



## **SCHEDULE OF WORK**

### **ATLANTIC HOTEL CSO**

**ST MARY'S  
ISLES OF SCILLY  
for  
COUNCIL OF THE ISLES OF SCILLY**

#### **STRIDE TREGLOWN LTD**

Norbury Court, The Millfields, Plymouth, Devon, PL1 3LL  
+44 1752 202 088

 **Stride Treglown**

#### **James Lockyer Associates Ltd**

Oakland Mews, Liskeard Business Park,  
Liskeard, Cornwall PL14 3UX  
**T: 01579 344771**

  
**CONSULTING ENGINEERS**  
CONSTRUCTIVE ADVICE. CONSIDERED SOLUTIONS

**May 2016  
JLA/4606**

**DOCUMENT RECORD SHEET**

<b>Document Number</b>	<b>JLA/4606</b>
<b>Document Title</b>	<b>ATLANTIC HOTEL CSO ST MARY'S, ISLES OF SCILLY</b>

<b>Rev</b>	<b>Date</b>	<b>Issue/Revision/Description</b>
<b>7</b>	<b>3 January 2016</b>	<b>Tender Document</b>
<b>8</b>	<b>26 May 2015</b>	<b>Tender Document (updated)</b>

<b>Prepared by :</b>	<b>James W Lockyer BSc CEng FICE</b>
<b>Signature:</b>	

<b>SCHEDULE OF WORK</b> Project: <b>Atlantic Outfall &amp; Minor Outfall Works</b> <b>Hugh Town, St Mary's, Isles of Scilly</b> Reference: <b>JLA/4606</b>	<b>SECTION B</b> <b>SCHEDULE OF WORKS</b> £      p
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------

## B10 GENERALLY

### B10/10 THE WORKS:

The Works involve local improvements to the drainage infrastructure serving Hugh Town, St Mary's, Isles of Scilly and include:

- **Reconstruction of the main outfall and FWD overflow on Town Beach at the Atlantic Hotel, including a new flap valve to limit seawater ingress.**
- **Improvements to co-located FWD overflow chamber and screen.**
- **Minor works and repairs to existing outfalls**

THE FOLLOWING ITEMS DESCRIBE THE MAIN ITEMS OF WORK TO BE CARRIED OUT. ALLOW FOR ALL WORKS NECESSARY FOR SATISFACTORY COMPLETION.

### B10/20 DESCRIPTION OF SITE:

The Isles of Scilly lie 28 miles from Lands End. St Mary's is the largest of the islands with the main centres of population being in the main port Hugh Town and in Old Town.

### B10/30 EXISTING FOUL WATER DRAINAGE (FWD) INFRASTRUCTURE:

The mains drainage infrastructure on St Mary's, Isles of Scilly serves the centres of population in Hugh Town and Old Town.

Hugh Town is served by a network of gravity drains, including a low lying branch termed the "Mermaid Run" running from the Mermaid Hotel along Hugh Street to manhole F4, where it joins the town's main sewer that continues to a pumping station located behind the Bishop & Wolf public house (B&W SPS). The pumps discharge into a 200mm diameter CI rising main that carries the raw effluent some 750m around the southern side of The Garrison to a sea outfall at Morning Point Battery.

The Mermaid Run is low lying with a flat gradient, and prone to blockages. It includes a chamber adjacent to the Atlantic hotel which has an overflow into the SWD system. The run meets the main sewer at manhole F4, which has recently been reconstructed to address flow restrictions from poorly swept channels and benching.

### B10/40 EXISTING SURFACE WATER DRAINAGE (SWD) INFRASTRUCTURE:

In Hugh Town mains surface water sheds either to the north to outfalls on Town Beach and Porth Melon, or south to Porth Cressa. The surface water drains are understood to have their origins in a combined sewerage system that served the town prior to the construction of the foul drainage system in the late 1930's. Outfalls onto Town Beach have since been rationalised and intercepted by a carrier drain to a main 450mm diameter outfall at the Atlantic Hotel. This is a combined outfall as it incorporates an overflow from the adjacent "Mermaid Run" foul drain running under the slipway.

