Lines 1-6 Mains

Mains laying

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Crossings of all types	√	✓
Reinstatement costs (temporary and permanent)	✓	✓
Granular fill in trench (surface type categories 'b' and 'c' only)	✓	✓
Disposal of excavated material to landfill tip 1km away	✓	✓
Excavation	✓	✓
As dug backfill (surface type categories 'a' only)	✓	✓
Pipe bedding and surround	✓	✓
hinor service diversions	✓	х
Traffic management (surface type categories 'b' and 'c' only)	✓	✓
NRSWA costs	✓	✓
Advance costs – land	✓	✓
Advance costs – wayleaves	✓	✓
Landfill tax (non contaminated material only)	✓	✓
Uncharted services \ other underground obstructions	Х	х
Connections to trunk mains	Х	х
Proving and testing	✓	✓
Temporary fencing (grassland only, other than required for safety regulations)	Х	х
Land drains (grassland only)	х	х
Re-connection of services	Х	х
Fittings and fixtures (in accordance with Table 4)	×	√
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	√	✓
Project design and supervision \ Project management	√	✓
Project quality audit	√	✓
Contractual claims	✓	✓
Compensation	x	х
Overheads on stores	√	✓
Commissioning	✓	✓
Tender\outturn margin	✓	✓
Contingencies or general adjustments	✓	√
Public meetings	X	х
Customer communication	X	х
Special inducements	X	х
Effect of seasonal working	X	х
Effect of limited working hours	Х	х

Lines 6a-6c Mai

Mains laying by directional drilling

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Crossings of all types	X 🗸	× √
Reinstatement costs (to match the existing surface)	✓ ✓	×
Excavation and backfill (at entry and exit pits)	✓	×
Disposal of excavated material to landfill tip 1km away	· · · · · · · · · · · · · · · · · · ·	~
Minor service diversions	✓	х
Traffic management (at entry and exit pits)	√	√
NRSWA costs	√	√
Advance costs – land	√	√
Advance costs – wayleaves	√	\checkmark
Landfill tax (non contaminated material only)	√	√
Uncharted services \ other underground obstructions	х	х
Connections to trunk mains	х	х
Proving and testing	√	√
Temporary fencing (at entry and exit pits, other than required for safety regulations)	х	х
Re-connection of services	х	х
Fittings and fixtures (in accordance with Table 4)	√	\checkmark
Overpumping	х	х
Maintaining flows	x	х
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	\checkmark	✓
Project design and supervision \ Project management	✓	√
Project quality audit	✓	√
Contractual claims	√	√
Compensation	х	х
Overheads on stores	√	✓
Commissioning	√	\checkmark
Tender/outturn margin	√	\checkmark
Contingencies or general adjustments	✓	\checkmark
Public meetings	Х	х
Customer communication	Х	х
Special inducements	Х	х
Effect of seasonal working	Х	х

Effect of limited working hours x x				
	Effect of limi	working hours	х	x

Lines 7-12

Mains rehabilitation

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Crossings of all types	√	✓
Reinstatement costs (to match the existing surface)	√	✓
Excavation and backfill	✓	√
Disposal of excavated material to landfill tip 1km away	√	✓
Traffic management	√	✓
NRSWA costs	√	✓
Advance costs – wayleaves	х	✓
Landfill tax (non contaminated material only)	✓	√
Connections to trunk mains (temporary and permanent)	✓	х
Proving and testing	✓	√
Re-connection of services	х	х
Fittings & fixtures (in accordance with Table 4)	√	✓
Protective sleeve (in pipe bursting)	x	X
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	✓
Project design and supervision \ Project management	✓	✓
Project quality audit	✓	✓
Contractual claims	√	✓
Compensation	х	х
Overheads on stores	√	√
Commissioning	√	√
Tender/outturn margin	√	✓
Contingencies or general adjustments	\checkmark	✓
Public meetings	X	х
Customer communication	х	х
Special inducements	X	х
Effect of seasonal working	X	х
Effect of limited working hours	Х	х

Lines 13-14

Communication pipes

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Crossings of all types	✓	✓
Reinstatement costs (renew only to match the existing surface)	√	✓
Excavation and backfill	√	✓
Disposal of excavated material to landfill tip 1km away	\checkmark	√
Traffic management (renew only)	✓	✓
NRSWA costs (renew only)	✓	✓
Landfill tax (non contaminated material only)	✓	✓
Connections to trunk mains (temporary and permanent)	х	х
Boundary box	✓	✓
Water sampling	Х	х
Re-connection of services	✓	✓
Fittings and fixtures (ferrule and stop tap)	✓	✓
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	✓ ✓
Project design and supervision \ Project management	✓	✓
Project quality audit	✓	✓
Contractual claims	✓	✓
Compensation	X	х
Overheads on stores	√	✓
Commissioning	✓	✓
Tender/outturn margin	√	✓
Contingencies or general adjustments	✓	✓
Public meetings	X	х
Customer communication	Х	х
Special inducements	X	Х
Effect of seasonal working	Х	Х
Effect of limited working hours	Х	Х

Lines 15-16

Household meters

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Full cost of meter (manually read type)	\checkmark	✓
Survey (for internal meters – include the costs associated with abortive house visits)	✓	✓
Installation	✓	✓
Boundary box (unsealed type – for external meters including boundary box)	✓	✓
Fittings	\checkmark	✓
Demolition \ removal of existing boundary box (for renewal of external meters including boundary box)	x	Х
Reinstatement costs (for external meters including boundary box only – to match the existing surface)	\checkmark	✓
Excavation and backfill (for external meters including boundary box)	\checkmark	✓
Disposal of excavated material to landfill tip 1km away	\checkmark	✓
Landfill tax (for external meters including boundary box only – non contaminated material only)	\checkmark	✓
NRSWA costs (for external meters including boundary box)	\checkmark	✓
Digital external meter outreaders (for internal meters)	×	х
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	✓
Project design and supervision \ Project management	\checkmark	\checkmark
Project quality audit	\checkmark	\checkmark
Contractual claims	\checkmark	\checkmark
Compensation	Х	Х
Overheads on stores	\checkmark	\checkmark
Commissioning	\checkmark	\checkmark
Tender\outturn margin	\checkmark	\checkmark
Contingencies or general adjustments	\checkmark	\checkmark
Public meetings	x	Х
Customer communication	\checkmark	Х
Special inducements	Х	х
Effect of seasonal working	Х	х
Effect of limited working hours	х	х

Lines 1-6 Sewer laying Include in Scottish Water STANDARD COST ASSUMPTIONS Standard Cost audit LABOUR AND PLANT Crossings of all types ~ ~ Reinstatement costs (temporary and permanent) √ \checkmark Granular fill in trench (surface type categories 'b' and 'c' only) ~ ~ Disposal of excavated material to landfill tip 1km away √ 1 Excavation √ 1 As dug backfill (surface type category 'a' only) ~ ~ Pipe bedding and surround ~ ~ Minor service diversions √ \checkmark Traffic management (surface type categories 'b' and 'c' only) \checkmark \checkmark NRSWA costs ~ ~ Advance costs - land √ \checkmark Advance costs - wayleaves ✓ ~ Landfill tax (non contaminated material only) ~ ~ Uncharted services \ other underground obstructions х х Disconnection and re-connection of laterals х х Proving and testing \checkmark \checkmark Temporary fencing (grassland only, other than required for safety regulations) х х Land drains (grassland only) х х Overpumping х х Cleaning by jetting only х х CCTV inspection after installation ~ ~ MANAGEMENT COSTS \checkmark Company overheads, programme management, project management, incentive payments ~ Project design and supervision \ Project management ~ ~ Project quality audit ~ ~ Contractual claims √ \checkmark Compensation х х Overheads on stores ~ ~ Commissioning ~ ~ Tender\outturn margin ~ ✓ Contingencies or general adjustments ~ ~ Public meetings х х Customer communication х х Special inducements х х

