

Table 2: Wastewater

Materials that are not on the following table MUST be approved by Council – refer to – Chief Engineer

	Category / Material	Application	Standard	Product / Comment	Recommended Manufacturer	Recommended Supplier
AM-2.1	Wastewater Pipe	Trunk mains: larger than 150mm. These to be specifically approved and specified by Council				
AM-2.1.1	Restrain Pipe	150mm to 225mm uPVC SN16	No dig renewals		IPLEX Pipelines New Zealand Ltd	Humes Pipeline Systems Hynds Pipe Systems Ltd
AM-2.1.2	Spiral-Welded Steel Pipe Internal Linings Include Concrete or Epoxy	Structural mains	NZS 4442 and AS 1579	<ul> <li>Specific design and approval</li> <li>Polyken YG111 external wrapping or speed steel with polyethylene coatings. Note internal coating must be resistant to hydrogen sulphide</li> <li>Manufacturer capable of meeting the required standard</li> </ul>	Steelpipe New Zealand	Mico Pipelines
AM-2.1.3	Ductile Iron Class K9 / K12	Structural mains	AS/NZS 2280 and amendments	<ul> <li>Specific design and approval</li> <li>Light cement lined with Tyton joints. External protection with greensleeve</li> <li>Generally suspended pipes and high structural loadings. Note internal coating must be resistant to hydrogen sulphide</li> </ul>	Tubemakers of Australia Asmuss Water Systems	Mico Pipelines  Asmuss Water Systems

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				<ul> <li>Manufacturer capable of meeting the required standard</li> <li>Tubemakers of Australia Licence #2029</li> </ul>		
AM-2.1.4	Ductile Iron Pipe Light Cement-Lined Tyton Excel PN20 and PN35	Structural mains	AS/NZS 2280 and amendments	<ul> <li>Specific design and approval</li> <li>With Tyton elastomeric seals and socket / spigot joints (with blue polyethylene sleeving). Note: internal coating must be resistant to hydrogen sulphide.</li> <li>Manufacturer capable of meeting the required standard</li> <li>Asmuss Water Systems Licence #SMK0883</li> </ul>	Asmuss Water Systems	Mico Pipelines Asmuss Water Systems
AM-2.1.5	uPVC Pipes (solid wall) and Fittings for Gravity Applications SN8 SN12.5 or SN16 for Trenches	Reticulation mains and lateral connections	AS/NZS 1254	<ul> <li>Rubber ring jointed</li> <li>IPLEX Licence #1697</li> <li>Marley Licence #2365</li> </ul>	IPLEX Pipelines New Zealand Ltd Marley New Zealand Limited RX Plastics Ltd	Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
AM-2.1.6	uPVC Pipes (solid wall) and Fittings for Pressure Applications SN16		AS/NZS 1477	Specific design and approval	IPLEX Pipelines New Zealand Ltd Marley New Zealand Limited RX Plastics Ltd	Keyplas  Humes Pipeline Systems  Hynds Pipe Systems Ltd  Mico Pipelines

Polyethylene Pipe (PE) for pressure applications		AS/NZS 4130 and			Manufacturer	Supplier
PE100 SDR17 (minimum PN12)		4131		Specific design and approval Pipes should be jointed in accordance with manufacturer's recommendations and be a standard black colour with inner core colour brown Electrofusion coupling will be accepted where pipe line strings are to be connected, connection of fittings and repairs to pipelines	IPLEX Pipelines New Zealand Ltd  Marley New Zealand Limited  RX Plastics Ltd  Waters & Farr	Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines Asmuss Water Systems
Tracer Wire / Warning Tape						
Tracer Wire	Trenchless installation rising mains		-	A continuous 4.0mm² multi- strand (minimum of 4) polythene sleeved cable		Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
Warning / Detection Tape	Open cut installation		:	Width – 100mm (min.) Thickness – 80mu Printing – TBC Printing Height – 80mm Tape Colour – TBC	Polymark Packaging	Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
	(minimum PN12)  Tracer Wire / Warning Tape  Tracer Wire  Warning / Detection	(minimum PN12)  Tracer Wire / Warning Tape  Tracer Wire  Trenchless installation rising mains  Warning / Detection  Open cut installation	(minimum PN12)  Tracer Wire / Warning Tape  Tracer Wire  Trenchless installation rising mains  Warning / Detection  Open cut installation	(minimum PN12)  Tracer Wire / Warning Tape  Tracer Wire  Trenchless installation rising mains  Warning / Detection Tape  Open cut installation	PE100 SDR17 (minimum PN12)  standard black colour with inner core colour brown  Electrofusion coupling will be accepted where pipe line strings are to be connected, connection of fittings and repairs to pipelines  Tracer Wire / Warning Tape  Tracer Wire Trenchless installation rising mains  Warning / Detection Tape  Warning / Detection Tape  Open cut installation  - Width – 100mm (min.)  Thickness – 80mu  Printing – TBC  Printing Height – 80mm  Tape Colour – TBC	PE100 SDR17 (minimum PN12)  standard black colour with inner core colour brown Electrofus coupling will be accepted where pipe line strings are to be connected, connection of fittings and repairs to pipelines  Tracer Wire / Warning Tape  Tracer Wire  Trenchless installation rising mains  Tracer Wire / Warning / Detection Tape  Tape  Open cut installation  Tape  Polymark Packaging Tinch else with the core colour brown  ### A continuous 4.0mm² multistrand (minimum of 4) polythene sleeved cable  ### Width – 100mm (min.)  ### Thickness – 80mu ### Printing – TBC ### Printing – TBC ### Printing Height – 80mm ### Tape Colour – TBC

