

INSPECTION AND TEST PLAN – WATER/RECYCLED WATER MAIN LAYING

ALL WORKS TO BE CARRIED OUT TO SYDNEY WATER STANDARDS

Developer:		Water Servicing Coordinator:		WSC Site Representative:				
		Constructor:		Constructor Site Representative:				
Case No:		Accredited Driller:		Witness, Hold & Surveillance points added to ITP				
Works classification:		Licensed Plumber RPZD:						
Works description:		Licensed Plumber Property Service (Main to Meter):						
		Plumbers Licence Number:		Sydney Water Representative				
		Field Tester:						
		ITP Prepared by:						Date / /
				Reviewed by:		Date / /		
No	Construction/Inspection Activity	Inspection Procedure & Acceptance Criteria		Const- ructor	WSC**	Sydney Water*	Record	Comment
1	Pre-start/Site establish	Visual check. Checklist completed.		X	H	S	Checklist	
2	Approved materials on Site/delivered	Visual check approved materials. Quantity and condition. Checklist completed		X	W	S	Checklist	
3	Installation of cut-in	Visual and dimensional check to Sydney Water Standards		H	H	H	Water Main Connection Report	
4	RPZD installation by an appropriate licensed plumber	Visual and dimensional check of backflow equipment and fittings		X	H	H	Checklist	
5	DTC/Special Design	Visual and dimensional check to DTC or Engineers certification		X	W	S	Checklist/plan	
6	Excavation and pipe laying	Visual and dimensional check to Sydney Water Standards. Checklist completed.		X	W	S	Checklist	
7	Chambers	Visual and dimensional check to Sydney Water Standards. Checklist completed		X	H	S	Checklist	
8	Survey of main in easement	Survey of pipe location before backfill		X	H	S		
9	Surface fittings	Visual and dimension check to Sydney Water Standards. Checklist completed		X	X	S	Checklist	
10	Pressure test when water is required prior to disinfection	Pressure test to Sydney Water Standards. Swabbing of main and pre-disinfection testing ie odour, clarity and turbidity test.		X	W	S	Test Results	
11	Testing	Pressure test, Compaction test to Sydney Water Standards		X	W	S	Test Results	
12	Disinfection	Disinfection to Sydney Water Standards		X	H	H	Test Results	
13	Pre-connection inspection – Main	Visual inspection to Sydney Water Standards. Checklist completed		H	H	H	Checklist	
14	Removal of RPZD by appropriately licensed plumber	Visual and dimensional check to Sydney Water Standards		X	H	H	Water Main Connection Report	
15	Connection to System	Visual and dimensional check to Sydney Water Standards.		X	H	W	Water Main Connection Report	
16	Property Water Connection	Visual and dimensional check to Sydney Water Standards. Checklist completed.		W	S	S	Checklist	

SYDNEY WATER

	(Drilling)						
17	Installation of property service (main to meter)	Visual and dimensional check to Sydney Water Standards. Checklist completed.	W	S	S	Checklist	
18	Dual Water Flow Test property service/s (main to meter)	Flow test of drinking water system. Lock and tag meter ball valve. Flow test of recycled water system. Lock and tag meter ball valve.	X	W	H	Water Main Connection Report	
19	Restoration and Post Connection Inspection	Visual inspection against photographs. Clearance letter from Council/property owner	X	H	H	Clearance letter	
20	Validation	No	Amendment	Date	Reviewed	Symbol	Legend
I certify that the works have been constructed in accordance with Sydney Water Standards and the Inspection and Test Plan Water Servicing Coordinator Date / /						X	Inspection by
						H	Mandatory Hold Point
						W	Option given to inspect
						S	Surveillance