Effect of seasonal working	х	х
Effect of limited working hours	Х	Х

Lines 6a-b

Sewer laying by pipe jacking or microtunnelling

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Crossings of all types		
	×	×
Reinstatement costs (temporary and permanent) Excavation and backfill (at thrust and reception pits)	· · · · · · · · · · · · · · · · · · ·	✓ ✓
	· · · · · · · · · · · · · · · · · · ·	✓ ✓
Disposal of excavated material to landfill tip 1km away		
Service diversions at thrust and reception pits	× 🗸	X
Traffic management (at thrust and reception pits)		✓
NRSWA costs	✓ 	✓
Advance costs – land	✓	✓ ✓
Advance costs – wayleaves	✓	✓
Landfill tax (non contaminated material only)	√	✓
Uncharted services \ other underground obstructions	X	Х
Proving and testing	✓	~
Temporary fencing / hoardings (thrust and reception pits, other than required for safety regulations)	X	х
Overpumping / maintaining flows	Х	х
Cleaning by jetting only	х	х
CCTV inspection after installation	\checkmark	√
Connection of laterals	х	х
Backdrops, vortex drops, vent poles	x	х
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	√
Project design and supervision \ Project management	✓	√
Project quality audit	√	✓
Contractual claims	√	✓
Compensation	x	х
Overheads on stores	√	✓
Commissioning	\checkmark	✓
Tender/outturn margin	✓	✓
Contingencies or general adjustments	√	✓
Public meetings	x	х
Customer communication	X	X
Special inducements	x	X
Effect of seasonal working	×	x
Effect of limited working hours	×	x

Lines 7-12

Sewer rehabilitation

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Crossings of all types	✓	x
Reinstatement costs (to match the existing surface)	· · · · · · · · · · · · · · · · · · ·	X
Excavation and backfill	· · · · · · · · · · · · · · · · · · ·	X
Disposal of excavated material to landfill tip 1km away	` · · · · · · · · · · · · · · · · ·	x
Traffic management	√	× √
NRSWA costs	√	✓
Advance costs – wayleaves	X	х
Landfill tax (non contaminated material only)	^ ````````````````````````````````	X
Proving and testing	✓	√
Opening and remaking of lateral connections	✓	✓
Laterals and manhole spacing in accordance with specification in definitions	✓	✓
Protective sleeve (in pipe bursting)	x	Х
Cleaning by jetting only	✓	✓
CCTV inspection before and after rehabilitation	\checkmark	√
Repair and re-rounding	х	х
Overpumping	✓	✓
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	√	✓
Project design and supervision \ Project management	√	✓
Project quality audit	✓	√
Contractual claims	√	✓
Compensation	Х	х
Overheads on stores	✓	\checkmark
Commissioning	✓	✓
Tender/outturn margin	\checkmark	\checkmark
Contingencies or general adjustments	\checkmark	\checkmark
Public meetings	х	х
Customer communication	Х	х
Special inducements	Х	х
Effect of seasonal working	X	х

Effect of limited working hours	Х	Х

Line 13

Construction of a self-contained pumping unit to isolate a domestic property

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
MECHANICAL EQUIPMENT		
Supply self-contained duplex pumping units with integral collecting tank, controls and non-return valve	✓	✓
Supply control panel in wall mounted weatherproof housing	✓	✓
Supply basic telemetry outstation equipment	x	✓
Power, control, instrument cabling	<i>√</i>	√
Supply and install generator socket	Х	Х
LABOUR AND PLANT		
Reinstatement costs (temporary and permanent)	✓	√
Granular fill in trench (surface type categories 'b' and 'c' only)	✓	✓
Disposal of excavated material to landfill tip 1km away	✓	√
Excavation and backfill	✓	✓
As dug backfill (surface type category 'a' only)	✓	✓
Pipe bedding and surround	✓	✓
Minor service diversions	х	х
Traffic management (surface type categories 'b' and 'c' only)	х	х
NRSWA costs	✓	✓
Advance costs – land	х	х
Advance costs – wayleaves	✓	√
Landfill tax (non contaminated material only)	х	х
Uncharted services \ other underground obstructions	х	х
Proving and testing	✓	√
Reconnection to the existing system	х	х
Sealing old connection to the existing system	✓	x
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	✓
Project design and supervision \ Project management	✓	✓
Project quality audit	✓	√
Contractual claims	✓	√
Compensation	X	х
Overheads on stores	✓	х
Commissioning	✓	✓
Tender/outturn margin	✓	√

Contingencies or general adjustments	\checkmark	х
Public meetings	х	х
Customer communication	х	х
Special inducements	х	х
Effect of seasonal working	х	х
Effect of limited working hours	х	Х

Standard cost from PR99 Information Requirement G 060498; Table G5, Line 1

Line 1

New treatment works type SW1, output 12MI/d

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Insert main stages		
Flocculation		
		✓
Rapid gravity filtration Chlorination	x	✓ ✓
Chemical Dosing	X	•
Sludge Storage		
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	✓	✓
Power, control, instrument cabling	✓	√
Instruments (level, flow, pressure, water quality, etc)	✓	√
Control panels (including local control PLC, works PLC, works SCADA)	✓	✓
Telemetry outstation equipment	✓	✓
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	✓	✓
Standby generators and associated switchgear	X	√
BUILDINGS		
Administration and control building	✓	√
Building over flocculator units (if applicable)	✓	✓
Building over flotation units (if applicable)	√	✓
Filter building including upper filter gallery	√	✓
Chemical storage and dosing building	√	✓
Dirty backwash water return pump building	✓	√
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	✓
Project design and supervision \ Project management	√	√
Project quality audit	✓	√

Contractual claims	✓	✓
Compensation	х	х
Overheads on stores	√	х
Commissioning	√	✓
Tender\outturn margin	√	✓
Contingencies or general adjustments	✓	х
Public meetings	х	х
Customer communication	х	х
Special inducements	х	х
Effect of seasonal working	х	х
Effect of limited working hours	х	х

Standard cost from PR99 Information Requirement G 060498; Table G5, Line 2

Line 2

New treatment works type SW1, output 5MI/d

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Insert main stages		
Coagulation		
Rapid gravity filtration	x	✓
Chlorination	× ×	· · ·
Chemical Dosing	^	
Sludge Storage		
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	\checkmark	\checkmark
Power, control, instrument cabling	✓	✓
Instruments (level, flow, pressure, water quality, etc)	✓	√
Control panels (including local control PLC, works PLC, works SCADA)	✓	√
Telemetry outstation equipment	✓	√
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	✓	√
Standby generators and associated switchgear	X	✓
BUILDINGS		
Administration and control building	✓	√
Building over flocculator units (if applicable)	✓	√
Building over flotation units (if applicable)	✓	√
Filter building including upper filter gallery	✓	√
Chemical storage and dosing building	√	✓
Dirty backwash water return pump building	✓	\checkmark
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	√	✓
Project design and supervision \ Project management	✓	\checkmark

Project quality audit	\checkmark	\checkmark
Contractual claims	\checkmark	\checkmark
Compensation	Х	х
Overheads on stores	\checkmark	х
Commissioning	\checkmark	\checkmark
Tender\outturn margin	\checkmark	\checkmark
Contingencies or general adjustments	\checkmark	х
Public meetings	Х	х
Customer communication	Х	х
Special inducements	Х	х
Effect of seasonal working	Х	х
Effect of limited working hours	Х	Х

Line 3

New treatment works type SW2, output 30MI/d

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Insert main stages		
Coagulation		
Clarification		
Rapid gravity filtration		
Chlorination		
Chemical Dosing		
Sludge Storage		
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	\checkmark	\checkmark
Power, control, instrument cabling	\checkmark	✓
Instruments (level, flow, pressure, water quality, etc)	\checkmark	\checkmark
Control panels (including local control PLC, works PLC, works SCADA)	✓	✓
Telemetry outstation equipment	✓	✓
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance).	✓	✓
Standby generators and associated switchgear	X	✓
BUILDINGS		
Administration and control building	✓	✓
Building over flocculator units (if applicable)	~	~
Building over flotation units (if applicable)	√	✓
Filter building including upper filter gallery	✓	√
Chemical storage and dosing building	✓	√
Dirty backwash water return pump building	✓	✓
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	√	✓
Project design and supervision \ Project management	✓	✓
Project quality audit	✓	✓
Contractual claims	√	✓
Compensation	x	х