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AM-2.2	Seal Rings		Comply with AS 1646.1	•	Elastomeric seals for wastewater purposes	IPLEX Pipelines New Zealand Ltd (Licence #SMK1174)	Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
AM-2.3	Fittings						
AM-2.3.1	Cast-Iron Socket and Spigot Fittings		AS/NZS 1830 and AS/NZS 2544	•	Rated a PN16 or higher Epoxy coated	Gillies Metaltech	HJ Asmuss & Company Limited
	Cast-Iron Flanges		Table D and coated to AS/NZS				Mico Pipelines
	PN16		4158 and amendments				
AM-2.3.2	Ductile Iron Pipe Flanged, Socket and		AS/NZS 2280 to Table D or raised			Crevet Pipelines	Humes Pipeline Systems
	Spigot Fittings Flanges		face and drilled to AS 4087, and			Surecast Metals	Hygrade Products Ltd
	PN16		coated to AS/NZS 4158 and			Asmuss Water Systems	Mico Pipelines
	TNIO		amendments			Gillies Metaltech	Asmuss Water
						Asmuss Water Systems	Systems
						,	
AM-2.3.3	Stand-Alone Flanges		Table D coated to AS/NZS 4158 and	:	PVC, ductile or cast iron Steel and tube – unflanged	IPLEX Pipelines New Zealand Ltd	Mico Pipelines
	PN16		amendments		adaptor – ductile iron		Asmuss Water Systems

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					Marley New Zealand Limited  Steel and Tube Holdings Limited  Asmuss Water Systems	
AM-2.3.4	Bolts, Nuts and Washers to be Hot- Dipped Galvanised as an Alternative to 316-Grade Stainless Steel		AS/NZS 1111 and 1112	<ul> <li>ISO metric hexagon commercial bolts and screws and ISO metric hexagon nuts, including thin nuts, slotted nuts and castle nuts</li> <li>Hot-dipped galvanised bolts, nuts and washers need to be wrapped in denso tape</li> <li>This particularly applies for corrosive soil and marine conditions</li> </ul>	Manufacturers who can supply to the relevant standards	Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines Asmuss Water Systems
AM-2.3.5	Stainless Steel Bolts, Nuts, Washers and Fastenings Provided they are 316-Grade Stainless Steel with Factory Applied Molybond Coating		Complying with AS 1252 – High Strength Steel Fastenings	<ul> <li>Stainless steel bolts, nuts and washers need to be wrapped in denso tape</li> <li>This particularly applies for corrosive soil and marine conditions</li> <li>Thread binding may occur and the bolts should be cut off if needed to be un-wound</li> </ul>	Manufacturers who can supply to the relevant standards	Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines Asmuss Water Systems
AM-2.3.6	Gibaults		AS/NZS 4158 and amendments	<ul> <li>Use 316-Grade Stainless Steel</li> <li>Bolts</li> <li>Preference for Long Barrel</li> </ul>	Gillies Metaltech	Humes Pipeline Systems