<b>SCHEDULE OF WORK</b> Project: <b>Atlantic Outfall &amp; Minor Outfall Works</b> <b>Hugh Town, St Mary's, Isles of Scilly</b> Reference: <b>JLA/4606</b>	<b>SECTION B</b> <b>SCHEDULE OF WORKS</b> £ p
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------

B10/50 CONTRACT DRAWINGS:

Drawing No.	Rev	Title
4606/CB/F/101	D	Hugh Town Foul and Surface Water (Location plan)
4606/CB/F/111	D	Old Town Foul and Surface Water (Location Plan)
4606/CD/300	D	Atlantic Hotel Outfall - Existing
4606/CD/301	F	Atlantic Hotel Outfall - Proposed
4606/CD/302	G	Atlantic Hotel CSO Screening Manhole

THE CONTRACT DRAWINGS will be the same as the tender drawings.

B10/60 PRELIMINARIES:

**Refer to Stride Treglown Contract Preliminaries & Pre-Construction Information (under separate cover).**

Allow for all necessary **PRELIMINARIES** for the Works described, particularly with regard to Management of the Works, and Security, Safety and Protection of the Works.

A10	PROJECT PARTICULARS	
A11	TENDER AND CONTRACT DOCUMENTS	
A12	THE SITE/EXISTING BUILDINGS	
A13	DESCRIPTION OF THE WORK	
A20	THE CONTRACT	
A30	TENDERING/SUBLETTING/SUPPLY	
A31	PROVISION, CONTENT AND USE OF DOCUMENTS	
A32	MANAGEMENT OF THE WORKS	
A33	QUALITY STANDARDS/CONTROL	
A34	SECURITY/SAFETY/PROTECTION	
A35	SPECIFIC LIMITATIONS ON METHOD/SEQUENCE/TIMING	
A36	FACILITIES/TEMPORARY WORK/SERVICES	
A37	OPERATION/MAINTENANCE OF THE FINISHED WORKS	
A40-A44	CONTRACTOR'S GENERAL COST ITEMS	
A54	PROVISIONAL WORK/ITEMS	
	<b>Contingencies</b>	<b>£5,000</b>
A55	DAYWORKS	

<b>SCHEDULE OF WORK</b> Project: <b>Atlantic Outfall &amp; Minor Outfall Works</b> <b>Hugh Town, St Mary's, Isles of Scilly</b> Reference: <b>JLA/4606</b>	<b>SECTION B</b> <b>SCHEDULE OF WORKS</b> £ p
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------

- B10/70 ACCESS:  
The Isles of Scilly are linked to the UK mainland by sea and air. Ferries run between Penzance and Hugh Town, which will be the main route for bringing plant, equipment and materials to St Mary's.
- B10/80 COMPLIANCE WITH CDM  
Allow for complying with the CDM Regulations, and providing on site Welfare Facilities  
Ensure Operatives are briefed to guard against Leptospirosis (Weil's disease) and wear suitable gloves and protective clothing
- B10/90 WORKS IN HIGHWAY AND TRAFFIC MANAGEMENT  
Works in Highways are to be generally in accordance with New Roads and Streetworks Act 1991. The Contractor should allow for all necessary notification and liaison with CIOs and temporary works to maintain traffic flow.  
Traffic management will be arranged in conjunction with CIOs. Plan and agree intended programme of work with CA to enable adequate prior notice to be given to CIOs of the areas where management will be required.  
Provide all necessary guarding and warning signage around the areas of work, and minimise obstructions encroachments into highways and other access routes.
- B10/100 CONFINED SPACE WORKING:  
With the exception of replacement of the flap valve in manhole S1, the works should not require access into enclosed manholes or other confined spaces, which is to be avoided insofar as possible and practical.  
However, to allow for this eventuality the contractor is to have the capability and experience to access confined spaces, taking all necessary precautions for health and safety in accordance with current guidance and legislation.  
Precautions assumed:
- A **Work Team** of competent and adequately trained individuals who may be permitted to enter and carry out work in a confined space, with a designated **Supervisor/Person in Charge**
  - Preparation of a **Risk Assessment** and **Safe System of Work** for each Confined Spaces operation
  - **Emergency arrangements** will be put in place before the works start
  - A **Permit to Work** system will be used for approval prior to entry into Confined Space
- Reference(s): **HSE "Safe Work in Confined Spaces"**  
**Confined Spaces Regulations 1997**  
The Contractor should provide a Risk Assessment and Safety Programme within 7 days of request to clarify arrangements and precautions to be taken, and sequence of proposed activities.
- B10/110 POLLUTION PREVENTION GUIDELINES  
Works should be planned and arranged with due regard to the following Environment Agency Pollution Prevention Guidelines:  
PPG5 Works and maintenance in or near water  
PPG6 Working at construction and demolition sites:
- B10/120 TENDER STAGE METHOD STATEMENT  
Provide a tender stage method statement outlining the proposed approach that will be adopted to complete the required works, and the intended programme and sequence of activities, making due allowance for the site constraints, and for arranging transportation and delivery of plant and equipment to the Island.  
Consideration must be given to enabling and maintaining a safe means of access for the works, and for delivery of materials and removal and disposal of arisings.  
**Describe proposals for maintaining active drainage flows by temporary diversions, stoppers and overpumping or other means.**