* Sydney Water reserves the right to vary these requirements at any time

** Sydney Water's written approval **MUST** be obtained prior to varying these requirements

WATER CONSTRUCTION CHECKLIST

*** Clause and Drawing No. refer to the Water Supply Code of Australia WSA 03-2011-3.1 (Sydney Water Edition)**

Refer to Provider Instructions
**** Refer to Technical Requirements & Work Instructions for Water Service Connections (DRILLING)**
Refer to Property Service (Main to meter) Installations Technical Requirements

Case Number		Main layer Name:					
Location		Pipe Size:					
		Line No:					
WSC Rep		Chainage Laid:					
		Date:					
No.	Description	Minimum Standard					
1.1	Photographic record	#					
1.2	Council fees paid	Council requirements					
1.3	Property entry agreement	#, *CI 11.4.1/11.5.4					
1.4	Current plan on site	#, WSC to confirm					
1.5	Current Main laying Specifications on site	#, WSC to confirm, *CI 11.1					
1.6	Kerb/footway to finished levels	#					
1.7	Sydney Water listed constructor on site	#, WSC to confirm, *CI 10.2					
1.8	Safe Work Plan on site & implemented	#, WSC to confirm, *CI 11.5					
1.9	Environmental Management Plan on site & implemented	#, WSC to confirm, *CI 11.5.5.1					
1.10	Inspection and Test Plan on site – one working copy	#					
1.11	Traffic Management Plan on site & implemented	Industry practice, * CI 11.5.4					
1.12	Job set out	#, WSC to confirm					
1.13	Services Authorities contacted – 48 hours notice	Design Plan					
1.14	All services located	#					
1.15	All services marked	#					
2.1	Approved materials on site	*CI 12.1/12.4					
2.2	Delivery Inspection	*CI 12.4					
2.3	Pipe type and size to current plan	Current Plan					
2.4	Polyethylene sleeving & accessories	* CI 12.1					
2.5	Marking tape	* CI 12.1					
2.6	Bedding material	* WAT-1250-S/1251-S, * CI 12.1					
2.7	Trench fill	* WAT-1250-S/1251-S, * CI 12.1					
2.8	Fittings	* CI 12.1					
2.9	Surface Fittings	* CI 12.1					

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2.10	Pre Cast chambers	* CI 12.1						
2.11	Pipe laying accessories	* CI 12.1						
3.1	Installation of cut-in	Relevant standards						
3.2	Appropriate Fittings and ancillaries to stand on site	Relevant standards						
4.1	RPZD Installation - Cut-In valve locked and tagged	Water Main Connection Report – Part 1						
4.2	Approval to install RPZD	Water Main Connection Report – Part 1 signed off						
4.3	Accredited licensed plumber to install and provide RPZD test results	Sydney Water Back Flow Prevention Programme Accreditation						
4.4	Back Flow prevention device, and fittings installation and location.	As per design plan and AS/NZS3500 Section 4.6						
4.5	Constructors site rep. On site							
4.6	Pressure test results satisfactory							
4.7	Traffic control, and other Safety procedures/plans in place to address special conditions.							
4.8	Site specific EMP and SWP implemented on site	# WSC 5. Project Specific Quality Plan						
4.9	All Fittings and ancillaries on site							
4.10	Inspection and Test Plan up to date							
4.11	Standards on site	AS/NZS3500						
4.12	Procedures and plans to address special conditions are in place i.e. Asset Isolation Plan	Flow Management and Isolation of Hydraulic Assets Procedure (HSP- 070)						
4.13	Approved to connect for construction water (if no give details)	Water main Connection Report – Part 1(a) signed off						
4.14	Cut-In valve unlocked and tag removed							
4.15	Metered standpipe installed	Sydney Water Registered Stand Pipe						
5.1	DTC/Special Design	#						
6.1	Services marked	Dial Before You Dig, *CI 11.5.1						
6.2	Services exposed with appropriate clearance	*CI 11.5.1						
6.3	Trench width to standard	*WAT-1250-S/1251-S						
6.4	Trench depth to standard	*WAT-1250-S/1251-S						
6.5	Shoring (S) Benching (BN) Battering (BT)	*CI 13.1/13.5/13.6						
6.6	Pipe joints Witness mark Deflection limits Restrained joints	* CI 15 * CI 15.1.4 * WAT-1250-S/1251-S * WAT-1208, * CL 15.7						
6.7	Valves, Hydrants and Surface fittings installed Shroud assembly Valve anchorage	* CI 15.4 * WAT-1301-V * WAT-1207						
6.8	Bulkheads and Trench Stops to standard	*WAT-1209/1210, *CI 15.6/15.9						

