**Format**

The Tender is to be written in English, using Arial font, no smaller than 11 point in size. Diagrams may be used and are to be labelled. All attachments submitted by the Tenderer are to be provided in either MS Word or PDF format (unless otherwise stated).

**General**

The SWS business plan details our vision, values and promises, for more information please refer to our website:

https://www.southernwater.co.uk/media/8235/6579_ofwat_company_turnaround_plan.pdf

The SWS response to Ofwat's Determination can be reviewed on the below link. Please ensure you have read this and fully understand prior to responding to the PQQ and if successful, ITT questions.

https://www.ofwat.gov.uk/wp-content/uploads/2019/12/PR19-final-determinations-Southern-Water-final-determination.pdf
Lot 1 Water works and services: £294m; comprising (a) £210m + (b) (£84m x across 3 additional years)

Lot 2 Wastewater works and services: £406m; comprising (a) £290m + (b) (£116m x across 3 additional years)

The scope of the framework is anticipated to be as follows:

- Services across Southern Water's geographical region including Isle Of Wight (IOW).
- This is intended to be used for routine asset replacement works which require limited design, and can be readily packaged and allocated by the Client. The Client has a new framework for providers for Non-Infrastructure works, starting in Q1 2023, but within this Framework procurement is the provision for further providers of for Infrastructure works the 'Infrastructure Framework'.
- Identify and develop options in accordance with the Client's technical and engineering standards for all aspects of Water and Wastewater systems.
- Achieve the required asset performance or customer outcomes by identifying:
- low build or no-build solutions.
- sustainable including low carbon, catchment, and nature-based solutions.
- lowest Totex or Best Value solutions across an agreed Tranche or Programme of works.
- how the solution(s) deliver benefit as measured the Client's Balanced Scorecard, and at an aggregate catchment or system level.

The Contractor shall provide construction management services and expertise including:

- Create, manage and optimise its allocated programmes, including developing programme, tranche and project execution plans as required by the Client.
- Supporting the Client with Pre-construction Enabling Activities.
- Undertaking Construction Enabling Activities (e.g. site surveys, site preparation, streetworks management, including communicating with the customer).
- Preparing all aspects of work delivery planning, including identification of the most cost-efficient civils, mechanical and electrical, and environmental construction resource to deliver the works, for review and acceptance by the Client.
- Work with the client to regularly optimise the specification and procurement of the Client's Standard Asset List, including use of centralised or buying club solutions
- Managing and undertaking construction delivery to the time, cost, quality and risk parameters agreed with the Client,

- Managing and undertaking commissioning and handover according to Client Engineering Standards.

**Question**

Case Study 2 (a separate response for each Lot is required)

Please provide case study no 2 comprising no more than 4 x A4 sides - including any diagrams or pictures and in Arial 11 point font), detailing your experience of a similar scope and scale to the Lot you are responding to and include:

- How the scope is of relevance to Southern Water;
- The scale (value and volume), complexity and scope of the work delivered;
- How the client's requirements, benefits and any value adds were achieved;
- The approach taken to achieve successful delivery;
- How you ensured your client's customers' needs where met through your delivery approach;
- Client contact details (name, organisation, telephone and email address) to verify case study

## Lot 2 – Case study 1 – Yorkshire Water P4Y: Infrastructure Framework

### Relevance of scope to Southern Water

This bespoke framework with a value of £25 million per annum forms a 5-year agreement (April 2010 to March 2025) with the potential to extend by 3 years to April 2028.

The framework involved delivery of planned capital and civil engineering works across waste networks including:

- Developing, managing and optimising allocated programmes, as required by Yorkshire Water.
- Collaborating with Yorkshire Water to manage, support and deliver pre-construction enabling activities, including site surveys, site preparation, streetworks management, and customer communications.
- Preparing all aspects of work delivery planning, selecting most cost-efficient civils, mechanical and electrical requirements, with least environmental impact.
- Collaborating with Yorkshire Water to optimise the specification and procurement of their Standard Asset List.

Examples of projects completed as part of the framework that are similar to those we expect to deliver as part of Lot 1 of the Capital Infrastructure (LCDR) Framework include:

- Hatfield Colliery, Doncaster – stepped excavation works to locate and repair a fractured rising main.
- Hoyle Mill Road, West Yorkshire – investigation and installation of new rising main.
- Market Gate Bridge, South Yorkshire – sewer diversion project.
- Aire Bank Mill, North Yorkshire – emergency sewer repair.
- Combined Sewer Overflows, South and East Yorkshire – rectifying CSO mechanical and electrical faults.