<b>JAMES LOCKYER ASSOCIATES LTD</b> <b>4606-SW-Atlantic-Rev8.docx</b>	Page B3	Total carried to Summary _____
--------------------------------------------------------------------------	---------	--------------------------------

<b>SCHEDULE OF WORK</b> Project: <b>Atlantic Outfall &amp; Minor Outfall Works</b> <b>Hugh Town, St Mary's, Isles of Scilly</b> Reference: <b>JLA/4606</b>	<b>SECTION B</b> <b>SCHEDULE OF WORKS</b> £      p
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------

## **B20 RECONSTRUCTION OF ATLANTIC HOTEL OUTFALL**

### **B20/10 GENERALLY:**

The existing outfall is to be taken up and reconstructed generally as detailed on the following drawings with a replacement flap valve

**4606/CD/300**

**Atlantic Hotel Outfall - Existing**

**4606/CD/301**

**Atlantic Hotel Outfall - Proposed**

### **B20/20 PREPARATORY WORK AND TEMPORARY DIVERSIONS**

The existing SWD is active and must be maintained during the works by temporary diversion or overpumping from upstream manholes.

**Allow for associated temporary works and diversions, and describe proposals for maintaining existing flow in Tender Stage Method Statement.**

Allow for carefully loosening and removing manhole cover S1 (routinely cleared, but prone to seizing up).

### **B20/30 REMOVAL OF EXISTING OUTFALL:**

Break up and remove existing concrete encased outfall, and grub up concrete bed. Carefully remove concrete pipework at outlet to manhole S1, minimising disturbance to existing wall and manhole chamber.

Dispose of all arisings.

### **B20/40 CONSTRUCTION OF FOR NEW OUTFALL BASE SLAB:**

Set out new reinforced concrete base slab to falls, including apron at headwall. Excavate to approved formation for new base slab, providing temporary support to beach sands using driven trench sheeting or equivalent support system. Allow for minimum **500mm** thick slab + 50 blinding.

Fix stainless steel reinforcement: A252 mesh (8mm bars @ 200 c/c e/w)  
Grade **316** S33 (marine grade)  
+ 8mm bars (lacers, etc. to close ends)

Bend rebar to suit base slab, bending and cutting as required including into downstand toe, maintaining 75mm cover. Ensure rebar projects above top of slab minimum 600mm to provide lap with rebar to pipe surround. Provide protection to projecting bars.

Place concrete to base slab.

Concrete: Grade RC40/50 (SRPC)  
Maximum 20mm Aggregate size

Alternative designed mixes may be proposed subject to approval and the following: Max w/c ratio 0.4

Minimum cement content 340 kg/m3

Consideration may be given to use of admixtures to achieve accelerated set

### **B20/50 OUTFALL PIPE:**

Place **500 ID** thermoplastic structured wall sewerage pipe to **WIS 4-35-01**, on base, shimming to correct levels to falls.

Temporarily secure in position using rebar until concrete surround is placed.

Drypack with mortar bedding.

Make good pipe entry in manhole S1, and reinstate masonry surround to manhole.