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6.9	Thrust blocks to standard	*WAT-1205/1207/ 1252-S, *CI 15.5						
6.10	Pipe embedment (bedding, surround & overlay) to standard	* WAT-1201/1202						
6.11	Concrete encasement to standard (CH-CH)	* CI 16.6						
6.12	Marking tape to standard and correctly fitted	* WAT-1201, CI 15.12						
6.13	Trench fill – App'd material only & layered	*WAT-1201/1250-S, *CI 17.1						
6.14	Compaction to standard	*CI 17.1.3						
6.15	Jointing to standard	*CI 15.2.2						
6.16	Sleeving to standard	*CI 15.11						
6.17	Barricades, fencing, trench plates in place & secured	OHS						
7.1	Chambers to standard: in-situ (IS) Precast (PC)	*WAT-1308-V/1309 / 1350-S/1351-S, *CI 15.13.1						
8.1	Survey of main in easement	Relevant standard						
9.1	Valves, Hydrants & Surface fittings to standard	*WAT-1303-V/1305-V						
9.2	Surface boxes and surrounds to finished levels	* WAT-1303-V/1305-V						
9.3	Surface box lids hinged in direction of traffic flow	* WAT-1303-V/1305-V						
9.4	Shroud pipes assembled to Standards	* WAT-1301-V						
9.5	Fitting bolts protected to Standards	* WAT-1313						
9.6	Correct depth to Spindle tops	* WAT-1301-V						
9.7	Correct depth to Hydrant lugs	* WAT-1301-V						
9.8	Spindle retaining disc in place	* WAT-1301-V						
9.9	Indicator plates in place	* WAT-1352-S/1353-S						
9.10	Excavation to standard	NSW Code of Practice 2.218.1						
9.11	Approved products and materials – Correct Tapping Band <ul style="list-style-type: none"> • Taptite • Milnes • Gunmetal • Other 	** 5 Approved Products and Materials						
9.12	Approved products and materials – Correct Plastic Bush <ul style="list-style-type: none"> • White – Imperial • Black - Metric 	** 5 Approved Products and Materials						
9.13	Appropriate Tools <ul style="list-style-type: none"> • Wad Cutter – PVC only • Twist Drill – D1CL/C1CL only • Plastic Sleeving – Blue Sleeve 	** 12.2 Install Drilling						
10.1	Pressure test when water is required prior to disinfection	* CI 19.4						
11.1	Compaction test	NATA Certified lab, *CI 19.3						

