## WATER INDUSTRY COMMISSIONER FOR SCOTLAND ■

#### ANNUAL RETURN INFORMATION REQUIREMENTS

#### **SUPPLEMENTARY INFORMATION - Cost Base**

#### Table J1: Water infrastructure standard costs

Reference BP PR   Format   Type   Grassland   EJG   Rurafusburb   EJG   Highway   EJG										•				
Mains taying		Ofwat	Units &	Field	а				-		i			
Mains laying	Description	Reference RP PR												
1.1   Norminal bore 100mm	2333,433		format	Туре	Grassland	EJG	an highway	EJG	Highway	EJG				
1.1   Norminal bore 100mm														
1.1   Norminal bore 100mm	Mains laying	1												
1.12   Nominal bore 150mm		C2 C1 L1	£/m (1dp)	ı	45.3	B2	91.7	B2	97.4	B2				
1.1.4   Nominal bore 300mm				ı	53.2	B2	101.4	B2						
1.5   Nominal bore 450mm	J1.3 Nominal bore 200mm	C2 C1 L3	£/m (1dp)	- 1	61.2	B2	111.1	B2	121.5	B2				
Mains laying by directional drilling		C2 C1 L4		I										
Mains laying by directional drilling			£/m (1dp)	1	152.7	B2								
1.16   Nominal bore 100mm	J1.6 Nominal bore 600mm	C2 C1 L6	£/m (1dp)	I	217.0	B2	336.2	B2	388.6	B2				
1.16   Nominal bore 100mm	Mains laying by directional drilling	1												
Ji.56   Nominal bore 150mm		C2 C1 L7	£/m (1dp)	I	41.6	B2	44.7	B2	45.4	B2				
Second   S				ı	58.7	B2	62.0	B2	63.9	B2				
Mains Rehabilitation	J1.6c Nominal bore 200mm	C2 C1 L9	£/m (1dp)	1	68.5	B2	70.7	B2	72.4	B2				
Mains Rehabilitation				-		_								
Cement Mortar   EJG   applied   internal   EJG   applied   internal   EJG   bursting   EJ					а		-				-			
Mains Rehabilitation									Sliplining		Pipe			
Mains Rehabilitation					Coment Marter	E IC	applied	E IC		E IC	insertion	E 10	bursting	EIC
Mains Rehabilitation					Cement Mortal	LJG	internal	LJG		EJG		EJG		EJG
31.7   Nominal bore 100mm		_					coating							
1.18   Nominal bore 150mm														
31.9   Nominal bore 200mm				I			41.4	B2	50.6	B2	0.0	N	56.7	B2
J1.10   Nominal bore 300mm   C2 C1 L13   £/m (1dp)   I   J1.11   Nominal bore 450mm   C2 C1 L14   £/m (1dp)   I   J1.12   Nominal bore 600mm   C2 C1 L15   £/m (1dp)   I   J1.13   Nominal bore 600mm   C2 C1 L15   £/m (1dp)   I   J1.14   Renew communication pipes   C2 C1 L16   £/unit (1dp)   I   J1.15   Semmunication pipes   C2 C1 L17   £/unit (1dp)   I   J1.14   Renew communication pipes   C2 C1 L17   £/unit (1dp)   I   J1.15   Semmunication pipes   C2 C1 L18   £/unit (1dp)   I   J1.15   Semmunication pipes   Semmunicatio				I									68.9	B2
31.11   Nominal bore 450mm				1					60.1	B2			81.1	B2
Solution				l			59.7	B2						
Communication pipes   C2 C1 L16   £/unit (1dp)   1   272.2   B2   175.9   B2     J1.14   Renew communication pipes   C2 C1 L17   £/unit (1dp)   1   384.2   B2   304.7   B2				I										
Long Side   EJG   Short side   EJG	J1.12  Nominal bore 600mm	C2 C1 L15	£/m (1dp)	I							0.0	N		
Long Side   EJG   Short side   EJG					а	ì	h	1						
Communication pipes   C2 C1 L16   £/unit (1dp)   I   272.2   B2   175.9   B2     J1.14   Renew communication pipes   C2 C1 L17   £/unit (1dp)   I   384.2   B2   304.7   B2						FIG	-	FIG						
J1.13   New communication pipes   C2 C1 L16   £/unit (1dp)   I   272.2   B2   175.9   B2     J1.14   Renew communication pipes   C2 C1 L17   £/unit (1dp)   I   384.2   B2   304.7   B2	Communication pipes	1			Long Olde		Chort clas	200						
A				I			175.9	B2						
Internally EJG (excluding boundary box) EJG (including box) EJG (incl	J1.14 Renew communication pipes	C2 C1 L17	£/unit (1dp)	- 1	384.2	B2	304.7	B2						
Internally EJG (excluding boundary box) EJG (including box) EJG (incl					а	1	h	1 1	С	1				
Internally					<u> </u>									
Meters														
Meters         box)         box)           J1.15         New meter installation         C2 C1 L18         £/unit (1dp)         I         360.6 B3         174.5 B3         351.9 B3					Internally	EJG		EJG		EJG				
Meters           J1.15 New meter installation         C2 C1 L18 £/unit (1dp)         I         360.6 B3         174.5 B3         351.9 B3									-					
	Meters	1					,		,		1			
	J1.15 New meter installation	C2 C1 L18	£/unit (1dp)	I	360.6	B3	174.5	В3	351.9	В3				
			£/unit (1dp)	I										

