, yardsticks and drivers used to generate the benchmark match those in the original cost estimate. Overall, this has allowed for data from 8 comparable water companies to be used within the benchmarks.

To undertake the benchmark, Mott MacDonald have employed the use of their benchmarking tools to ensure consistent alignment of benchmark sources across individual assets and models. As such, sources only differ between benchmarks when the cost driver lies outside the ranges of a comparable model and has subsequently been removed. This ensures consistency of results and allows for a more comprehensive analysis of the individual Southern Water models, which can aid in highlighting key areas that costs are not aligned with the industry.

Costs have been normalised with respect to inflation using the CPIH inflation index. The price base is set to 1Q2023.

Additionally, costs have been normalised with respect to the construction location using BCIS location factors. This helps mitigate the effects of regional purchasing power to improve the benchmark accuracy.

Costs in the scope associated with Custom Assets are incorporated into the benchmark where possible to increase coverage and benchmark confidence in the more bespoke assets. If possible, cost models have been aligned and particular care has been taken to examine the corresponding scope information to create an appropriate benchmark. In some instances, high-level assumptions have been made to include additional items that the granularity of the scope cannot provide drivers for, with the focus being ensuring a like-for-like comparison. In instances where there is insufficient granularity to reasonably align models, the asset has been excluded from the benchmark.

There are instances of large proportions of costs being attributed to assets that have been supplied with quotations from delivery partners. Where there has been sufficient granularity within the scope for these assets to be benchmarked, a benchmark cost has been taken forward in the traditional manner to improve confidence in the benchmark output. However, there are instances where the scope provides insufficient information to generate a benchmark comparison. In these instances, the cost has been removed and presented separately, as this still provides a level of cost confidence in the output outside of a formal benchmark.

### 3 Results and Analysis

The Sandown scope estimate totalled £81.09m. Of this, £23.26m was attributed to quotation costs for which there was insufficient granularity to benchmark. This resulted in £57.83m of scope that could be benchmarked at Level 2. The Benchmark Summary in Table 1 provides a breakdown of the benchmark for the benchmark only and the benchmark including quotations methods.

**Table 1: Benchmark Summary**

Benchmark Category	Scope Cost	Scope Benchmarked	Coverage	Benchmark	Variance
Benchmark	£57,831,512.83	£51,097,904.94	88.36%	£48,658,984.38	5.01%
Benchmark Incl. Quotes	£81,090,247.63	£74,356,639.75	91.70%	£71,917,719.18	3.39%

Considering the L2 scope that could be benchmarked outside of quotations, the benchmark coverage is 88.36%, which is sufficient to have confidence in the benchmark output. The benchmark itself returns a variance of 5.01%, which indicates that the scope estimate costs are 5.01% above the industry standard. In comparison to the total scope however, the benchmarked scope on its own only accounts for 63.01%.

When the additional quotations are considered, the “benchmark” coverage rises to 91.70%. The quotations are considered to have a 0% variance, as they have come directly from the delivery partners and are thus aligned to the industry. As such, the variance is inevitably closer to the benchmark at 3.39%, which indicates the scope estimate costs are in line the benchmark, but slightly less efficient than the industry.

## 4 Conclusion

Overall, the benchmark indicates that the Southern Water costs are 5.01% above the benchmark for 63.01% of the scope. Additionally, there is a large proportion of the cost attributed to quotes which further improves the coverage and reduces the variance. In total, there is a level of cost confidence for 91.70% of the estimate, which returns a variance of 3.39%, indicating that the estimate costs are in line with the benchmark and give confidence in the costs.