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12.1	Disinfection, sample & test	*CI 20							
13.1	Site restored	*CI 11.5.4.1, 11.5.5/ 23							
13.2	Pre connection inspection	#							
13.3	Pre connection inspection Main	# ≥ DN 250 (Isolation procedure as per Job Specific Letter)							
13.4	Work As Constructed compiled – connection assumed	#, *CI 24							
14.1	Removal of RPZD by appropriately licensed plumber	Water Main connection							
15.1	Connection Safe Work Plan on site & implemented	#, WSC to confirm							
15.2	Connection to live system – under pressure connection	*WAT-1105, CI 22.2							
15.3	Connection to live system – existing system shut down	*CI 22.1/22.2							
15.4	Thrust block to standard	*WAT-1105/1205							
16.1	Install Property service connection (Drilling)	** 12.2 Install Drilling							
16.2	Drilling in main correct	** 12.2 Install Drilling							
16.3	Location of drilling as per standard	** 12.1							
16.4	Pipe Size within accreditation ≤200mm	** 2. Scope of Water Service Connection (Drilling)							
16.5	Pipe type within accreditation: DICL/CICL/PVC only	** 2. Scope of Water Service Connection (Drilling)							
16.6	Dual Water Flow Test property services (main to meter)	Water Main Connection Report							
16.7	Fittings disinfected	*CI SW20.1							
16.8	Property Water Connection (Drilling) Driller holding relevant accreditation on site	Listed Accredited Driller							
16.9	Installation of property service (main to meter) Plumber holding relevant accreditation on site	AS/NZS3500							
16.10	Property boundaries located	## 10. Installation of Property services: (Installers Responsibility), 10.1.16 <ul style="list-style-type: none"> • Current NSW Code of Practice for Plumbing and Drainage • AS/NZS3500 							
16.11	Install property service (main to meter) – Drinking Water	## 10. Installation of Property services: (Installers Responsibility) <ul style="list-style-type: none"> • Current NSW Code of Practice for Plumbing and Drainage • AS/NZS3500 							

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Refer to Property Service (Main to meter) Installations Technical Requirements

16.12	Install property service (main to meter) – Recycled Water	## 10. Installation of Property services: (Installers Responsibility) <ul style="list-style-type: none"> • Current NSW Code of Practice for Plumbing and Drainage • AS/NZS3500 						
16.13	Drinking water riser is plain copper	## 10. Installation of Property services: (Installers Responsibility) <ul style="list-style-type: none"> • Current NSW Code of Practice for Plumbing and Drainage • AS/NZS3500 						
16.14	Recycled water riser is coloured lilac	## 10. Installation of Property services: (Installers Responsibility) <ul style="list-style-type: none"> • Current NSW Code of Practice for Plumbing and Drainage • AS/NZS3500 						
16.15	Drinking water riser has correct ball valve	## 10. Installation of Property services: (Installers Responsibility) <ul style="list-style-type: none"> • Current NSW Code of Practice for Plumbing and Drainage • AS/NZS3500 						
16.14	Recycled water riser has correct ball valve	## 10. Installation of Property services: (Installers Responsibility) <ul style="list-style-type: none"> • Current NSW Code of Practice for Plumbing and Drainage • AS/NZS3500 						
16.15	Risers are a minimum 300mm apart	Meter Fit Policy						
16.16	Drinking Water non-return valve fitter							
16.17	Termination of property service as per standard	## 10.1.2 – 10.1.3 <ul style="list-style-type: none"> • AS/NZS3500 						
16.18	Embedment and trench fill – drinking water property services	<ul style="list-style-type: none"> • AS/NZS3500 						
16.19	Embedment and trench fill – recycled water property services	<ul style="list-style-type: none"> • AS/NZS3500 						
16.20	Clearance from other services	## 10. Installation of Property services: (Installers Responsibility), 10.1.7 <ul style="list-style-type: none"> • Current NSW Code of Practice for Plumbing and Drainage • AS/NZS3500 						
16.21	Drinking water property services locked & tagged							
16.22	Recycled water property services locked & tagged							
17.1	Site clear & final restoration	*CI 23						
17.2	Road/Footpath Opening	** 6.2 Work Site Assessment						
17.3	Dial Before You Dig	** 6 Excavation, 6.1						

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18.1	Safe Work Plan On Site	** 12.1							
18.2.	Safe Work Plan Implemented	** 12.1							
18.3	Environmental Management Plan on site	** 12.1							
18.4	Environmental Management Plan implemented/site prepared	** 12.1							
19.1	Validation	#							
20.1	Inspection & Test Plan signed off	#							
This is to certify that excavation & installation of infrastructure has been in compliance with Sydney Water Standards and in accordance with Company OHS & Environmental Policies		Signed:..... Date: (Sydney Water listed constructor responsible for construction)							