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SUPPLEMENTARY INFORMATION - Cost Base Table J1: Water infrastructure standard costs Ofwat Units & Description Grassland Rural/suburban highway Urban Highway format Туре Comment Comment Necessary Necessar Y/N Y/N Y/N Mains laying J1.1 Nomimal bore 100mm J1.2 Nomimal bore 150mm J1.3 Nomimal bore 200mm
J1.4 Nomimal bore 300mm
J1.5 Nomimal bore 450mm J1.6 Nomimal bore 600mm C2 C1 L6 £/m (1dp) I Mains laying by directional drilling C2 C1 L7 £/m (1dp) I
C2 C1 L8 £/m (1dp) I
C2 C1 L9 £/m (1dp) I
C2 C1 L9 £/m (1dp) I J1.6a Nominal bore 100mm J1.6b Nominal bore 150mm J1.6c Nominal bore 200mm C2 C1 L8 C2 C1 L9 Pipe insertion Pipe bursting **Cement Mortar** Surface applied internal coating Sliplining Comment Y/N Y/N Mains Rehabilitation J1.7 Nomimal bore 100mm
J1.8 Nomimal bore 150mm
J1.9 Nomimal bore 200mm
J1.10 Nomimal bore 300mm
J1.11 Nomimal bore 450mm C2 C1 L10 £/m (1dp) I
C2 C1 L11 £/m (1dp) I
C2 C1 L12 £/m (1dp) I SW do not undertake this activity SW do not undertake this activity SW do not undertake this activity C2 C1 L13 £/m (1dp) I
C2 C1 L14 £/m (1dp) I
C2 C1 L15 £/m (1dp) I SW do not undertake this activity SW do not undertake this activity J1.12 Nomimal bore 600mm SW do not undertake this activity Long Side Short side Necessary Necessary Y/N Communication pipes J1.13 New communication pipes
J1.14 Renew communication pipes C2 C1 L16 £/unit (1dp)
C2 C1 L17 £/unit (1dp) Internally Externally (excluding boundary box) Externally (including boundary box) Comment

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Meters J1.15 New meter installation J1.16 Renewal of meters

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C2 C1 L18 £/unit (1dp)
C2 C1 L19 £/unit (1dp)

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Y/N

# WATER INDUSTRY COMMISSIONER FOR SCOTLAND

## **ANNUAL RETURN INFORMATION REQUIREMENTS**

## SUPPLEMENTARY INFORMATION - Cost Base

### Table J2: Water mains - projected expenditure

Description	Ofwat Reference BP PR04	Units & format	Field Type	Estimated proportion of expenditure during the
				period 2002-03 - 2005-06

	Mains laying or replacement				
J2.1	Grassland	C2 C2 L1	% (1dp)	I	21.0
J2.2	Rural\suburban highway	C2 C2 L2	% (1dp)	I	26.0
J2.3	Urban highway	C2 C2 L3	% (1dp)	I	19.0

	Mains laying or replacement by directional drilling				
J2.3a	Grassland	C2 C2 L4	% (1dp)	ı	0.0
J2.3b	Rural\suburban highway	C2 C2 L5	% (1dp)	ı	0.0
J2.3c	Urban highway	C2 C2 L6	% (1dp)	I	0.0

	Mains rehabilitation				
J2.4	Not in use				
J2.5	Surface applied internal coating	C2 C2 L7	% (1dp)	I	4.0
J2.6	Sliplining	C2 C2 L8	% (1dp)	I	7.0
J2.7	Pipe insertion	C2 C2 L8	% (1dp)	ı	0.0
J2.8	Pipe bursting	C2 C2 L10	% (1dp)	I	23.0
J2.9	Not in use				

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## WATER INDUSTRY COMMISSIONER FOR SCOTLAND

### **ANNUAL RETURN INFORMATION REQUIREMENTS**

**SUPPLEMENTARY INFORMATION - Cost Base** 

Table J2: Water mains - projected expenditure

Issues with data	Problem ?	Solution
The sum of lines 1 to 9 should equal 100%	N	No solution required

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## WATER INDUSTRY COMMISSIONER FOR SCOTLAND ✓

### ANNUAL RETURN INFORMATION REQUIREMENTS

### **SUPPLEMENTARY INFORMATION - Cost Base**

	Ofwat	Units &	Field	а		b		С		
Description	Reference BP PR04	format	Туре	Grassland	EJG	Rural/suburban highway	EJG	Urban Highway	EJG	
Sewer laying										
J3.1 Diameter 150mm	C2 C5 L1	£/m (1dp)	I	119.6		196.8	B2	218.9	B2	
J3.2 Diameter 225mm	C2 C5 L2	£/m (1dp)	- 1	145.4		235.7		259.3	B2	
J3.3 Diameter 300mm	C2 C5 L3	£/m (1dp)	I	171.3		274.6		299.7	B2	
J3.4 Diameter 450mm	C2 C5 L4	£/m (1dp)	ı	222.9		352.4		380.6		
J3.5 Diameter 600mm	C2 C5 L5	£/m (1dp)	I	274.5	B2	430.2	B2	461.5	B2	
J3.6 Diameter 900mm	C2 C5 L6	£/m (1dp)	I	377.8	B2	585.8	B2	623.2	B2	
Sewer laying by hipe lacking or microtiling										
Sewer laying by pipe jacking or microtunnelling  3.6a   Sewer laying by microtunnelling - Diameter 450mm  3.6b   Sewer laying by pipe jacking or microtunnelling - Diameter 900mm	C2 C5 L7 C2 C5 L8	£/m (1dp) £/m (1dp)	1	2	   1	0.0 0.0		0.0	N N	d
Sewer laying by microtunnelling - Diameter 450mm     Sewer laying by pipe jacking or microtunnelling - Diameter 900mm				a Polyethylene	EJG	b Insitutorm		C Pine	N N EJG	d Man entry
3.6a Sewer laying by microtunnelling - Diameter 450mm 3.6b Sewer laying by pipe jacking or microtunnelling - Diameter 900mm  Sewer Rehabilitation	C2 C5 L8	£/m (1dp)			EJG	b Insituform	N EJG	c Pipe	N	
3.6a Sewer laying by microtunnelling - Diameter 450mm 3.6b Sewer laying by pipe jacking or microtunnelling - Diameter 900mm  Sewer Rehabilitation  J3.7 Diameter 150mm	C2 C5 L8  C2 C5 L9	£/m (1dp) £/m (1dp)			EJG	b Insituform	EJG B2	c Pipe bursting	N EJG	
3.6a Sewer laying by microtunnelling - Diameter 450mm 3.6b Sewer laying by pipe jacking or microtunnelling - Diameter 900mm  Sewer Rehabilitation  J3.7 Diameter 150mm  J3.8 Diameter 225mm	C2 C5 L8  C2 C5 L9  C2 C5 L10	£/m (1dp) £/m (1dp) £/m (1dp)			EJG	0.0  b Insituform  105.5 115.0	EJG B2 B2	c Pipe bursting	EJG	
3.6a Sewer laying by microtunnelling - Diameter 450mm 3.6b Sewer laying by pipe jacking or microtunnelling - Diameter 900mm  Sewer Rehabilitation  J3.7 Diameter 150mm  J3.8 Diameter 225mm  J3.9 Diameter 300mm	C2 C5 L8  C2 C5 L9  C2 C5 L10  C2 C5 L11	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)			EJG	0.0  b Insituform  105.5 115.0 130.5	EJG B2 B2 B2 B2	C Pipe bursting	EJG B2 B2	
3.6a Sewer laying by microtunnelling - Diameter 450mm 3.6b Sewer laying by pipe jacking or microtunnelling - Diameter 900mm  Sewer Rehabilitation  J3.7 Diameter 150mm  J3.8 Diameter 225mm	C2 C5 L8  C2 C5 L9  C2 C5 L10	£/m (1dp) £/m (1dp) £/m (1dp)			EJG	0.0  b Insituform  105.5 115.0	B2 B2 B2 B2 B2	c Pipe bursting	EJG B2 B2	