Overheads on stores	✓	Х
Commissioning	√	√
Tender\outturn margin	√	√
Contingencies or general adjustments	√	х
Public meetings	х	х
Customer communication	х	х
Special inducements	х	х
Effect of seasonal working	х	х
Effect of limited working hours	Х	Х

Line 3a

Alterations to water treatment works type SW2, output 30MI/d

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Insert main stages Ultra filtration		
Chemical Dosing		
ELECTRICAL EQUIPMENT		
Motor control centres including incomer / isolator / local distribution	✓	✓
Power, control, instrument cabling	· · · · · · · · · · · · · · · · · · ·	✓ ✓
Instruments (level, flow, pressure, water quality, etc)	¥	✓ ✓
Control panels (including local control PLC, works PLC, works SCADA)		· ·
Telemetry outstation equipment	· · · · · · · · · · · · · · · · · · ·	· · ·
Building services (lighting, power, heating, ventilation, telephones, intruder/fire alarm, entry control & surveillance)	· · · · · · · · · · · · · · · · · · ·	· · ·
Standby generators and associated switchgear	X	x
	^	^
BUILDINGS		
Chemical storage and dosing building (if applicable)	\checkmark	✓
Dirty backwash water return pump building (if applicable)	\checkmark	\checkmark
Building to house the process	✓	✓
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	✓
Project design and supervision	\checkmark	\checkmark
Project quality audit	\checkmark	✓
Contractual claims	✓	✓
Compensation	X	Х
Overheads on stores	✓	Х
Commissioning	✓	✓
Tender/outturn margin	✓	✓
Contingencies or general adjustments	✓	х
Public meetings	х	х
Customer communication	x	х
Special inducements	X	Х
Effect of seasonal working	X	Х
Effect of limited working hours	X	х

Not an Ofwat standard cost

Line 4

New filtration system at treatment works type SW2, output 10MI/d

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Insert main stages		
Rapid gravity filtration		
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	✓	✓
Power, control, instrument cabling	√	✓
Instruments (level, flow, pressure, water quality, etc)	✓ ✓	✓
Control panels (including local control PLC, works PLC, works SCADA)	✓ ✓	✓
Telemetry outstation equipment	✓	 ✓
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	✓	\checkmark
Standby generators and associated switchgear	X	X
BUILDINGS		
Filter building (pump and blower room, switchgear room) including upper filter gallery	✓	✓
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	\checkmark
Project design and supervision \ Project management	✓	✓
Project quality audit	✓	√
Contractual claims	\checkmark	\checkmark
Compensation	х	х
Overheads on stores	\checkmark	х
Commissioning	✓	✓
Tender/outturn margin	✓	✓
Contingencies or general adjustments	√	х
Public meetings	Х	Х
Customer communication	x	Х

Special inducements	Х	Х
Effect of seasonal working	х	х
Effect of limited working hours	x	х

Line 5	Replacement filtration system at an existing water treatment works type SW2, output
	30MI/d

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Insert main stages		
Rapid gravity filtration		
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	✓	√
Power, control, instrument cabling	✓	√
Instruments (level, flow, pressure, water quality, etc)	✓	√
Control panels (including local control PLC, works PLC, works SCADA)	✓	√
Telemetry outstation equipment	✓	Х
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	\checkmark	\checkmark
Standby generators and associated switchgear	Х	х
BUILDINGS		
Filter building (pump and blower room, switchgear room) including upper filter gallery	✓	√
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	✓
Project design and supervision \ Project management	✓	✓
Project quality audit	✓	\checkmark
Contractual claims	✓	\checkmark
Compensation	Х	х
Overheads on stores	√	Х
Commissioning	√	√
Tender/outturn margin	√	√
Contingencies or general adjustments	\checkmark	х
Public meetings	Х	х
Customer communication	Х	х
Special inducements	x	Х

Effect of seasonal working	Х	Х
Effect of limited working hours	Х	Х

Line 5a	Fitting new plumbosolvency control to existing abstraction borehole treatment works with
	simple disinfection only, output 8MI/d

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Insert main stages		
Orthophosphoric Dosing		
ELECTRICAL EQUIPMENT		
Motor control centres including incomer / isolator / local distribution	\checkmark	\checkmark
Power, control, instrument cabling	\checkmark	\checkmark
Instruments (level, flow, pressure, water quality, etc)	\checkmark	\checkmark
Control panels (including local control PLC, works PLC, works SCADA)	\checkmark	\checkmark
Telemetry outstation equipment	\checkmark	\checkmark
Building services (lighting, power, heating, ventilation, telephones, intruder/fire alarm, entry control & surveillance)	\checkmark	✓
Standby generators and associated switchgear	x	x
BUILDINGS		
Switchgear and dosing building	√	✓
Building to store dosing chemicals	√	✓
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	✓
Project design and supervision	\checkmark	✓
Project quality audit	\checkmark	✓
Contractual claims	✓	√
Compensation	х	х
Overheads on stores	✓	х
Commissioning	√	✓
Tender/outturn margin	√	√
Contingencies or general adjustments	✓	х
Public meetings	х	х
Customer communication	х	х
Special inducements	х	Х
Effect of seasonal working	х	Х
Effect of limited working hours	х	х

Line 5b Installation of a nitrate removal plant at a borehole treatment works with simple disinfection only, output 10MI/d

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
DD00F20		
PROCESS		
Insert main stages		
State the capacity of the nitrate removal system and maximum nitrate concentration		
SW do not carry out this type of work		
ELECTRICAL EQUIPMENT		
Motor control centres including incomer / isolator / local distribution	✓	
Power, control, instrument cabling	√	
Instruments (level, flow, pressure, water quality, etc)	√	
Control panels (including local control PLC, works PLC, works SCADA)	√	
Telemetry outstation equipment	√	
Building services (lighting, power, heating, ventilation, telephones, intruder/fire alarm, entry control & surveillance)	✓	
Standby generators and associated switchgear	Х	
BUILDINGS		
Process building including switchgear room	√	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	
Project design and supervision	✓	
Project quality audit	✓	
Contractual claims	~	
Compensation	х	
Overheads on stores	\checkmark	
Commissioning	\checkmark	
Tender\outturn margin	\checkmark	
Contingencies or general adjustments	\checkmark	
Public meetings	х	
Customer communication	x	
Special inducements	x	

Effect of seasonal working	Х	
Effect of limited working hours	х	

Line 5c	Cryptosporidium	protection	to	an existing	borehole	treatment	works	with	simple	l
	disinfection only,	output 2.5M	l/d							l

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Insert main stages Ultrafiltration		
Chemical Dosing		
ELECTRICAL EQUIPMENT		
	✓	✓
Motor control centres including incomer / isolator / local distribution	× • • • • • • • • • • • • • • • • • • •	✓ ✓
Power, control, instrument cabling	× • • • • • • • • • • • • • • • • • • •	✓ ✓
Instruments (level, flow, pressure, water quality, etc) Control panels (including local control PLC, works PLC, works SCADA)	· · · · · · · · · · · · · · · · · · ·	✓ ✓
Telemetry outstation equipment	v	✓ ✓
	¥	↓
Building services (lighting, power, heating, ventilation, telephones, intruder/fire alarm, entry control & surveillance) Standby generators and associated switchgear		-
Stanuby generators and associated switchgean	X	Х
BUILDINGS		
Process building (if required)	✓	✓
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	✓ ✓
Project design and supervision	✓	✓
Project quality audit	✓	✓
Contractual claims	✓	✓
Compensation	X	X
Overheads on stores	×	X
Commissioning	✓	✓ ✓
Tender/outturn margin	×	✓
Contingencies or general adjustments	✓	Х
Public meetings	x	Х
Customer communication	X	Х
Special inducements	X	Х
Effect of seasonal working	x	X
Effect of limited working hours	Х	Х