**SCHEDULE OF WORK**

Project: **Atlantic Outfall & Minor Outfall Works**  
**Hugh Town, St Mary's, Isles of Scilly**

Reference: **JLA/4606**

**SECTION B**  
**SCHEDULE OF WORKS**  
**£ p**

**B20/60 CONCRETE SURROUND TO OUTFALL PIPE**  
 Fix reinforcement as detailed, including secondary layer over crown of pipe:  
     A252 mesh (8mm bars @ 200 c/c e/w) Grade 316S33 (marine grade)  
     + 8mm bars (lacers, etc. & to reinforce headwall wings at c. 200 c/c e/w)  
 Erect formwork for concrete surround, headwall and wing walls with c.40 chamfer to all exposed arrises.  
 Place concrete to surround and to form headwall and wing walls.  
 Concrete:     Grade RC40/50 (SRPC)  
                 Maximum 20mm Aggregate size  
 Alternative designed mixes may be proposed subject to approval and the following:     Max w/c ratio     0.4  
                                 Minimum cement content     340 kg/m3  
 Consideration may be given to use of admixtures to achieve accelerated set

**B20/70 CSO TIDAL FLAP VALVE:**  
 Supply and fit 500mm dia. **HPDE/SS tidal flap valve with HDPE ribs** over pipe at headwall suitable for use with a water pressure of 5 MWC for 72 hours using marine grade 316 s/steel fittings in accordance with suppliers installation instructions.

**B20/80 REPLACEMENT FLAP VALVE IN MANHOLE S1**  
 Remove existing metal flap valve from Manhole F18B discharge.  
 Check pipe size for fit (assumed 150 dia.)  
 Supply and fit elastomeric **Duck Bill Check Valve** with marine grade 316 s/steel flange using marine grade 316 s/steel fittings in accordance with suppliers installation instructions.



- Flanged
- Flared Top/Bottom
- Reliable backflow prevention

**B20/90 COMPLETION OF OUTFALL:**  
 Ensure new outfall pipe and manhole S1 are left clear of debris and obstructions. Regrade beach around new outfall.  
 On completion clear all debris from site, remove arisings & leave the site in a clean and tidy condition to the satisfaction of the CA.

<b>SCHEDULE OF WORK</b> Project: <b>Atlantic Outfall &amp; Minor Outfall Works</b> <b>Hugh Town, St Mary's, Isles of Scilly</b> Reference: <b>JLA/4606</b>	<b>SECTION B</b> <b>SCHEDULE OF WORKS</b> £      p
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------

### B30 IMPROVEMENTS TO FWD OVERFLOW CHAMBER

#### B30/10 GENERALLY:

The existing manhole is to be reconstructed and replaced with a new larger manhole sized to suit the installation of a non-powered upward flow hydro-static CSO screen, and provided with a new accessible cover generally as detailed on the following drawings:

<b>4606/CD/300</b>	<b>Atlantic Hotel Outfall – Existing (Location)</b>
<b>4606/CD/302</b>	<b>Atlantic Hotel Screening Manhole</b>

#### B30/20 PREPARATORY WORK AND TEMPORARY DIVERSIONS:

The existing FWD is active and flow must be maintained during the works. Where necessary allow for temporary stoppers and overpumping from upstream manhole.

Cut to fit and place temporary cover over FWD running through manhole to prevent debris being dropped into invert.

#### B30/30 CONSTRUCTION OF NEW MANHOLE:

Remove cover and frame, and cover slab to fully open up chamber. Carefully break out existing walls of manhole and base slab, maintaining existing channel invert unless overpumping is used to maintain flow.

Construct new manhole generally as detailed, internal size nominally 1600mm x 900mm **to suit installation of proprietary static CSO screen**, with GEN3 concrete base slab and 225mm thick masonry walls.

Integrate and coordinate installation of s/steel support spill weir plate to be provided as part of the CSO screen and install to required levels as detailed.