	_		estimate	LJG
Other sewerage infrastructure activity				
J3.13 Construction of a self-contained pumping unit to isolate a domestic property	C2 C5 L15	£/unit (1dp)	16914.2	B3

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## WATER INDUSTRY COMMISSIONER FOR SCOTLAND ■

#### ANNUAL RETURN INFORMATION REQUIREMENTS

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SUPPLEMENTARY INFORMATION - Cost Base	
ISUPPLEMENTARY INFORMATION - COST BASE	
OUT I ELINEITARY IN ORMATION OUSE BUSC	

	Ofwat	Units &	Field	10 <b>a</b>	
Description	Reference BP PR04	format	Туре	a Grassland	
	Notice of the state of the stat	Tormac	.,,,,	Comment	Comme
				Necessary Y/N	Necess Y/N
Sewer laying				<u> </u>	
J3.1 Diameter 150mm	C2 C5 L1	£/m (1dp)	1	N	N
J3.2 Diameter 225mm	C2 C5 L2	£/m (1dp)	1	N	N
J3.3 Diameter 300mm	C2 C5 L3	£/m (1dp)	+++	N	N
J3.4 Diameter 450mm	C2 C5 L4	£/m (1dp)	+	N 	N
J3.5         Diameter 600mm           J3.6         Diameter 900mm	C2 C5 L5 C2 C5 L6	£/m (1dp) £/m (1dp)	+	N N	N N
Sewer laying by pipe jacking or microtunnelling	C2 C5 L7	£/m (1dp)	<del></del>		
J3.6a Sewer laying by microtunnelling - Diameter 450mm  J3.6b Sewer laying by pipe jacking or microtunnelling - Diameter 900mm	C2 C5 L7	£/m (1dp)	+		N N
				Comment Necessary Y/N	Necess
Sewer Rehabilitation				Necessary	Necess
J3.7 Diameter 150mm	C2 C5 L9	£/m (1dp)	T.I	Necessary	Necess Y/N
J3.7         Diameter 150mm           J3.8         Diameter 225mm	C2 C5 L10	£/m (1dp)		Necessary	Necess Y/N N N
J3.7         Diameter 150mm           J3.8         Diameter 225mm           J3.9         Diameter 300mm	C2 C5 L10 C2 C5 L11	£/m (1dp) £/m (1dp)	<u> </u>	Necessary	Neces: Y/N N N N
J3.7         Diameter 150mm           J3.8         Diameter 225mm           J3.9         Diameter 300mm           J3.10         Diameter 450mm	C2 C5 L10 C2 C5 L11 C2 C5 L12	£/m (1dp) £/m (1dp) £/m (1dp)	1 1 1	Necessary	Necess Y/N N N N N
J3.7         Diameter 150mm           J3.8         Diameter 225mm           J3.9         Diameter 300mm           J3.10         Diameter 450mm           J3.11         Diameter 600mm	C2 C5 L10 C2 C5 L11 C2 C5 L12 C2 C5 L13	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)	1 1 1 1 1 1	Necessary	Necess Y/N N N N
J3.7         Diameter 150mm           J3.8         Diameter 225mm           J3.9         Diameter 300mm           J3.10         Diameter 450mm           J3.11         Diameter 600mm	C2 C5 L10 C2 C5 L11 C2 C5 L12	£/m (1dp) £/m (1dp) £/m (1dp)		Necessary Y/N	N N N
J3.7         Diameter 150mm           J3.8         Diameter 225mm           J3.9         Diameter 300mm           J3.10         Diameter 450mm           J3.11         Diameter 600mm	C2 C5 L10 C2 C5 L11 C2 C5 L12 C2 C5 L13	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)		Necessary Y/N	Necess Y/N N N N N N
J3.7         Diameter 150mm           J3.8         Diameter 225mm           J3.9         Diameter 300mm           J3.10         Diameter 450mm           J3.11         Diameter 600mm	C2 C5 L10 C2 C5 L11 C2 C5 L12 C2 C5 L13	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)	1 1 1 1 1 1 1 1	Necessary Y/N  10 a	Necess Y/N N N N N
J3.7         Diameter 150mm           J3.8         Diameter 225mm           J3.9         Diameter 300mm           J3.10         Diameter 450mm           J3.11         Diameter 600mm	C2 C5 L10 C2 C5 L11 C2 C5 L12 C2 C5 L13	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)		Necessary Y/N  10 a Standard unit cost	Neces: Y/N N N N N
J3.7         Diameter 150mm           J3.8         Diameter 225mm           J3.9         Diameter 300mm           J3.10         Diameter 450mm           J3.11         Diameter 600mm	C2 C5 L10 C2 C5 L11 C2 C5 L12 C2 C5 L13	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)		Necessary Y/N  10 a Standard unit cost  Comment Necessary Comment Necessary	Neces Y/N N N N
J3.7         Diameter 150mm           J3.8         Diameter 225mm           J3.9         Diameter 300mm           J3.10         Diameter 450mm	C2 C5 L10 C2 C5 L11 C2 C5 L12 C2 C5 L13	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)		Necessary Y/N  10 a Standard unit cost	Neces Y/N N N N
J3.7 Diameter 150mm J3.8 Diameter 225mm J3.9 Diameter 300mm J3.10 Diameter 450mm J3.11 Diameter 600mm J3.12 Diameter 900mm  Other sewerage infrastructure activity	C2 C5 L10 C2 C5 L11 C2 C5 L12 C2 C5 L13 C2 C5 L14	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)		Necessary Y/N  10 a Standard unit cost  Comment Necessary Comment Necessary	Neces Y/I N N N N
J3.7 Diameter 150mm J3.8 Diameter 225mm J3.9 Diameter 300mm J3.10 Diameter 450mm J3.11 Diameter 600mm J3.12 Diameter 900mm	C2 C5 L10 C2 C5 L11 C2 C5 L12 C2 C5 L13 C2 C5 L14	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)		Necessary Y/N  10 a Standard unit cost  Comment Necessary Y/N  Comment	Neces Y/I N N N N
J3.7 Diameter 150mm J3.8 Diameter 225mm J3.9 Diameter 300mm J3.10 Diameter 450mm J3.11 Diameter 600mm J3.12 Diameter 900mm  Other sewerage infrastructure activity	C2 C5 L10 C2 C5 L11 C2 C5 L12 C2 C5 L13 C2 C5 L14	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)		Necessary Y/N  10 a Standard unit cost  Comment Necessary Y/N  Comment	Neces Y/N N N N
J3.7 Diameter 150mm J3.8 Diameter 225mm J3.9 Diameter 300mm J3.10 Diameter 450mm J3.11 Diameter 600mm J3.12 Diameter 900mm  Other sewerage infrastructure activity  J3.13 Construction of a self-contained pumping unit to isolate a domestic pro-	C2 C5 L10 C2 C5 L11 C2 C5 L12 C2 C5 L13 C2 C5 L14	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)		Necessary Y/N  10 a Standard unit cost  Comment Necessary Y/N  Comment	Neces: Y/N N N N N
J3.7 Diameter 150mm J3.8 Diameter 225mm J3.9 Diameter 300mm J3.10 Diameter 450mm J3.11 Diameter 600mm J3.12 Diameter 900mm  Other sewerage infrastructure activity J3.13 Construction of a self-contained pumping unit to isolate a domestic proprepared by:	C2 C5 L10 C2 C5 L11 C2 C5 L12 C2 C5 L13 C2 C5 L14  C2 C5 L14  Date:	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)		Necessary Y/N  10 a Standard unit cost  Comment Necessary Y/N  Comment	Neces: Y/N N N N N
J3.7 Diameter 150mm J3.8 Diameter 225mm J3.9 Diameter 300mm J3.10 Diameter 450mm J3.11 Diameter 600mm J3.12 Diameter 900mm	C2 C5 L10 C2 C5 L11 C2 C5 L12 C2 C5 L13 C2 C5 L14  C2 C5 L14	£/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp) £/m (1dp)		Necessary Y/N  10 a Standard unit cost  Comment Necessary Y/N  Comment	Necess Y/N N N N N N