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	<ul> <li>Cast Iron         (coating as per standard)</li> <li>Gunmetal DR         LG2 with ABS         belly</li> <li>M16 316         stainless steel         (with clips         fusion coating as per standard)</li> </ul>		Coating to ASTM A276	■ Use 316-Grade Stainless Steel Fasteners	Viking Johnson – Maxifit (with Sheraplex coated bolts)  Crevet Pipelines  Milnes Pty Ltd  Asmuss Water Systems	Hynds Pipe Systems Ltd  Mico Pipelines  Asmuss Water Systems
AM-2.3.7	PE Fittings			<ul> <li>Agru butt welding and electro fusion fittings</li> <li>Viking Johnson aqua fast, aqua grip and ultra-grip mechanical fittings for polyethylene pipe</li> <li>Hawle System 2000 mechanical fittings for polyethylene pipe</li> <li>Philmac Licence #1271</li> <li>Pushlok Licence #1494</li> <li>Plasson Licence #1494 and 1271</li> <li>Alprene A16 Easygrip Licence #1157</li> <li>"Plassim" MDPE fitting to AS/NZS 4129 – Licence #WMKA21062</li> <li>"Magnum" MDPE fitting to AS/NZS 4129 – Licence #SMK02432</li> </ul>	IPLEX Pipelines New Zealand Ltd  Marley New Zealand Limited  Asmuss Plastic Systems Limited  PPI Corporation (NZ) Limited  Waters & Farr  RX Plastics Ltd	Hygrade Products Ltd  Humes Pipeline Systems  RX Plastics Ltd  Mico Pipelines
AM-2.3.8	uPVC Fittings		AS/NZS 1260	<ul> <li>RRJ fitting only to be used</li> <li>IPLEX Licence #SMK1174</li> <li>Marley Licence #WMKA20224</li> </ul>	IPLEX Pipelines New Zealand Ltd	Keyplas Humes Pipeline Systems

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					Marley New Zealand Limited	Hynds Pipe Systems Ltd
						Mico Pipelines
AM-2.3.9	Rubber Sleeves	Reticulation pipes (non-pressure)	AS/NZS 4326	<ul> <li>All couplings used shall have a central 316-grade stainless steel sheer band</li> </ul>	Furnco Pty Ltd	Humes Pipeline Systems Hynds Pipe Systems Ltd
						Mico Pipelines
						Asmuss Water Systems
AM-2.3.10	Bolted Unrestraint Coupers	For jointing spigot ends of pipes, other than PE, in water and sewerage applications.	AS/NZS 4998:2009	Product must be fit for purpose	Derwent Industries Ltd	Hygrade, Hynds, Mico, Plumbing world, Pipe & Infrastructure, Water supply products
AM-2.3.11	Repair and Offtake Stainless Steel Clamps	For repairing cracks,seal for decommissioned service connections, holes, splits and pinholes in rigid water and sewerage pipes.	AS 4181-2013	Product must be fit for purpose	Derwent Industries Ltd	Hygrade, Hynds, Mico, Plumbing world, Pipe & Infrastructure, Water supply products
AM-2.4	Valves					

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AM-2.4.1	Valves ≥50mm Resilient Seated Anti-Clockwise Closing Rated at PN16  External and Internal Protective Coating  Flanges to be Raised Face and Drilled as Per Standard	Pump station and rising mains	AS/NZS 2638.2 NZS/BS 5163 Class 1 AS/NZS 4158 and amendments AS 4087		Teflon gland packing or 2 or more O ring seals and dust cover In-line valves should be the same diameter as the reticulation main AVK Australia Pty Ltd Licence #SAI2420 and 2573 Asmuss Water Systems Licence #PRD/R61/0412/2 Crevet Pipelines Licence #1327 Hawle 4060E2 and 4500E2AS series Licence #SMK20123	AVK Australia Pty Ltd Gillies Metaltech Asmuss Water Systems Crevet Pipelines Hawle	Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines Asmuss Water Systems
AM-2.4.2	Resilient Seated Gated Valves for Waterworks purposes	for isolating water supply and sewerage pressure pipelines	AS/NZS 2638.2:2011	•	Product must be fit for purpose	Derwent Industries Ltd	Hygrade, Hynds, Mico, Plumbing world, Pipe & Infrastructure, Water supply products
AM-2.5	Manholes						
AM-2.5.1	1050mm to 2500mm ID with Precast Base			•	Polyethylene manholes require specific design and approval by the Chief Engineer	Humes Pipeline Systems Hynds Pipe Systems Ltd	Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
AM-2.5.2	Hyseal Type 1050 to 2500mm ID					Humes Pipeline Systems	Humes Pipeline Systems

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					Hynds Pipe Systems Ltd	Hynds Pipe Systems Ltd
AM-2.5.3	Concrete Lid (flat top) with 600mm Openings					Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
AM-2.5.4	Manhole Sealant, Flexible Jointing Compound			■ BM100 or SM9020		Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
AM-2.5.5	Access Steps – 316- Grade Stainless Steel Access Steps			■ Stainless manholes steps — 16mm Ø	Costavic	Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
AM-2.5.6	Plastic Encapsulated Stainless Steel Access Steps		AS/NZS 1657 AS 4198		Nextep Miyama NZ Ltd Licence #JP-JQA- QM6570	