*NOTE: all dimensions to be checked for compatibility with the site, the existing drains and the proposed screen installation and fixings.*

**Note that the manhole chamber has been detailed and dimensioned to suit a proprietary upflow static screen with weir overflow. Alternative supplier's screens may be proposed subject to meeting the performance requirements for the screen (see B30/40), which might necessitate amendments to the chamber's size and configuration, and the cover and frame. It is suggested that the proprietary screen be obtained before construction of the new chamber to ensure the chamber is built to fit. Allow for all associated costs required to construct the chamber, cover and frame to suit the proprietary screen and overflow.**

Form new benched FWD channel invert.

Reinstate 150 dia drain discharging to manhole S1, and bench outgoing channel.

Install 50mm dia duct through chamber walls as detailed for level sensing alarm installation (**see B30/60**). Provide swept bend and connection to 25mm marine grade s/steel tube duct fixed to adjacent wall of Atlantic Hotel with non-corrosive fittings. Continue duct to +3m above slipway.

Reinstate cobbled surfaces of slipway where disturbed.

Remove and dispose of all arisings.

<b>JAMES LOCKYER ASSOCIATES LTD</b> <b>4606-SW-Atlantic-Rev8.docx</b>	Page <b>B6</b>	Total carried to Summary _____
--------------------------------------------------------------------------	----------------	--------------------------------



<b>SCHEDULE OF WORK</b> Project: <b>Atlantic Outfall &amp; Minor Outfall Works</b> <b>Hugh Town, St Mary's, Isles of Scilly</b> Reference: <b>JLA/4606</b>	<b>SECTION B</b> <b>SCHEDULE OF WORKS</b> £      p
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------

B30/40 CSO SCREEN  
Design, supply and fit non-powered upward flow CSO Screen with weir overflow to fit and be incorporated within the CSO chamber.

**Performance Objectives & Requirements**

To provide **6mm** screening or better to retain aesthetically offensive material and gross solids at all states of flow up to the peak storm flow with the material being retained in the foul sewer during and after a storm event.

The screen is to require minimal maintenance, have a low head requirement and require no power.

Screen to be sized to suit peak flow design of **60 l/s**, with design based on industry standard loadings of 75 l/s/m<sup>2</sup> with 50% blinded screen to provide a designed headloss of less than 60mm.

The screen is to be provided with a quick release system to allow removal of mesh panel from the chamber to clean and to gain access to the chamber below, and is to incorporate flow modifying baffles and an emergency upstand spill weir relief to cater for the screen becoming 100% blinded or incoming flow exceeding design parameters.

**Provide details of proposed screen and supplier with tender.**

**Allow for on-costs and charges on supplier and ensure construction of chamber is coordinated with screen for fit.**

**Full details of suppliers proposals to meet the performance requirements are to be submitted for review and approval prior to procurement and construction, including fabrication drawings, details of screen and overflow weir, and construction details of chamber.**

B30/50 NEW COVER AND FRAME TO MANHOLE  
Supply and fit new rectangular cover and frame to manhole to provide full access to chamber for maintenance, to suit internal plan size of new chamber.

**Clear opening size 1600mm x 900mm – provisional, see below.**

**Note that changes to the chamber size to suit particular proprietary screens may necessitate a different sized cover and frame. Allow for all costs associated with providing a cover and frame meeting the performance requirements to suit as-built chamber dimensions.**

**Performance Requirements**

- Twin leaf flush fit solid top hinged cover system for use in trafficked areas.
- Load Class **C250**
- STANDARD PRODUCT FEATURES
- Twin leaf flush fitting solid chequer plate top.
- Holding down anchor points for secure location of frame.
- Hidden hinges – protected from vehicle loadings/ingress of grit, etc.
- Sealing strip underside cover for odour control.
- Torsion sprung lids for single person operation.
- Hand operated auto safety stay.
- Recessed padlock with anti-trip cover plate.
- Semi fixed integral weather bar at cover joint for extra frame rigidity.
- Non-sequential opening (any cover opened independently).
- Turn-catch locking / BSI sealed lifting keyholes.
- Hot dip galvanised after manufacture to BS EN ISO 1461.

Allow for building up existing walls of chamber to suit new frame and ensure cover level ties into existing levels.