-			
b			С
Rural/suburban highway		Urban Highway	
ment ssary	Comment	Comment Necessary	Comment

N N

Y/N

Y/N	
N	
N	
N	
N	
N	
N	

SW do not undertake this activity SW do not undertake this activity

SW do not undertake this activity
SW do not undertake this activity

20	30
b	С
Insituform	Pipe bursting

Comment

Necessary

		Man entry
	Comment	

Ν

Y/N		Y/N
	-	
		N
		N
		N

Necessary Y/N

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Edition 2

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## WATER INDUSTRY COMMISSIONER FOR SCOTLAND ■

#### **ANNUAL RETURN INFORMATION REQUIREMENTS**

#### **SUPPLEMENTARY INFORMATION - Cost Base** Table J4: Sewerage infrastructure - projected expenditure Field Type Ofwat Units & **Estimated proportion of** Description expenditure during the Reference BP PR 04 format period 2002-03-2005-06 **Sewer laying or replacement** J4.1 Grassland C2 C6 L1 % (1dp) 23 37 J4.2 Rural\suburban highway C2 C6 L2 % (1dp) 28 J4.3 Urban highway C2 C6 L3 % (1dp) Sewer laying or replacement by pipe jacking or microtunnelling C2 C6 L4 J4.3a Grassland % (1dp) J4.3b Rural\suburban highway C2 C6 L5 % (1dp) 0 J4.3c Urban highway C2 C6 L6 % (1dp) Sewer rehabilitation J4.4 Not in use J4.5 Insituform C2 C6 L7 % (1dp) 11 J4.6 Pipe bursting C2 C6 L8 % (1dp) 0 J4.7 Man entry systems C2 C6 L9 % (1dp) J4.8 Not in use Other sewerage infrastructure activity C2 C6 L10 0 J4.9 | Construction of self-contained pumping units to isolate domestic properties % (1dp)

Edition 2

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Date: .....

Date: .....

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Prepared by: .....

Checked by: .....