Lines 6, 7 and 9New service reservoir, capacity 1MI, 4MI and 15MI

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
CONSTRUCTION		
Insert main material of construction	√	✓
Concrete		
LABOUR AND PLANT		
Two compartment tank	✓	✓
Roof membrane	✓	✓
Disinfection on completion	√	√
Water test	√	✓
Emptying and re-filling	✓	✓
Pipework and interconnecting pipework	✓	✓
Valves	✓	✓
Access covers	√	√
Ladders	✓	✓
Flow	X 🗸	X 🖌
Level		✓ ✓
Water quality	X 🗸	✓ ✓
Telemetry	×	×
BUILDINGS		
Valve house	X	х
Building for ICA equipment	\checkmark	x
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	✓
Project design and supervision	√	✓
Project quality audit	✓	✓
Contractual claims	✓	✓
Compensation	x	Х
Overheads on stores	√	х
Commissioning	✓ ✓	✓
Tender\outturn margin	✓	✓
Contingencies or general adjustments	√	Х
Public meetings	X	Х
Customer communication	X	Х
Special inducements	х	х

Effect of seasonal working	Х	Х
Effect of limited working hours	Х	Х

Line 8

Refurbishment of service reservoir, capacity 6MI

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Sample tap	x	х
Disinfection on completion	√	✓
Remedial work	\checkmark	✓
Cracks in roof (combifex)	\checkmark	✓
Construction joints in floor and walls	\checkmark	✓
Defective concrete	√	✓
Rendering	✓	✓
Roof vents (sealed)	√	✓
Access covers	✓	✓
New roof membrane	✓	√
Roof drainage system	✓	✓
Internal ladders	✓	✓
Water test	Х	Х
Emptying and refilling	Х	Х
Excavated material stored on site	✓	✓
Replace excavated material and re-grassing	✓	✓
Refurbish internal corroded pipework to DWI approved finish	✓	✓
Cleaning reservoir	x	х
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	√	✓
Project design and supervision	\checkmark	✓
Project guality audit	\checkmark	✓
Contractual claims	✓	✓
Compensation	X	х
Overheads on stores	✓	х
Commissioning	√	✓
Tender\outturn margin	√	✓
Contingencies or general adjustments	\checkmark	х
Public meetings	х	х
Customer communication	х	х
Special inducements	х	Х
Effect of seasonal working	х	х
Effect of limited working hours	Х	х

Line 10

Replacement of variable speed pumps, output 6-9MI/d

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Remove existing pumps and motor set & shafts (2No.), supply new	✓ 	
Remove suction valves \ delivery valves	X	
Remove existing non return valves, supply new	✓	
Remove existing pipework, and re-use (make up pieces between pump suction and delivery and adjacent valves)	✓	
Remove existing plinth, construct new	✓	
ELECTRICAL		
Disconnect and reconnection of power cables	\checkmark	
Removal of existing ICA panel, supply new	✓	
Removal of existing PLC (hardware and software), supply new	✓	
Removal of existing level instrumentation, supply new	✓	
Removal of existing telemetry, supply new	✓	
Cabling for control instrumentation and local telemetry (incl. traywork, ducting, clipping and testing)	√	
Building services	x	
Standby generation and associated switchgear	х	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	
Project design and supervision	✓	
Project quality audit	✓	
Contractual claims	✓	
Compensation	x	
Overheads on stores	\checkmark	
Commissioning	\checkmark	
Tender\outturn margin	\checkmark	
Contingencies or general adjustment	\checkmark	
Public meetings	x	
Customer communication	x	

Special inducements	x	
Effect of seasonal working	х	
Effect of limited working hours	х	
Line 11

Replacement of variable speed pump motors, rated 110kW

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit	
LABOUR AND PLANT			
Remove existing motors (3 No.), supply and install new	×		
ELECTRICAL			
Disconnect and renewal of power cables	√		
MANAGEMENT COSTS			
Company overheads, programme management, project management, incentive payments	√		
Project design and supervision	✓		
Project quality audit	✓		
Contractual claims	\checkmark		
Compensation	Х		
Overheads on stores	\checkmark		
Commissioning	\checkmark		
Tender\outturn margin	\checkmark		
Contingencies or general adjustments	\checkmark		
Public meetings	Х		
Customer communication	X		
Special inducements	X		
Effect of seasonal working	X		
Effect of limited working hours	х		

Lines 12 and 13c New fixed speed pumpset, output 10MI/d and 30MI/d

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
MECHANICAL EQUIPMENT		
Remove blank flanges (on existing isolating valves (2No.))	√	
Supply new pump set inclusive of pump, motor and baseplate (1No.) and install	√	
New pipework (make up pieces between pump suction and delivery and adjacent valves) including new bolt sets and gaskets	√	
Supply new non-return valve	√	
Construct new plinth	✓	
ELECTRICAL		
Connection of power cables to existing MCC starter cubicle	√	
Supply and install modifications to ICA equipment (PLC, instrumentation and telemetry)	√	
Cabling for new control instrumentation and local telemetry (incl. traywork, ducting, clipping and testing)	✓	
Reconnect telemetry to network	X	
Building services	Х	
Standby generation and associated switchgear	Х	
New starter	X	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	√	
Project design and supervision	\checkmark	
Project quality audit	√	
Contractual claims	√	
Compensation	Х	
Overheads on stores	√	
Commissioning	√	
Tender/outturn margin	✓	
Contingencies or general adjustments	✓	
Public meetings	x	1

Customer communication	x	
Special inducements	x	
Effect of seasonal working	x	
Effect of limited working hours	x	

Lines 13a and 13b Replacement of borehole pumpsets, output 4MI/d and 10MI/d

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
MECHANICAL EQUIPMENT		
Remove existing headworks and borehole riser pipework as required	✓	
Remove existing borehole pump, supply new (including shrouds and power cable (within borehole))	✓	
Allow for preparation and painting of reused borehole pipework	х	
Reinstall riser and headworks pipework if required	√	
Temporary lifting gantry	\checkmark	
ELECTRICAL		
Disconnect and reconnection of power cables	√	
Removal of existing ICA panel, supply new	√	
Removal of existing PLC (hardware and software), supply new	√	
Removal of existing instrumentation, supply new	√	
Removal of existing telemetry, supply new	\checkmark	
Cabling for control instrumentation and local telemetry (including traywork, ducting, clipping and testing)	\checkmark	
Reconnect telemetry to network	x	
Building services	x	
Standby generation and associated switchgear	Х	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	
Project design and supervision	\checkmark	
Project quality audit	\checkmark	
Contractual claims	✓	
Compensation	х	
Overheads on stores	√	
Commissioning	√	
Tender/outturn margin	√	
Contingencies or general adjustments	✓	
Public meetings	х	
Customer communication	X	
Special inducements	X	
Effect of seasonal working	X	
Effect of limited working hours	х	

Lines 13d and 13e Replacement motor control centre for an existing variable speed pumping station, 15kW and 90kW total installed motor capacity

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
	✓	
Phased disconnection of existing MCC and controls	v	
Installation of temporary control panel, phased connections and commissioning and /or temporary overpumping	•	
Construction of plinths	x	
Installation of new MCC	✓	
Phased reconnection of cabling to the new MCC and control section	✓	
ELECTRICAL		
Disconnect and reconnection of power cables	✓	
Removal of existing MCC and ICA including telemetry and PLC	✓	
Minor modifications to MCC plinth	x	
Provision of temporary works control panel or temporary pumping	✓	
Supply of new MCC incorporating new ICA, PLC (hardware and software) and telemetry outstation, marshalling and cabling	✓	
Supply of new level control instrumentation	✓	
Removal of existing level instrumentation	✓	
Factory Acceptance Tests (FATs)	\checkmark	
Site Acceptance Tests (SATs)	✓	
Cabling for control instrumentation and local telemetry (incl, traywork, ducting, clipping and testing)	\checkmark	
Reconnect telemetry to network	x	
Building Services	х	
Standby generation and associated switchgear	х	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	√	
Project design and supervision	✓	
Project guality audit	✓	
Contractual claims	\checkmark	
Compensation	x	
Overheads on stores	✓	
Commissioning	√	
Tender/outturn margin	√	
Contingencies or general adjustments	√	
Public meetings	x	
Customer communication	x	
Special inducements	x	

Effect of seasonal working	Х	
Effect of limited working hours	х	

Standard cost from PR99 Information Requirement G 060498; Table G5, Line 15

Line 14 Extension to office accommodation

Checklist to follow.