### Scale, complexity and scope of work delivered

This ongoing framework involves delivering projects of varying complexity and value with a diverse range of work scopes including those described below.

| Project | Description |
|---|---|
| Combined Sewer Overflows, South and East Yorkshire | MWS was issued with 24 combined sewer overflows (CSOs) that had been identified as having mechanical and electrical faults, showing 'Screen out of Service'. It was necessary to rectify the faults in the fastest time possible to comply with Environment Agency regulations, which require storm flows to be screened.<br>We were tasked with carrying out surveys and repair and maintenance (electrical and mechanical) works to reinstate the CSOs back into service.<br>Works covering the following commenced in May 2022:<br>• Pre-surveys to understand the site constraints such as access, traffic management and customer impact.<br>• Desk top surveys to gather existing records and data.<br>• Private land notices.<br>• Detailed site surveys and recommendation reports detailing the repairs/faults that needed rectification.<br>• Our sister company, IWJS provided jetting and cleaning services during the survey activity. |

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| | Our work returned 18 CSOs back into service and helped Yorkshire Water maintain Environment Agency compliance. |
| Hatfield Colliery, Doncaster | MWS was contracted to repair a significant failure on a 600-mm cast iron surface water rising main buried 12 metres below ground. The main has been laid in extremely challenging ground conditions through the colliery and runs under the East Coast Main Line railway. Works involved installing temporary pumps and connecting them to the existing automated control systems to mitigate the flows (up to 350 l/s) and carrying out large bulk 12-metre stepped excavation works to locate and repair the fractured rising main.<br>Following the mammoth effort involved to repair the asset, and with risk of future failures, we proposed an alternative way of safeguarding the main using spray lining in the vicinity of the railway and in the sections where the main is at its deepest. |
| Hoyle Mill Road, West Yorkshire | MWS was contracted to install over 415 metres of new rising main following a number of historical bursts. We carried out extensive investigations to assess the location and condition of the main including:<br>• Topographical / cross-section survey of the pipeline route.<br>• Sahara acoustic survey to detect leaks and/or any trapped pockets of gas along the route.<br>• Trial hole excavations to confirm the location, depth and position of the rising main and the ground conditions.<br>• Full circumference pipe samples to confirm the remaining life of the rising main and assess internal and external condition.<br>• Soil samples and soil resistivity surveys to confirm the existing soil mechanics.<br>Following investigations, we recommended replacing the length of main using directional drilling to minimise disruption to the park and water courses. |
| Market Gate Bridge, Barnsley, South Yorkshire | MWS was contracted to divert 56 metres of Section 185 sewer at Market Gate Bridge, as part of a development to install a new footbridge over the railway in Barnsley town centre. Works involved:<br>• Abandonment of 56 metres of existing 375-mm sewer pipe.<br>• Installation of 76 metres of concrete sewer pipe.<br>• Installation of four new manholes.<br>• Abandonment and grouting of the existing pipe and manhole. |
| Aire Bank Mill, Skipton, North Yorkshire | MWS was contracted as Principal Designer and Principal Contractor to carry out emergency sewer repair works following a collapsed weir and sewer running through the river Aire at Gargrave.<br>Works involved abandonment of 161 metres of the existing failed sewer and directionally drilling twinned siphons of 48 metres each. We also installed 146 metres of new pipework and three new manholes, before removing 15 metres of the existing weir and western wing wall. Works were completed under an Environment Agency Flood Risk Activity Permit in low-flow conditions with silt |

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| | management in place, including sediment entrapment mats and staked straw bales. |

## How the client's requirements, benefits and any value adds were achieved

One of our objectives on this framework is to ensure the best whole life cost is achieved on projects, with careful consideration of the needs of key stakeholders. On each project delivered as part of this framework, we have collaborated closely with all relevant stakeholders to meet project requirements, leave a positive legacy in the communities we impact, and help Yorkshire Water achieve its social and environmental commitments.

Our Hatfield Colliery project demonstrates how we work with our clients and stakeholders to reduce disruption and environmental impact – and save time and money.

Drawing on our considerable design and build spray lining experience and accreditation insitu spray lining of sewer pipelines, we proposed the use of a sprayable structural composite lining as a solution to safeguard the 600-mm cast iron surface water rising main following our repair work.

The material used (Axalta's Corroless ACO Wasteseal) is a sprayable structural composite lining and has been formulated as a carbon fibre reinforced, solvent-free and hybrid polyurethane coating. The coating is designed to deliver maximum strength and durability, – even after the original pipe has decayed away. The design life of the coating has been developed to be at least equal to the design life of CIPP liners, typically at least 50 years.