# WATER INDUSTRY COMMISSIONER FOR SCOTLAND ■

## **ANNUAL RETURN INFORMATION REQUIREMENTS**

<b>SUPPI</b>	LEMENT	ARY INFO	<b>RMATION</b> -	<b>Cost Base</b>
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## Table J4: Sewerage infrastructure - projected expenditure

	Ofwat	Units &	Field Type	Forecast proportion of
Description	D ( 1D 00	£		expenditure during the
	Reference JR 99	format		period 2004-05-2007-08

Issues with data

The sum of lines 1 to 9 should equal 100%

No solution required

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Date: April 2004
Table 4 of 8
Revision 7.0

## WATER INDUSTRY COMMISSIONER FOR SCOTLAND

#### **ANNUAL RETURN INFORMATION REQUIREMENTS**

#### **SUPPLEMENTARY INFORMATION - Cost Base**

#### Table J5: Water non-infrastructure standard costs

	Description	Ofwat	Units &	Field	Standard Cost	
	Description	Reference	format	Туре	Estimates	EJG
		_			_	' <u>-</u>
	Water treatment works					
J5.1	New treatment works type SW1, output 12Ml/d	PR99 G G5 L1	£/Ml/d (1dp)	I	225539.3	B3
J5.2	New treatment works type SW1, output 5MI/d	PR99 G G5 L1	£/Ml/d (1dp)	I	414342.8	B3
J5.3	New treatment works type SW2, output 30MI/d	PR04 BP C2 C3 L1	£/Ml/d (1dp)	I	186420.7	B3
J5.3a	Alterations to water treatment works type SW2, output 30MI/d	PR04 BP C2 C3 L5	£/MI/d (1dp)	I	53831.9	B3
J5.4	New filtration system at treatment works, type SW2, output 10Ml/d	-	£/Ml/d (1dp)	I	100539.1	B2
J5.5	Replacement filtration system at an existing water treatment works, type SW2, output 30Ml/d	PR04 BP C2 C3 L2	£/MI/d (1dp)	I	87210.3	B2
J5.5a	Fitting new plumbosolvency control to existing abstraction borehole treatment works with simple disinfection only, output 8MI/d	PR04 BP C2 C3 L4	£/Ml/d (1dp)	I	15638.1	В3
J5.5b	Installation of a nitrate removal plant at a borehole treatment works with simple disinfection only, output 10Ml/d	PR04 BP C2 C3 L6	£/Ml/d (1dp)	ı	0.0	N
J5.5c	Cryptosporidium protection to an existing borehole treatment works with simple disinfection only, output 2.5MI/d	PR04 BP C2 C3 L7	£/Ml/d (1dp)	ı	374178.9	B2
			<u> </u>	-		
	Storage					
J5.6	New service reservoir 1MI	-	£/MI (1dp)	I	310188.4	B2
J5.7	New service reservoir, capacity 4MI	PR04 BP C2 C3 L8	£/MI (1dp)	- 1	183279.0	B2
J5.8	Refurbishment of service reservoir 6MI	PR04 BP C2 C3 L10	£/MI (1dp)	I	29247.6	B2
J5.8a	New service reservior, capacity 15Ml	PR04 BP C2 C3 L9	£/MI (1dp)	I	111578.7	B2
_			<del>-</del>	-	<del>-</del>	<u>-</u>
	Pumping stations					
J5.9	Not in use					
J5.10	Replacement of variable speed Pumps, output 6 - 9 MI/d	PR04 BP C2 C3 L11	£/Ml/d (1dp)	I	0.0	N
	Replacement of variable speed pump motors, rated 110kW	PR04 BP C2 C3 L12	£/kW(1dp)	I	0.0	N
J5.12	New fixed speed pumpset, output 10MI/d	PR04 BP C2 C3 L15	£/MI/d (1dp)	I	0.0	N
	Not in use		` ',			
J5.13a	Replacement of borehole pumpsets, output 4MI/d	PR04 BP C2 C3 L13	£/Ml/d (1dp)	I	0.0	N
	Replacement of borehole pumpsets, output 10MI/d	PR04 BP C2 C3 L14	£/Ml/d (1dp)	ı	0.0	N
	New fixed speed pumpset, output 30MI/d	PR04 BP C2 C3 L16	£/MI/d (1dp)	I	0.0	N
	Replacement motor control centre for an existing variable speed pumping station, 15kW total installed motor capacity	PR04 BP C2 C3 L17	£/kW(1dp)	ı	0.0	N
	Replacement motor control centre for an existing variable speed pumping station, 90kW total installed motor capacity	PR04 BP C2 C3 L18	£/kW(1dp)	I	0.0	N
				-		
	Management & General					
	Extension to Office accomodation	PR99 G G5 L15	£/sqm (1dp)	I	1278.6	B3
J5.15	Satellite stations and a transmission station	PR99 G G5 L16	£/outstation (1dp)	ı	0.0	N