Apply liberal coating of grease over moving parts and seals

**Provide details of proposed screen meeting above performance requirements for review and approval prior to procurement and construction**

<b>JAMES LOCKYER ASSOCIATES LTD</b> <b>4606-SW-Atlantic-Rev8.docx</b>	<b>Page B7</b>	<b>Total carried to Summary</b> _____
--------------------------------------------------------------------------	----------------	---------------------------------------

**SCHEDULE OF WORK**

Project: **Atlantic Outfall & Minor Outfall Works**  
**Hugh Town, St Mary's, Isles of Scilly**

Reference: **JLA/4606**

**SECTION B**  
**SCHEDULE OF WORKS**  
**£ p**

**B30/60 MONITORING AND ALARM SYSTEM**

Supply and install monitoring system to provide "Event Duration Monitoring" (EDM) of the CSO.

This is to be achieved by installing 2 Nr. battery powered sensors in the screening chamber, one set to low level alert to detect an increase in level of effluent within the chamber, the other high level sensor set to alarm when effluent reaches and passes over the level of the spill weir.

An accompanying battery powered flashing beacon kit is to be provided adjacent to the chamber fixed to the wall of the Atlantic Hotel to operate and warn when the low level alert is triggered.

Trigger signals from the sensors will be relayed wirelessly by radio signal to the Bishop & Wolf Sewage Pumping Station (SPS) where a gateway receiver is to be provided with a volts free interface to an existing Trend iQ3 control panel to allow remote monitoring.

System Components

Obtain system components from specialist supplier.

Design stage proposals for the system components have been received from the following supplier:

**Radio Data Networks Ltd** or equivalent RDN reference: **RDN15005-rev 1**

The Innovation Farm, Sawbridge Road, Little Hallingbury, Bishops Stortford  
Herts CM 22 7QU Tel: 01279 600 440 (Brian Back)

Components:

- 1 x Dual BDT Transducers c/w 4m cable including stainless steel mounting bracket
- 1 x Dual Battery powered booster/repeater with 5-minute wakeup reporting cycle
- 1 x Gateway Receiver 4-slot complete with:  
230V mains power supply  
2 x BDT relay output  
1 x Antenna and Mounting Pole
- 1 x Flashing Beacon Kit comprising:  
Spatial diversity receiver UHF to pick up signals from BDT or FDT  
IP65 wall / pole mounting box & universal mounting bracket

**Check costed proposal for currency**

**Alternative/equivalent suppliers may be proposed.**

Installation and Commissioning

Arrange for and employ **Trend accredited** specialist contractor to install and commission system who will:

- Install and set up the sensors and set the levels
  - Install and set up the flashing beacon kit
  - Install and set up the antennae on mounting pole at the SPS
  - Install the Gateway receiver in the SPS and provide a power supply
  - Connect the receiver to the existing Trend iQ3 controller
  - Commission installation to ensure full function and allow remote monitoring
- Specialist contractor (installed existing Trend iQ3 controller and SPS pump monitoring system): **Teekay Controls Ltd**

Heather Bank, Whitesmock Meadow, Boscastle PL35 0AS

Tel: 01840 250 099 (Trevor Kinslow)

**Alternative/equivalent suppliers may be proposed, but must be Trend accredited due to need to work on installed Trend system controls.**

Allow for attendance, support and BWIC for specialist contractor including:

- Providing access to chamber and fixing of transducers to chamber walls with non-ferrous (s/steel) fixings (plug and screw type)
- Fixing IP65 boxes in position to wall of Atlantic Hotel above screening chamber using non-ferrous fixings
- Fixing antennae mounting pole to wall of SPS with non-ferrous fixings and fixing antennae in position

**SCHEDULE OF WORK**

Project: **Atlantic Outfall & Minor Outfall Works**  
**Hugh Town, St Mary's, Isles of Scilly**

Reference: **JLA/4606**

**SECTION B**  
**SCHEDULE OF WORKS**  
**£      p**

**B40      OTHER WORKS****B40/10      FLAP VALVE TO FWD OVERFLOW ON MERMAID RUN**

An existing 150mm drain runs from a manhole in the rear yard of the Mermaid Inn (between manhole 10C & D) to outfall through a masonry wall onto town Beach, and provides an emergency means of overflow discharge if sewage backs up the Mermaid Run.