Standard cost from PR99 Information Requirement G 060498; Table G5, Line 16

Line 15	Satellite stations and a transmission station

Checklist to follow.

WATER NON-INFRASTRUCTURE STANDARD COST SCOPE OF WORKS – TABLE J5

PUMPING COSTS	STATION STANDARD	Pump and Motor Set	Motor Only	Make Up Pipework	Non-return Valves	Isolation Valves	Station Pipework and	Riser Pipework	Headworks Pipework and	PLC	PLC Software	Telemetry Outstation	Telemetry End to End Testing	ICA Panel	Level Instrumentation	Pressure Instrumentation	Proximity Switches and	Plinth or Pump Stool	Pump Power Cabling	Starters	Temporary Works
LINE Nos	TITLE																				
10	Replacement of variable speed pumps, output 6 to 9MI/d		N	R	S	R	R	N	N	S	S	S	N	S	S	N	S	S	R	R	N
[new6]	Replacement of variable speed pump motors, rated 110kW		S(3)	R	R	R	R	N	N	R	R	R	N	R	R	R	R	R	S	R	N
[new7]	Replacement of borehole pumpsets, output 4MI/d	S(3)	N	R	S	R	R	R	R	S	S	S	N	S	S	N	N	N	S	R	S ¹
[new8]	Replacement of borehole pumpsets, output 10MI/d	S(3)	N	R	S	R	R	R	R	S	S	S	N	S	S	N	N	Ν	S	R	S ¹
13	New fixed-speed pumpset, output 10MI/d	S(1)	N	S	S	R	R	N	Ν	М	Pr	М	N	М	S	S	N	S	S	R	N
[new9]	New fixed-speed pumpset, output 30MI/d	S(1)	N	S	S	R	R	Ν	Ν	М	Pr	М	N	М	S	S	N	S	S	R	N
[new10]	Replacement MCC, 15kW total installed capacity	Ν	N	N	N	N	N	N	N	S	S	S	N	S ⁴	Ν	S	N	R	R	S	S ²
	Replacement MCC, 90kW total installed capacity	N	N	N	N	N	Ν	N	Ν	S	S	S	N	S ⁴	Ν	S	N	R	R	S	S ²

KEY

Supply new (x) = no. of items Re-use existing S(x)

- Ŕ
- Not required Ν

Pr

Reprogramme existing Modification or expansion of existing Μ

NOTES

1

2

3

4

Temporary lifting plant Temporary control panel, pumping or tinkering

Temporary pumping

ICA provision integral to the MCC within control section/cubicle

WATER NON-INFRASTRUCTURE STANDARD COST SCOPE OF WORKS – TABLE J5

COSTS	STATION STANDARD	Pump and Motor Set	Motor Only	Make Up Pipework	Non-return Valves	Isolation Valves	Station Pipework and	Riser Pipework	Headworks Pipework and	PLC	PLC Software	Telemetry Outstation	Telemetry End to End Testing	ICA Panel	Level Instrumentation	Pressure Instrumentation	Proximity Switches and	Plinth or Pump Stool	Pump Power Cabling	Starters	Temporary Works
LINE Nos	TITLE																				
10	Replacement of variable speed pumps, output 6 to 9MI/d																				
[new6]	Replacement of variable speed pump motors, rated 110kW																				
[new7]	Replacement of borehole pumpsets, output 4MI/d																				
[new8]	Replacement of borehole pumpsets, output 10MI/d																				
13	New fixed-speed pumpset, output 10MI/d																				
[new9]	New fixed-speed pumpset, output 30MI/d																				
[new10]	Replacement MCC, 15kW total installed capacity																				
[new11]	Replacement MCC, 90kW total installed capacity																				

KEY

Supply new (x) = no. of items Re-use existing S(x)

- R
- Not required Ν

Pr Reprogramme existing

NOTES

1 2

3

4

Temporary lifting plant

Temporary control panel, pumping or tinkering

Temporary pumping ICA provision integral to the MCC within control section/cubicle

M Modification or expansion of existing

Line 1

Storage tank to combined sewer overflow 750m³

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Re-use of excavated material on site	✓	✓
Geo-technical investigations	× ✓	×
•		-
Temporary pumping	X	Х
Kiosk base slab	✓	Х
Allowance for uplift	x	x
Inlet/outlet chambers	^^ ✓	× ✓
Vertical sided excavation	·	✓ √
Transfer pumps and circulating pump	✓ · · · ·	✓ ×
Circulating pump or other deposition prevention system	√	✓
Access ladders	✓ · · · ·	✓ ✓
Access covers	✓	✓
Vents	✓	✓
Guard rails	X	х
Manhole, interconnecting pipework and connection to sewer (in and out)	✓	✓
BUILDINGS		
Kiosk	✓	x
		~
ELECTRICAL		
Motor control centres	✓	√
Cabling	√	✓
ICA	\checkmark	√
Telemetry	✓	√
Building services	x	х
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	✓
Project design and supervision	↓	✓ ✓
Project design and supervision Project quality audit	✓ ✓	· ·
Contractual claims	✓ ✓	✓ ✓
Compensation	X	×
Overheads on stores	×	x
Commissioning	✓ ✓	×
Tender/outturn margin	✓ ✓	✓ ✓
Contingencies or general adjustments	✓ ✓	×

Public meetings	Х	Х
Customer communication	х	х
Special inducements	х	х
Effect of seasonal working	х	х
Effect of limited working hours	Х	х

Line 1a

Large storage tank to a combined sewer overflow, capacity 3,000m³

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Re-use of excavated material on site	✓	\checkmark
Geo-technical investigations	✓	\checkmark
Temporary pumping	x	x
Kiosk base slab	✓	х
Allowance for uplift	x	x
Inlet/outlet chambers	✓	✓
Vertical sided excavation	\checkmark	✓
Transfer pumps and circulating pump	\checkmark	✓
Circulating pump or other deposition prevention system	√	√
Access ladders	✓	√
Access covers	✓	√
Vents	✓	✓
Guard rails	Х	Х
Manhole, interconnecting pipework and connection to sewer (in and out)	✓	\checkmark
BUILDINGS		
Kiosk	✓	Х
ELECTRICAL		
Motor control centers		✓
Cabling	· · · · · · · · · · · · · · · · · · ·	· · ·
ICA	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Telemetry	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Building services	x	X
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	\checkmark	\checkmark
Project design and supervision	\checkmark	\checkmark
Project quality audit	\checkmark	\checkmark
Contractual claims	✓	\checkmark
Compensation	х	х
Overheads on stores	✓	Х
Commissioning	✓	\checkmark
Tender\outturn margin	✓	✓
Contingencies or general adjustments	\checkmark	х

Public meetings	Х	Х
Customer communication	х	Х
Special inducements	x	Х
Effect of seasonal working	x	Х
Effect of limited working hours	Х	Х

Line 1b

Combined sewer overflow chamber with powered screen

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Re-use of excavated material on site	\checkmark	✓
Geo-technical investigations	✓	\checkmark
Temporary pumping	x	Х
Kiosk base slab	✓	\checkmark
Insitu RC chamber	✓	\checkmark
Allowance for uplift	x	х
Inlet/outlet chambers	√	\checkmark
Vertical sided excavation	√	\checkmark
Traffic management / NRSWA costs	Х	х
Powered screen	√	✓
Access ladders	√	\checkmark
Access covers	√	\checkmark
Service diversions	X	х
Vents	Х	Х
Manhole, interconnecting pipework and connection to sewer (in and out)	√	\checkmark
Overflow sewer, new manhole and connection to existing outfall pipe	✓	\checkmark
BUILDINGS		
Kiosk	✓	\checkmark
ELECTRICAL		
Control panel	√	✓
Cabling	√	\checkmark
ICA	√	✓
Telemetry	✓	\checkmark
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	√	✓
Project design and supervision	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Project quality audit	· · · · · · · · · · · · · · · · · · ·	 ✓
Contractual claims	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Compensation	X	x
Overheads on stores	^ ✓	×
Commissioning	· · · · · · · · · · · · · · · · · · ·	 ✓
Tender/outturn margin	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·