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### WATER INDUSTRY COMMISSIONER FOR SCOTLAND ₩

#### ANNUAL RETURN INFORMATION REQUIREMENTS

SUPPLEMENTARY INFORMATION - Cost Base						
Table J5: Water non-infrastructure standard costs						
					10	
Description	Ofwat Reference	Units & format	Field Type	Sta	andard Cost Estimates	
				Comment Necessary Y/N	Comment	
Water treatment works						L
J5.1 New treatment works type SW1, output 12Ml/d	PR99 G G5 L1	£/Ml/d (1dp)	I	N		
J5.2 New treatment works type SW1, output 5Ml/d	PR99 G G5 L1	£/Ml/d (1dp)	I	N		
J5.3 New treatment works type SW2, output 30Ml/d	PR04 BP C2 C3 L1	£/MI/d (1dp)	I	N		
J5.3a Alterations to water treatment works type SW2, output 30MI/d	PR04 BP C2 C3 L5	£/MI/d (1dp)	1	N		
J5.4 New filtration system at treatment works, type SW2, output 10Ml/d	-	£/Ml/d (1dp)	I	N		
Replacement filtration system at an existing water treatment works, type SW2, J5.5 output 30Ml/d	PR04 BP C2 C3 L2	£/Ml/d (1dp)	ı	N		
Fitting new plumbosolvency control to existing abstraction borehole treatment J5.5a works with simple disinfection only, output 8Ml/d	PR04 BP C2 C3 L4	£/Ml/d (1dp)	ı	N		
Installation of a nitrate removal plant at a borehole treatment works with simple J5.5b disinfection only, output 10Ml/d	PR04 BP C2 C3 L6	£/MI/d (1dp)	ı	N	SW do not carry out this type of	work
Cryptosporidium protection to an existing borehole treatment works with simple J5.5c disinfection only, output 2.5Ml/d	PR04 BP C2 C3 L7	£/MI/d (1dp)	ı	N		
	•					
Storage		I				
J5.6 New service reservoir 1MI	-	£/MI (1dp)		N		
J5.7 New service reservoir, capacity 4MI	PR04 BP C2 C3 L8	£/MI (1dp)		N		
J5.8 Refurbishment of service reservoir 6MI	PR04 BP C2 C3 L10	£/MI (1dp)		N		
J5.8a New service reservior, capacity 15MI	PR04 BP C2 C3 L9	£/MI (1dp)	l l	N		
Pumping stations						
J5.9 Not in use						
J5.10 Replacement of variable speed Pumps, output 6 - 9 Ml/d	PR04 BP C2 C3 L11	£/Ml/d (1dp)	I	N	SW have no relevant costs for t	
J5.11 Replacement of variable speed pump motors, rated 110kW	PR04 BP C2 C3 L12	£/kW(1dp)	1	N	SW have no relevant costs for t	
J5.12 New fixed speed pumpset, output 10MI/d	PR04 BP C2 C3 L15	£/Ml/d (1dp)	ı	N	SW have no relevant costs for t	his line - see commenta
J5.13 Not in use						
J5.13a Replacement of borehole pumpsets, output 4MI/d	PR04 BP C2 C3 L13	£/Ml/d (1dp)	!	N	SW have no relevant costs for t	
J5.13b Replacement of borehole pumpsets, output 10Ml/d	PR04 BP C2 C3 L14	£/Ml/d (1dp)	!	N	SW have no relevant costs for t	
J5.13c New fixed speed pumpset, output 30Ml/d	PR04 BP C2 C3 L16	£/Ml/d (1dp)		N	SW have no relevant costs for t	his line - see commenta
Replacement motor control centre for an existing variable speed pumping station, J5.13d 15kW total installed motor capacity	PR04 BP C2 C3 L17	£/kW(1dp)		N	SW have no relevant costs for t	his line - see commenta
Replacement motor control centre for an existing variable speed pumping station, J5.13e 90kW total installed motor capacity	PR04 BP C2 C3 L18	£/kW(1dp)		N	SW have no relevant costs for t	
Management & General						
J5.14 Extension to Office accommodation	-	£/sqm (1dp)		N		
J5.15 Satellite stations and a transmission station		£/outstation (1dp)	<del>L i l</del>	N	SW have no relevant costs for t	his line - see commenta

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#### ANNUAL RETURN INFORMATION REQUIREMENTS

#### **SUPPLEMENTARY INFORMATION - Cost Base**

#### Table J6: Non-infrastructure standard sewerage costs

	Description	Ofwat	Units &	Field	<b>Standard Cost</b>	
		Reference	format	Type	Estimates	EJG
		-				
	Sewage structures					
	Storage tank to combined sewer overflow, capacity 750m3	PR04 BP C2 C7 L1	£/unit (1dp)	<u> </u>	394174.2	B3
	Large storage tank to combined sewer overflow, capacity 3000m3	PR04 BP C2 C7 L2 PR04 BP C2 C7 L3	£/unit (1dp)	+	865892.4	B3 B3
J6.10	Combined sewer overflow chamber with powered screen	PR04 BP C2 C7 L3	£/unit (1dp)	l	146280.9	В3
	Sewage pumping stations	1				
		PR04 BP C2 C7 L4	£/kW (1dp)			
J6.2	Replacement dry well pumps and motors for an existing pumping station, 12kW total capacity	1 10 4 B1 02 07 E4	2/KW (1ap)	<u> </u>	1732.0	B3
J6.3	Replacement dry well pumps and motors for an existing pumping station, 30kW total capacity	PR04 BP C2 C7 L5	£/kW (1dp)	I	871.0	В3
	Replacement dry well pumps and motors for an existing pumping station, 100kW total capacity	PR04 BP C2 C7 L6	£/kW (1dp)	I	353.0	В3
	Replacement submersible pumps for an existing pumping station, 12kW total capacity	PR04 BP C2 C7 L7	£/kW (1dp)	I	0.0	N
	Upsize existing dry well in-line pumping station from 12kW to 30 kW capacity	PR04 BP C2 C7 L8	£/kW (1dp)	I	0.0	N
	Upsize existing wet well in-line pumping station from 12kW to 30 kW capacity	PR04 BP C2 C7 L9	£/kW (1dp)		0.0	N
	Replacement motor control centre for an existing fixed speed pumping station, 15kW total installed motor capacity	PR04 BP C2 C7 L10	£/kW (1dp)	ı	0.0	N
	Replacement motor control centre for an existing fixed speed pumping station, 90kW total installed motor capacity	PR04 BP C2 C7 L11	£/kW (1dp)	I	0.0	N
	, ,	•				
	Treatment Works					
J6.5	Primary treatment works p.e. 10,000	PR99 G G6 L5	£/kgBOD <sup>5</sup> /d (1dp)	I	1623.6	B2
J6.6	Additional secondary treatment p.e. 5,000	PR99 G G6 L6	£/kgBOD <sup>5</sup> /d (1dp)	I	3240.2	B2
J6.7	Additional secondary treatment p.e. 60,000	-	£/kgBOD <sup>5</sup> /d (1dp)	I	995.5	B2
J6.7a	Installation of denitrification at existing secondary works, p.e. 40,000	PR04 BP C2 C7 L13	£/kgBOD <sup>5</sup> /d (1dp)	I	0.0	N
J6.8	New secondary treatment works p.e. 5,000	PR99 G G6 L7	£/kgBOD <sup>5</sup> /d (1dp)	- 1	5084.3	B2
J6.9	New secondary treatment works p.e. 70,000	-	£/kgBOD <sup>5</sup> /d (1dp)	I	1653.3	B2
J6.10	Reconstruction of preliminary treatment p.e. 25,000	PR99 G G6 L10	£/kgBOD <sup>5</sup> /d (1dp)	I	392.9	B2
J6.11	First time rural sewage treatment p.e. 200	PR04 BP C2 C7 L12	£/kgBOD <sup>5</sup> /d (1dp)	I	18341.6	B2
J6.12	Additional nutrient removal at existing secondary works, p.e. 12,000	PR04 BP C2 C7 L14	£/kgBOD <sup>5</sup> /d (1dp)	I	309.3	B2
	Additional nutrient removal at existing secondary works, p.e. 40,000	PR04 BP C2 C7 L15	£/kgBOD <sup>5</sup> /d (1dp)	I	132.6	B2
	Additional ammonia removal at existing secondary works, p.e. 2,000	PR04 BP C2 C7 L16	£/kgBOD <sup>5</sup> /d (1dp)	I	1442.3	B2
	Additional ammonia removal at existing secondary works, p.e. 40,000	PR04 BP C2 C7 L17	£/kgBOD <sup>5</sup> /d (1dp)	I	241.0	B2
	Additional UV disinfection at existing treatment works, p.e. 5,000	PR04 BP C2 C7 L18	£/m³/d (1dp)	I	0.0	N
	Additional UV disinfection at existing treatment works, p.e. 40,000	PR04 BP C2 C7 L19	£/m³/d (1dp)	I	0.0	N
	New enhanced sludge treatment facility, throughput 2 ttds per annum	PR04 BP C2 C7 L20	£/ttds/a (1dp)	I	0.0	N
J6.18	Extension to existing conventional sludge treatment facility, additional throughput 1 ttds per annum	PR04 BP C2 C7 L21	£/ttds/a (1dp)	I	0.0	N