The location is indicated on the following drawing:

**4606/CB/F/101      Hugh Town Foul & Surface Water (location)**



Supply and fit slip-on Duckbill check valve over pipe at outlet in accordance with suppliers installation instructions.

Compression clamps to be in marine grade 316 s/steel



- Slip-on
- Flared Top/Bottom
- Reliable backflow prevention
- 100% elastomer construction

**SCHEDULE OF WORK**

Project: **Atlantic Outfall & Minor Outfall Works**  
**Hugh Town, St Mary's, Isles of Scilly**

Reference: **JLA/4606**

**SECTION B**  
**SCHEDULE OF WORKS**  
 £ p

**B40/30 OLD TOWN MAIN SURFACE WATER OUTFALL**

The main outfall onto Old Town beach is a 300mm dia. concrete encased pipe with a headwall and flap valve.

The section of pipe immediately behind the headwall has been storm damaged and broken.

The location is indicated on the following drawing:

**4606/CB/F/111 Old Town Foul & Surface Water (location)**



Remove boulders sitting on top of crushed pipe behind headwall.

Carefully cut back and trim concrete encasement sufficient to allow section of pipe behind headwall to be cut out – allow for removal of 2m length of encasement and pipe.

Prepare base and lay in new section of pipe, complete with flexible connectors.

Provide formwork and reinstate concrete encasement with chamfered arises

Concrete generally as specified for reconstruction of Atlantic Hotel outfall.

***Details for reinstatement of outfall to be reviewed and agreed with CA.***

Carefully place boulders over reinstated concrete.

Clear accumulation of cobbles, etc. from around headwall and flap valve and ensure valve is free to operate.

**B50 COMPLETION****B50/10 GROUNDS REINSTATEMENT AND SITE CLEARANCE:**

On completion clear all debris from sites and working areas, remove arisings & leave all the sites in a clean and tidy condition to the satisfaction of the CA.

<b>SCHEDULE OF WORK</b> Project: <b>Atlantic Outfall &amp; Minor Outfall Works</b> <b>Hugh Town, St Mary's, Isles of Scilly</b> Reference: <b>JLA/4606</b>	<b>SECTION C</b> <b>SUMMARY OF TENDER</b> £      p
---------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------

	AMOUNT (£   p)
<b>B-THE WORKS</b>	
<b>Page B1</b>	
<b>Page B2</b> <b>including Preliminaries Generally</b> <b>Contractors General Cost Items</b> <b>Provisional Sums &amp; Contingencies</b> Refer also to Stride Treglown Preliminaries & PCI (Separate documents)	
<b>Page B3</b>	
<b>Page B4</b>	
<b>Page B5</b>	
<b>Page B6</b>	
<b>Page B7</b>	
<b>Page B8</b>	
<b>Page B9</b>	
<b>Page B10</b>	
<b>Page B11</b>	
<b>TOTAL FOR TENDER</b>	<b>£</b>

PRICES IN THIS TENDER ARE TO INCLUDE ALL PROFIT AND OVERHEADS AND ARE NOT TO INCLUDE VAT.

<b>NAME OF TENDERER</b>	
-------------------------	--

<b>SCHEDULE OF DAYWORKS RATES</b>		
The following rates will apply to those hours worked when dayworks are directed. Any necessary standing time, travelling time, etc. is to be included in rates together with all overheads and profit and supervision.		
<b>LABOUR</b>		
Tradesman	Gross rate/hour	£
Operative	Gross rate/hour	£
<b>MATERIALS</b>	Percentage to be added to invoiced amounts	%
<b>PLANT</b>	Percentage to be added to invoiced amounts	%

**APPENDIX A**

<b>Drawing No.</b>	<b>Rev</b>	<b>Title</b>
4606/CB/F/101	D	Hugh Town Foul and Surface Water (Location plan)
4606/CB/F/111	D	Old Town Foul and Surface Water (Location Plan)
4606/CD/300	D	Atlantic Hotel Outfall - Existing
4606/CD/301	F	Atlantic Hotel Outfall - Proposed
4606/CD/302	G	Atlantic Hotel CSO Screening Manhole