Contingencies or general adjustments	\checkmark	Х
Public meetings	х	х
Customer communication	х	х
Special inducements	х	х
Effect of seasonal working	x	х
Effect of limited working hours	х	х

Lines 2, 3 and 4	Replacement dry well pumps and motors for an existing pumping station, 12kW, 30kW
	and 100kW capacity

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Removal of existing pumps and motors, supply new	√ 	✓
Removal of existing pipework and re-use as required	✓	✓ ✓
Removal of existing plinths, construct new	✓	√
ELECTRICAL		
Disconnect and reconnection of power cables	✓	✓
Removal of existing ICA panel, supply new	✓	✓
Removal of existing PLC (hardware and software), supply new	✓	✓
Removal of existing instrumentation, supply new	✓	✓
Removal of existing telemetry, supply new	✓	✓
Cabling for control instrumentation and local telemetry (incl. traywork, ducting, clipping and testing)	✓	✓
Reconnect telemetry to network	X	Х
Building services	X	Х
Standby generation and associated switchgear	Х Х	X
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	√
Project design and supervision	✓	\checkmark
Project quality audit	✓	\checkmark
Contractual claims	✓	\checkmark
Compensation	х	х
Overheads on stores	✓	х
Commissioning	✓	√
Tender\outturn margin	✓	√
Contingencies or general adjustments	✓	Х
Public meetings	х	Х
Customer communication	х	Х
Special inducements	Х	Х
Effect of seasonal working	Х	Х
Effect of limited working hours	Х	х

Line 4a

Replacement submersible pumps for an existing pumping station, 12kW capacity

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Removal of existing pumps and motors, supply new	\checkmark	
Removal of existing pipework and re-use as required	\checkmark	
Removal of existing plinths, construct	x	
ELECTRICAL EQUIPMENT		
Disconnect and reconnection of power cables	\checkmark	
Removal of existing ICA panel, supply new	\checkmark	
Removal of existing PLC (hardware and software), supply new	√	
Removal of existing instrumentation, supply new	√	
Removal of existing telemetry outstation, supply new	√	
Cabling for control instrumentation and local telemetry (incl, traywork, ducting, clipping and testing)	\checkmark	
Reconnect telemetry to network	X	
Building services	Х	
Standby generation and associated switchgear	x	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	
Project design and supervision	✓	
Project quality audit	√	
Contractual claims	√	
Compensation	Х	
Overheads on stores	√	
Commissioning	\checkmark	
Tender\outturn margin	\checkmark	
Contingencies or general adjustments	\checkmark	
Public meetings	Х	
Customer communication	х	
Special inducements	x	
Effect of seasonal working	x	
Effect of limited working hours	X	

Line 4b

Upsize existing dry well in-line pumping station from 12kW to 30kW capacity

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Removal of existing pumps and motors, supply new	✓	
Removal of existing pipework reinstall as required	√	
Removal of existing plinths, construct new	✓	
ELECTRICAL EQUIPMENT		
Disconnect and reconnection of power cables	✓	
Removal of existing ICA panel, supply new	✓	
Removal of existing PLC (hardware and software), supply new	✓	
Removal of existing instrumentation, supply new	✓	
Removal of existing telemetry outstation, supply new	✓	
Cabling for control instrumentation and local telemetry (incl, traywork, ducting, clipping and testing)	✓	
Reconnect telemetry to network	x	
Building services	x	
Standby generation and associated switchgear	x	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	\checkmark	
Project design and supervision	√	
Project quality audit	✓	
Contractual claims	✓	
Compensation	x	
Overheads on stores	✓	
Commissioning	✓	
Tender/outturn margin	✓	
Contingencies or general adjustments	✓	
Public meetings	x	
Customer communication	Х	
Special inducements	x	
Effect of seasonal working	х	
Effect of limited working hours	x	

Line 4c

Upsize existing wet well in-line pumping station from 12kW to 30kW capacity

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Removal of existing pumps and motors, supply new	\checkmark	
Temporary pump and overpumping	✓	
Removal of existing pipework reinstall as required	√	
Removal of existing pipework remistant as required	· · · · · · · · · · · · · · · · · · ·	
Removal of existing plintins, construct new	· · · ·	
ELECTRICAL EQUIPMENT		
Disconnect and reconnection of power cables	✓	
Removal of existing ICA panel, supply new	\checkmark	
Removal of existing PLC (hardware and software), supply new	√	
Removal of existing instrumentation, supply new	\checkmark	
Removal of existing telemetry outstation, supply new	✓	
Cabling for control instrumentation and local telemetry (incl, traywork, ducting, clipping and testing)	✓	
Reconnect telemetry to network	х	
Building services	x	
Standby generation and associated switchgear	X	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	
Project design and supervision	✓	
Project quality audit	√	
Contractual claims	√	
Compensation	x	
Overheads on stores	\checkmark	
Commissioning	\checkmark	
Tender\outturn margin	\checkmark	
Contingencies or general adjustments	\checkmark	
Public meetings	Х	
Customer communication	Х	
Special inducements	x	
Effect of seasonal working	x	
Effect of limited working hours	х	

Line 4d and 4e	Replacement motor control centre for an existing fixed speed pumping station, 15kW and	
	90kW total installed motor capacity	

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
LABOUR AND PLANT		
Phased disconection of existing MCC and controls	✓	
Installation of temporary control panel, phased connections and commissioning	✓	
Construction of plinths	x	
Installation of new MCC	✓	
Phased reconnection of cabling to the new MCC and control section	✓	
ELECTRICAL EQUIPMENT		
Disconnect and reconnection of power cables	✓	
Removal of existing MCC and ICA including telemetry outstation and PLC	√	
Minor modifications to MCC plinth	Х	
Provision of temporary works control panel	\checkmark	
Supply of new MCC incorporating new ICA, PLC (hardware and software) and telemetry outstation	\checkmark	
Supply of new level control instrumentation	\checkmark	
Removal of existing level instrumentation	\checkmark	
Factory Acceptance Tests	✓	
Site Acceptance Tests	✓	
Cabling for control instrumentation and local telemetry (incl, traywork, ducting, clipping and testing)	✓	
Reconnect telemetry to network	x	
Building services	х	
Standby generation and associated switchgear	х	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	
Project design and supervision	✓	
Project quality audit	✓	
Contractual claims	✓	
Compensation	х	
Overheads on stores	✓	
Commissioning	✓	
Tender\outturn margin	✓	
Contingencies or general adjustments	✓	
Public meetings	X	
Customer communication	X	
Special inducements	Х	

Effect of seasonal working	х	
Effect of limited working hours	х	

Line 5

Primary treatment works p.e 10,000

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Process Design to meet consent standard specified	✓	✓
Insert main process assumptions		
Design solids reduction of 50% - Design BOD reduction of 30%		
Sludge storage volume calculated on primary settled sludge conc. Of 2%		
Primary sludge density of 1000kg/m3		
Primary tanks design hydraulic loading at max flow of 1.25m/h		
Flow measurement	√	✓ <i>✓</i>
Sludge storage		✓
Odour control	· · · · · · · · · · · · · · · · · · ·	X
Interconnecting pipework and valves	√	 ✓
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	✓	√
Power, control, instrument cabling	✓	✓
Instruments (level, flow, pressure, water quality, etc)	✓	√
Control panels (including local control PLC, works PLC, works SCADA)	✓	√
Telemetry outstation equipment	✓	√
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	✓	✓
Standby generators and associated switchgear	X	х
BULDINGS		
Switchgear building/kiosk	\checkmark	✓
Administration and control building	\checkmark	✓
Blower building (if applicable)	X	х
MANAGEMENT COSTS		,
Company overheads, programme management, project management, incentive payments	×	✓
Project design and supervision	✓	✓
Project quality audit	✓ ✓	✓ ✓
Contractual claims	✓	✓
Compensation	x	X
Overheads on stores	✓ ✓	X 🗸
Commissioning	✓ ✓	✓ ✓
Tender\outturn margin		-
Contingencies or general adjustments	✓ 	X
Public meetings	x	X