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## WATER INDUSTRY COMMISSIONER FOR SCOTLAND ■

#### ANNUAL RETURN INFORMATION REQUIREMENTS

SUPPI	LEMENTARY INFORMATION - Cost Base						
			1				
Table -	J6: Non-infrastructure standard sewerage costs						1
	Description	Ofwat	Units &	Field		10	
	Description	Reference	format	Type	Sta	ndard Cost Estimates	
					0		· 
					Comment Necessary	Comment	
		1			Y/N		
J6.1	Sewage structures Storage tank to combined sewer overflow, capacity 750m3	PR04 BP C2 C7 L1	£/unit (1dp)		N		
	Large storage tank to combined sewer overflow, capacity 750m3	PR04 BP C2 C7 L1	£/unit (1dp)	<u> </u>	N		
	Combined sewer overflow chamber with powered screen	PR04 BP C2 C7 L3	£/unit (1dp)	i	N		
		•					
	Sewage pumping stations			1			
	Replacement dry well pumps and motors for an existing pumping station, 12kW total capacity	PR04 BP C2 C7 L4	£/kW (1dp)	1	N		
	Replacement dry well pumps and motors for an existing pumping station,	PR04 BP C2 C7 L5	£/kW (1dp)				
	30kW total capacity	PR04 BP C2 C7 L3	£/KW (Tup)	'	N		
	Replacement dry well pumps and motors for an existing pumping station, 100kW total capacity	PR04 BP C2 C7 L6	£/kW (1dp)	1	N		
00.1	Replacement submersible pumps for an existing pumping station, 12kW total	PR04 BP C2 C7 L7	£/kW (1dp)		•		
J6.4a	capacity	FRU4 BF C2 C1 L1	£/KVV (Tup)	-	N	SW have no relevant costs for	this line
J6.4b	Upsize existing dry well in-line pumping station from 12kW to 30 kW capacity	PR04 BP C2 C7 L8	£/kW (1dp)	1	N	SW have no relevant costs for	this line
		PR04 BP C2 C7 L9	£/kW (1dp)	1			
J6.4c	Upsize existing wet well in-line pumping station from 12kW to 30 kW capacity Replacement motor control centre for an existing fixed speed pumping	1104 B1 02 01 E3	Z/KW (Tup)	<u> </u>	N	SW have no relevant costs for	this line
J6.4d	station, 15kW total installed motor capacity	PR04 BP C2 C7 L10	£/kW (1dp)	I	N	SW have no relevant costs for	this line
	Replacement motor control centre for an existing fixed speed pumping	PR04 BP C2 C7 L11	£/kW (1dp)				
J6.4e	station, 90kW total installed motor capacity	1104 B1 02 07 E11	2/KW (1ap)		N	SW have no relevant costs for	this line
	Treatment Works						
J6.5	Primary treatment works p.e. 10,000	PR99 G G6 L5	£/kgBOD <sup>5</sup> /d (1dp)	- 1	N		
	Additional secondary treatment p.e. 5,000	PR99 G G6 L6	£/kgBOD <sup>5</sup> /d (1dp)	I	N		
	Additional secondary treatment p.e. 60,000	-	£/kgBOD <sup>5</sup> /d (1dp)	- 1	N		
	Installation of denitrification at existing secondary works, p.e. 40,000	PR04 BP C2 C7 L13	£/kgBOD <sup>5</sup> /d (1dp)	1	N	SW would not carry out this typ	e of work
	New secondary treatment works p.e. 5,000	PR99 G G6 L7	£/kgBOD <sup>5</sup> /d (1dp)	- 1	N	, , , , ,	
J6.9	New secondary treatment works p.e. 70,000	-	£/kgBOD <sup>5</sup> /d (1dp)	I	N		
J6.10	Reconstruction of preliminary treatment p.e. 25,000	PR99 G G6 L10	£/kgBOD <sup>5</sup> /d (1dp)	I	N		
	First time rural sewage treatment p.e. 200	PR04 BP C2 C7 L12	£/kgBOD <sup>5</sup> /d (1dp)	I	N		
J6.12	Additional nutrient removal at existing secondary works, p.e. 12,000	PR04 BP C2 C7 L14	£/kgBOD <sup>5</sup> /d (1dp)	1	N		
J6.13	Additional nutrient removal at existing secondary works, p.e. 40,000	PR04 BP C2 C7 L15	£/kgBOD <sup>5</sup> /d (1dp)	1	N		
	Additional ammonia removal at existing secondary works, p.e. 2,000	PR04 BP C2 C7 L16	£/kgBOD <sup>5</sup> /d (1dp)	1	N		
J6.14a	Additional ammonia removal at existing secondary works, p.e. 40,000	PR04 BP C2 C7 L17	£/kgBOD <sup>5</sup> /d (1dp)	1	N		
J6.15	Additional UV disinfection at existing treatment works, p.e. 5,000	PR04 BP C2 C7 L18	£/m³/d (1dp)	I	N	SW have no relevant costs for	this line
J6.16	Additional UV disinfection at existing treatment works, p.e. 40,000	PR04 BP C2 C7 L19	£/m³/d (1dp)	I	N	SW have no relevant costs for	this line
J6.17	New enhanced sludge treatment facility, throughput 2 ttds per annum	PR04 BP C2 C7 L20	£/ttds/a (1dp)	- 1	N	SW have no relevant costs for	this line
.16.18	Extension to existing conventional sludge treatment facility, additional throughput 1 ttds per annum	PR04 BP C2 C7 L21	£/ttds/a (1dp)	1	N	SW have no relevant costs for	this line
00.10	an eagily at 1 the per difficult	<u>I</u>			14	STATIONS NO TELEVALLE COSTS TO	
			1				
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## WATER INDUSTRY COMMISSIONER FOR SCOTLAND