Our delivery team successfully cleaned and spray-lined the rising main under the railway line; navigating the identified 22 ½ and 11 ¼ bends along the pipe and applied a 6-mm coating of Axalta's material.

Use of this technology avoided the complex engineering works that would otherwise be needed to repair any future failures, and the risks associated with carrying out these works in such a critical and complex environment i.e. under the East Coast Main Line railway. We have also significantly increased the asset life, as the material used will remain intact after the original rising main fully deteriorates.

Additional benefits include reducing the environmental impact of future works by avoiding excavation and heavy plant movements, thereby reducing carbon, cost and repair time, and minimising disruption and pollution caused by vehicle movements.

## Our approach taken to achieve successful delivery

### Simple delivery model

Our first step towards achieving successful delivery and providing a positive customer experience was to establish a delivery model that would provide an efficient quality-focused design and delivery service. This simple 'back to basics' contractor delivery model focuses on excellent design and lean construction, which, complimented by our digital capability, provides for swift and timely decision making. This is achieved through the principles of efficient, agile and fast-tracking project management and a team of excellent people.

By fully understanding our client's business plans, we have developed a model built on in-house staff and labour, supported by our aligned supply chain for specialist techniques and peak volumes, which ensures we can provide flexible teams to respond to all requirements.

### Collaborative working

We work collaboratively with Yorkshire Water and our supply chain and attend scheduled meetings throughout the concept, investigation, design, delivery and commissioning phases of each project where we discuss progress, potential issues and any delays to programme.

This allows MWS, Yorkshire Water and other stakeholders to remain focussed on the desired outcome and explore opportunities to deliver alternative and/or innovative solutions that can provide efficiency or cost benefits, or that will provide additional benefits for Yorkshire Water, their customers, the environment and/or the local community.

We co-chair a Clients Engineering Forum periodically through the year where we present our best practice workshops, innovation stand downs and introduce new and standardised products to be trialled, such as spray lining, gel pigging and smart AVs. We also use the forum to collaborate with Yorkshire Water to optimise their Standard Asset List.

Drawing on our established processes and experiences relating to collaborative working, helps us ensure the individual expectations of all stakeholders are achieved or exceeded, and that we continue to deliver excellent cost efficiencies, sound engineering principles, customer outcomes and programme compliance – safeguarding Yorkshire Water' reputation and delivering customer satisfaction.

**Lessons learned**

Each project within the framework has its own lessons to be learned from, and we use these together with those lessons learnt from our many years' experience of delivering in collaborative environments and managing varying expectations of multiple stakeholders.

Our lead design engineers and construction managers regularly meet and discuss any issues encountered during their projects and exchange ideas to resolve problems and prevent recurrence. This includes feedback to Yorkshire Water on issues such as incompatible specifications or new technologies that may alleviate existing problems but which they have not yet considered or approved.

## How we ensured our client's customers' needs where met

At MWS, our clients' customers' needs are at the forefront of our delivery approach. Our Every Customer Counts initiative encourages our employees to place themselves in the customers' shoes throughout the whole process, ensuring they are fully aware of the impact they have on each customer's journey.

We always treat Yorkshire Water's customers with respect, courtesy and honesty and communicate clearly with them when providing timely and accurate information. We ensure all customers are treated as individuals and recognise they each have their own needs and issues. Our approach is tailored to supporting and communicating with them, ensuring we provide the help they need in their daily lives. All our teams and operatives are fully inducted and trained in what we expect of them to help deliver total customer satisfaction.

Our Customer Liaison Officers worked with Yorkshire Water's customer team to agree customer communications, which included setting up drop-ins, visiting customers on site before commencing works, and follow-up meetings whilst works were underway.

Our commitment to delivering customer satisfaction is demonstrated by our approach to customer relations on our Rosmead Street project in Hull. The project involved installing permeable paving to collect and control surface water to reduce the likelihood of flooding. Our team worked closely with St Johns Community Church and local residents to minimise disruption throughout the road closure; providing temporary parking, around the clock security, shopping trollies to transport items to their homes, rearranging bin collections, and arranging access for house moves.

Local children from Estcourt Primary School helped lay the final blocks and residents by helping the team install bird boxes in the green space to encourage more nature into the street too.

## Client contact details for Yorkshire Water P4Y: Infrastructure Framework

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| **Name and organisation** | Brigitte Sorby, Capital Delivery Programme Manager<br>Yorkshire Water, Western House, Halifax Road, Bradford, BD6 2SZ |
| **Telephone and email address** | Brigitte.Sorby@Yorkshirewater.co.uk<br>07790 617394 |