Customer communication	Х	Х
Special inducements	х	Х
Effect of seasonal working	Х	Х
Effect of limited working hours	Х	Х

Lines 6 and 7 Additional secondary treatment works p.e. 5,000 and p.e. 60,000

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Process Design to meet consent standard specified	√	\checkmark
Insert main process assumptions		
Design irrigation velocity for adequate wetting of plastic media filter (J6.6) of 10-30 m3/m2/d		
Maximum organic loading without ponding 5kg BOD/m2/d		
Sludge storage		
Sludge storage Odour control	✓ ✓	×
Interconnecting pipework and valves	· · · · · · · · · · · · · · · · · · ·	X 🗸
	•	•
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	✓	✓
Power, control, instrument cabling	✓	✓
Instruments (level, flow, pressure, water quality, etc)	~	\checkmark
Control panels (including local control PLC, works PLC, works SCADA)	✓	√
Telemetry outstation equipment	~	✓
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	~	✓
Standby generators and associated switchgear	X	Х
BUILDINGS		
Switchgear building/kiosk	✓	✓
Administration and control building	x	-
Blower building (if applicable)	x x	X √
	Χ	•
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	✓
Project design and supervision	✓	✓
Project quality audit	✓	√
Contractual claims	✓	√
Compensation	x	х
Overheads on stores	\checkmark	х
Commissioning	~	√
Tender\outturn margin	\checkmark	\checkmark
Contingencies or general adjustments	\checkmark	х
Public meetings	х	Х
Customer communication	x	Х
Special inducements	x	Х

Effect of seasonal working	Х	Х
Effect of limited working hours	Х	х

Line 7a

Installation of denitrification at existing secondary works, p.e. 40,000

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Process Design to meet consent standard specified	√	
Insert main stages		
SW would not carry out this type of work		
Additional sludge treatment (if applicable) including odour control	✓	
Flow measurement	x	
Interconnecting pipework and valves	✓	
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	✓	
Power, control, instrument cabling	✓	
Instruments (level, flow, pressure, water quality, etc)	✓	
Control panels (including local control PLC, works PLC, works SCADA)	✓	
Telemetry outstation equipment	✓	
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	\checkmark	
Standby generators and associated switchgear	X	
BUILDINGS		
Switchgear building/kiosk	✓	
Administration and control building (if applicable)	х	
Blower building (if applicable)	х	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	
Project design and supervision	✓	
Project quality audit	✓	
Contractual claims	✓	
Compensation	x	
Overheads on stores	✓ ✓	
Commissioning	✓	
Tender\outturn margin	✓	
Contingencies or general adjustments	✓	
Public meetings	х	

Customer communication	х	
Special inducements	x	
Effect of seasonal working	x	
Effect of limited working hours	Х	

Lines 8 and 9 New secondary treatment works, p.e. 5,000 and p.e. 70,000

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Process Design to meet consent standard specified	√	\checkmark
insert main process assumptions		
Design irrigation velocity for adequate wetting of plastic media filter (J6.6) of 10-30 m3/m2/d		
Maximum organic loading without ponding 5kg BOD/m2/d		
Storm tanks		x
	-	
Flow measurement	✓	\checkmark
Sludge storage	✓	✓
Odour control	<i>✓</i>	X
Interconnecting pipework and valves	✓	✓
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	✓	\checkmark
Power, control, instrument cabling	✓	\checkmark
Instruments (level, flow, pressure, water quality, etc)	~	\checkmark
Control panels (including local control PLC, works PLC, works SCADA)	~	\checkmark
Telemetry outstation equipment	~	\checkmark
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	\checkmark	✓
Standby generators and associated switchgear	X	х
BUILDINGS		
Switchgear building/kiosk	✓	✓
Administration and control building	✓	✓
Blower building (if applicable)	✓	✓
MANAGEMENT COSTS		
	√	✓
Company overheads, programme management, project management, incentive payments Project design and supervision	✓ ✓	✓ ✓
Project design and supervision Project quality audit	✓ ✓	✓ ✓
Contractual claims	✓ ✓	×
Compensation	x	×
Overheads on stores	× ×	X
Commissioning	· · · · · · · · · · · · · · · · · · ·	× ✓
Tender/outturn margin	√	√
Contingencies or general adjustments	√	x
Public meetings	X	x
Customer communication	X X	X
Special inducements	x	X

Effect of seasonal working	Х	Х
Effect of limited working hours	Х	Х

Line 10

Reconstruction of preliminary treatment works, p.e. 25,000

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Process Design to meet consent standard specified	√	\checkmark
insert main process assumptions		
Flow measurement	√	\checkmark
Odour control	✓	Х
Interconnecting pipework and valves	✓	√
Electrical Equipment		
Motor Control Centres including incomer/isolator/local distribution	✓	\checkmark
Power, control, instrument cabling	√	✓
Instruments (level, flow, pressure, water quality, etc)	✓	\checkmark
Control panels (including local control PLC, works PLC, works SCADA)	✓	\checkmark
Telemetry outstation equipment	✓	\checkmark
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	✓	\checkmark
Standby generators and associated switchgear	X	Х
Buildings		
Switchgear building/kiosk	✓	√
Administration and control building (if applicable)	x	Х
Blower building (if applicable)	X	х
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	\checkmark
Project design and supervision	✓	\checkmark
Project quality audit	✓	√
Contractual claims	~	\checkmark
Compensation	x	Х
Overheads on stores	✓	Х
Commissioning	✓	\checkmark
Tender\outturn margin	\checkmark	\checkmark
Contingencies or general adjustments	✓	х
Public meetings	x	х
Customer communication	х	Х
Special inducements	х	Х
Effect of seasonal working	x	Х

	Effect of limited working hours	X	х
--	---------------------------------	---	---

Line 11

First time rural sewage works, p.e. 200

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Process Design to meet consent standard specified	\checkmark	√
Insert main stages		
Primary settlement via septic tanks	x	✓
Secondary treatment by package BAF/SAF	X	\checkmark
Odour control	√	X
Electrical Equipment		
Motor Control Centres including incomer/isolator/local distribution	~	√
Power, control, instrument cabling	\checkmark	\checkmark
Instruments (level, flow, pressure, water quality, etc)	\checkmark	\checkmark
Control panels (including local control PLC, works PLC, works SCADA)	\checkmark	\checkmark
Telemetry outstation equipment	\checkmark	\checkmark
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	x	\checkmark
Standby generators and associated switchgear	X	X
BULDINGS		
Switchgear building/kiosk	✓	✓
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	√
Project design and supervision	✓	√
Project quality audit	✓	√
Contractual claims	✓	√
Compensation	x	Х
Overheads on stores	✓	х
Commissioning	✓	✓
Tender/outturn margin	✓	√
Contingencies or general adjustments	✓	х
Public meetings	x	х
Customer communication	x	х
Special inducements	x	х
Effect of seasonal working	x	Х
Effect of limited working hours	x	Х

Lines 12, 13, 14 and 14a Additional nutrient/ammonia removal at existing secondary works

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Process Design to meet consent standard specified	√	✓
Insert main stages		
Alum/ferric dosing		
Sludge storage		
Filtration (14 and 14a)		
Additional sludge treatment including odour control	√	x
Flow measurement	x	x
Interconnecting pipework and valves	√	√
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	✓	√
Power, control, instrument cabling	✓	√
Instruments (level, flow, pressure, water quality, etc)	✓	√
Control panels (including local control PLC, works PLC, works SCADA)	✓	✓
Telemetry outstation equipment	✓	\checkmark
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	✓	√
Standby generators and associated switchgear	Х	x
BUILDINGS		
Switchgear building/kiosk	✓	√
Administration and control building (if applicable)	x	Х
Blower building (if applicable)	x	x
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	~	✓
Project design and supervision	~	✓
Project quality audit	~	✓
Contractual claims	~	✓
Compensation	x	Х
Overheads on stores	✓	Х
Commissioning	✓	✓
Tender\outturn margin	✓	✓
Contingencies or general adjustments	\checkmark	Х
Public meetings	x	х
Customer communication	x	х
Special inducements	Х	x
Effect of seasonal working	x	х