### **ANNUAL RETURN INFORMATION REQUIREMENTS**

### **SUPPLEMENTARY INFORMATION - Cost Base**

### Table J7: Composition of investment by asset type- water service

	• • • • • • • • • • • • • • • • • • • •				
	Description	Ofwat Reference PR04 BP	Units &	Field Type	Estimated proportion of expenditure during the period 2002-03 - 2005-06
J7.1	Water resources	C2 C4 L1	% (1dp)		2.2
		02 0 . 2 .	70 ( · ap)		<del></del>
	Water treatment works				
J7.2	New surface water up-to and including 10Ml/day		% (1dp)	I	7.5
J7.3	New surface water greater than 10Ml/d	001410	% (1dp)	I	14.9
J7.4	Upgraded or refurbished surface water up-to and including 10Ml/day	C2 L4 L2	% (1dp)	I	5.7
J7.5	Upgraded or refurbished surface water greater than 10Ml/day	╗	% (1dp)	ı	4.4
J7.6	Ground water	C2 L4 L3	% (1dp)	I	3.3
	Treated water storage				
J7.7	New	00.041.4	% (1dp)	I	1.7
J7.8	Refurbished	C2 C4 L4	% (1dp)	I	6.8
J7.9	Pumping stations	C2 C4 L5	% (1dp)	I	1.6
	Mains and Customer Ancilliaries				
J7.10	Potable mains	C2 C4 L6	% (1dp)	<u> </u>	39.6
J7.11	Communication pipes	C2 C4 L7	% (1dp)	I	0.4
J7.12	Management & general	C2 C4 L9	% (1dp)	I	10.1
J7.13	Meters	C2 C4 L8	% (1dp)	<del></del>	1.8

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## WATER INDUSTRY COMMISSIONER FOR SCOTLAND

#### **ANNUAL RETURN INFORMATION REQUIREMENTS**

		_
SUPPLEMENTARY	/ INFORMATION - Cost Base	

Table J7: Composition of investment by asset type- water service

Issues with data	Problem ?	Solution
The sum of lines 1 to 13 should equal 100%	N	No solution required

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 Date:

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## WATER INDUSTRY COMMISSIONER FOR SCOTLAND

### **ANNUAL RETURN INFORMATION REQUIREMENTS**

### **SUPPLEMENTARY INFORMATION - Cost Base**

#### Table J8: Composition of investment by asset type- sewerage service

Description	Ofwat Reference PR04 BP	Units &	Field Type	Estimated proportion of expenditure during the period 2002-03 - 2005-06
J8.1   Sewers	C2 C8 L1	% (1dp)	I	27.1
J8.2   Sewer structures	C2 C8 L2	% (1dp)	I	11.2
J8.3   Sewage pumping stations	C2 C8 L3	% (1dp)	I	2.5
Sewage treatment works				
J8.4 Preliminary treatment only	C2 C8 L4	% (1dp)	I	1.1
J8.5 New primary treatment up-to and including 10,000 p.e.		% (1dp)	I	0.9
J8.6 New primary treatment greater than 10,000 p.e.	C2 C8 L5	% (1dp)	I	0.0
J8.7 Upgraded or refurbished primary treatment up-to and including 10,000 p.e.	C2 C6 L5	% (1dp)	I	13.7
J8.8 Upgraded or refurbished primary treatment greater than 10,000 p.e.		% (1dp)	I	0.0
J8.9 New secondary treatment up-to and including 10,000 p.e.		% (1dp)	I	4.3
J8.10 New secondary treatment greater than 10,000 p.e.	C2 C8 L6	% (1dp)	I	1.3
J8.11 Upgraded or refurbished secondary treatment up-to and including 10,000 p.e.	C2 C6 L0	% (1dp)	I	21.1
J8.12 Upgraded or refurbished secondary treatment greater than 10,000 p.e.		% (1dp)	I	6.5
J8.13 Tertiary treatment	C2 C8 L7	% (1dp)	I	3.1
J8.14   Sea outfalls	C2 C8 L8	% (1dp)	I	1.1
J8.15   Sludge treatment and disposal	C2 C8 L9	% (1dp)	I	1.7
J8.16   Management and general	C2 C8 L10	% (1dp)		4.4

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## WATER INDUSTRY COMMISSIONER FOR SCOTLAND ■

## **ANNUAL RETURN INFORMATION REQUIREMENTS**

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J	JFFL				OII - GUSL DASE

Table J8: Composition of investment by asset type- sewerage service

Jacobs with data
Issues with data The sum of lines 1 to 16 should equal 100%
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