	Effect of limited working hours	х	x
--	---------------------------------	---	---

Lines 15 and 16 Additional UV disinfection at existing treatment works, p.e. 5,000 and p.e. 40,000

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Process Design to meet consent standard specified	✓	
Insert main stages		
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	✓	
Power, control, instrument cabling	√	
Instruments (level, flow, pressure, water quality, etc)	✓ <i>✓</i>	
Control panels (including local control PLC, works PLC, works SCADA)	✓ <i>✓</i>	
Telemetry outstation equipment	✓ <i>✓</i>	
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	✓	
Standby generators and associated switchgear	Х	
BUILDINGS		
Switchgear building/kiosk	✓	
Administration and control building (if applicable)	x	
Blower building (if applicable)	X	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓ <i>✓</i>	
Project design and supervision	✓	
Project quality audit	✓ <i>✓</i>	
Contractual claims	✓	
Compensation	х	
Overheads on stores	✓	
Commissioning	\checkmark	
Tender\outturn margin	\checkmark	
Contingencies or general adjustments	\checkmark	
Public meetings	x	
Customer communication	x	
Special inducements	x	

Effect of seasonal working	х	
Effect of limited working hours	Х	

Line 17

New enhanced sludge treatment facility, throughput 2ttds per annum

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Process Design to meet Code of Practice standard specified	✓	
Insert main stages		
State assumed dry solids content of finished sludge	✓	
Odour control	\checkmark	
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	✓	
Power, control, instrument cabling	✓ ✓	
Instruments (level, flow, pressure, water quality, etc)	✓ ✓	
Control panels (including local control PLC, works PLC, works SCADA)	· · · · · · · · · · · · · · · · · · ·	
Telemetry outstation equipment	✓ ✓	
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	↓	
Standby generators and associated switchgear	X	
Stanuby generators and associated switchgear	^	
BUILDINGS		
Switchgear building/kiosk	\checkmark	
Administration and control building (if applicable)	х	
Blower building (if applicable)	Х	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	√	
Project design and supervision	✓	
Project guality audit	✓	
Contractual claims	✓	
Compensation	x	
Overheads on stores	^	
Commissioning	· · · · · · · · · · · · · · · · · · ·	
Tender/outturn margin	· · · · · · · · · · · · · · · · · · ·	
Contingencies or general adjustments	✓ ✓	
Public meetings	X	
Customer communication	X	

Special inducements	x	
Effect of seasonal working	x	
Effect of limited working hours	X	

Line 18

New enhanced sludge treatment facility, throughput 2ttds per annum

STANDARD COST ASSUMPTIONS	Include in Standard Cost	Scottish Water audit
PROCESS		
Process Design to meet Code of Practice standard specified	✓	
Insert main stages		
State assumed dry solids content of finished sludge	✓	
Odour control	✓	
ELECTRICAL EQUIPMENT		
Motor Control Centres including incomer/isolator/local distribution	✓	
Power, control, instrument cabling	· · · · · · · · · · · · · · · · · · ·	
Instruments (level, flow, pressure, water quality, etc)		
Control panels (including local control PLC, works PLC, works SCADA)	✓	
Telemetry outstation equipment	· · · · · · · · · · · · · · · · · · ·	
Building services (lighting, power, heating, ventilation, telephones, intruder and fire alarm, and entry control and surveillance)	· · · · · · · · · · · · · · · · · · ·	
Standby generators and associated switchgear	X	
	~ ~ ~	
BUILDINGS		
Switchgear building/kiosk	~	
Administration and control building (if applicable)	х	
Blower building (if applicable)	Х	
MANAGEMENT COSTS		
Company overheads, programme management, project management, incentive payments	✓	
Project design and supervision	✓	
Project quality audit	√	
Contractual claims	√	
Compensation	X	
Overheads on stores	✓	
Commissioning	✓	
Tender\outturn margin	✓	
Contingencies or general adjustments	\checkmark	
Public meetings	х	
Customer communication	x	

Special inducements	x	
Effect of seasonal working	x	
Effect of limited working hours	Х	

PUMPING COSTS	STATION STANDARD	Pump and Motor Set	Motor Only	Make Up Pipework	Non-return Valves	Isolation Valves	Station Pipework and	Riser Pipework	Headworks and Associated	PLC	PLC Software	Telemetry Outstation	Telemetry End to End Testing	ICA Panel	Level Instrumentation	Pressure Instrumentation	Proximity Switches and	Plinth or Pump Stool	Pump Power Cabling	Starters	Temporary Works
LINE Nos	TITLE																				
2	Replacement dry well pumps and motors, 12kW capacity	S(2)	N	R	R	R	R	Ν	N	S	S	S	Ν	S	S	Ν	S	S	S	R	N
3	Replacement dry well pumps and motors, 30kW capacity	S(2)	N	R	R	R	R	N	N	S	S	S	N	S	S	N	S	S	S	R	N
4	Replacement dry well pumps and motors, 100kW capacity	S(2)	N	R	R	R	R	Ν	N	S	S	S	Ν	S	S	Ν	S	S	S	R	N
[new3]	Replacement submersible pumps, 12kW capacity	S(2)	N	R	R	R	R	Ν	N	S	S	S	Ν	S	S	Ν	N	R	S	R	Ν
[new4]	Upsize existing dry well from 12kW to 30kW capacity	S(2)	N	R	R	R	R	N	N	S	S	S	N	S	S	N	S	S	S	R	N
[new5]	Upsize existing wet well from 12kW to 30kW capacity	S(2)	N	R	R	R	R	N	N	S	S	S	Ν	S	S	N	S	S	S	R	S ³
[new6]	Replacement MCC, 15kW total installed motor capacity	Ν	N	N	N	N	N	Ν	N	S	S	S	N	S ⁴	S	Ν	N	R	R	S	S ²
[new7]	Replacement MCC, 90kW total installed motor capacity	N	N	N	N	N	N	N	N	S	S	S	Ν	S ⁴	S	N	N	R	R	S	S ²

SEWERAGE NON-INFRASTRUCTURE STANDARD COST SCOPE OF WORKS – TABLE J6

KEY

NOTES

1

S(x) Supply new (x) = no. of items

Temporary lifting plant

R	Re-use existing	
N I		

- N Pr
- Not required Reprogramme existing Modification or expansion of existing М

2 3

4

Temporary control panel, pumping or tankering Temporary pumping ICA provision integral to the MCC within control section/cubicle

SEWERAGE NON-INFRASTRUCTURE STANDARD COST SCOPE OF WORKS – TABLE J6

PUMPING COSTS	STATION STANDARD	Pump and Motor Set	Motor Only	Make Up Pipework	Non-return Valves	Isolation Valves	Station Pipework and	Riser Pipework	Headworks and Associated	PLC	PLC Software	Telemetry Outstation	Telemetry End to End Testing	ICA Panel	Level Instrumentation	Pressure Instrumentation	Proximity Switches and	Plinth or Pump Stool	Pump Power Cabling	Starters	Temporary Works
LINE Nos	TITLE																				
2	Replacement dry well pumps and motors, 12kW capacity																				
3	Replacement dry well pumps and motors, 30kW capacity																				
4	Replacement dry well pumps and motors, 100kW capacity																				
[new3]	Replacement submersible pumps, 12kW capacity																				
[new4]	Upsize existing dry well from 12kW to 30kW capacity																				
[new5]	Upsize existing wet well from 12kW to 30kW capacity																				
[new6]	Replacement MCC, 15kW total installed motor capacity																				
[new7]	Replacement MCC, 90kW total installed motor capacity																				

KEY

NOTES

1

S(x) Supply new (x) = no. of items

Temporary lifting plant

R	Re-use existing	
N.I.	Mine and the l	

- N Pr
- Not required Reprogramme existing Modification or expansion of existing М

2 3

4

Temporary control panel, pumping or tankering Temporary pumping ICA provision integral to the MCC within control section/cubicle