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AM-2.5.7	Cast-Iron Covers and Frames: 600mm nominal diameter minimum		BS EN 124 vehicle loading or AS 3996 80kN load rating	■ Includes "non-rock"	Humes Pipeline Systems Hynds Pipe Systems Ltd Hygrade Products Ltd Pipe & Infrastructure Ltd Mico Pipelines	••
AM-2.5.8	Ductile Iron Covers and Frames: 600mm Nominal Diameter Minimum		AS 3996 210kN (Class D) load rating	<ul> <li>Includes "non-rock"</li> <li>Webforge NZ – Code DCC6DIPAC</li> <li>Gatic – Code GM300S6D4</li> <li>St Gobain – Korum</li> <li>Hygrade – 600mm Maestro</li> </ul>	Gatic Pty Ltd Saint Gobain PAM Webforge NZ	Humes Pipeline Systems Hynds Pipe Systems Ltd Pipe & Infrastructure Ltd Mico Pipelines
AM-2.5.9	Manhole Connectors					
AM-2.5.10	Romold Manhole Chamber	For Wastewater & Stormwater Drainage, Land Development, Industrial and Infrastructure.	The certificates have been issued in Austria for ROMOLD products complying to EN 13598-2	1)This product is approved for green field subdivision only. 2)All other applications on a case by case basis as approved by the Chief Engineer. 3)No changes to product specification(s)	ROMOLD GmbH, ROMOLD technologies Ltd	Australasia Moulding Ltd, Frank PKS, Harrison Bloy Plumbing, Edward Gibbon – Reece

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					ovided without written approval by e Chief Engineer		
AM-2.5.9.1	PVC			•	Proprietary units only	IPLEX Pipelines New Zealand Ltd	Humes Pipeline Systems
						Solo Plastics Ltd	Hynds Pipe Systems Ltd
							Mico Pipelines
AM-2.5.9.2	PE			•	PE 80 PE 100	Manufacturers who can supply to the relevant standards	Humes Pipeline Systems
							Hynds Pipe Systems Ltd
							Mico Pipelines
							Asmuss Water Systems
AM-2.5.10	Ероху	Sealing joints and step irons		•	2-part epoxy (e.g. Humebond, Hybond)		Humes Pipeline Systems Ltd
							Hynds Pipe Systems Ltd
							Mico Pipelines
AM-2.5.11	Concrete	Lid surround	NZS 3104	•	17.5MPa		
AM-2.5.12	Reinforcing Steel	Lid surround	AS/NZS 4671	•	D10 Grade 300	Pacific Steel Group	

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AM-2.5.13	Entry Safety Grill	Entry Safety	≥75mm square mesh Hot dipped galvanised if made of steel or of 316-grade stainless steel allows installation without heavily modifying existing manhole Capable of locking and securing to manhole Test load ≥400kg Can be removed easily by one person ≥5min Connected by chain or similar to ensure grill does not fall into MH (must be able to support the weight of the grill) Manufacturers name, applicable information on the product Does not introduce any	<ul> <li>Caliber Safety Grill 02104076         Grill MH TCC Galvanised 500mm</li> <li>Caliber Safety Grill 02104078         Grill MH TCC Maestro Galvanised 600mm</li> <li>Caliber Safety Grill 02104079         Grill MH TCC Maestro Stainless         Steel 600mm</li> <li>All other products are subject to specific approval or trial installations</li> <li>Humes 48502 – 520mm Nominal Safety Grille</li> <li>Humes 48504 – 600mm Nominal Safety Grille</li> </ul>	Hygrade Products Ltd  Humes Pipeline Systems	Hynds Pipe Systems Ltd  Humes Pipeline Systems

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			additional Health and Safety Issues			
AM-2.6	Rodding Eyes					
AM-2.6.1	Reinforced Concrete Pipe	To create chamber	NZS 3107 – soon to be replaced with AS/NZS 4058	■ 600mm Ø cut to 600mm length		Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
AM-2.6.2	Cast-Iron Cover and Frames 545mm Nominal Diameter Minimum		BS EN 124 vehicle loading or AS 3996 80kN load rating			Humes Pipeline Systems Hynds Pipe Systems Ltd Hygrade Products Ltd Pipe & Infrastructure Ltd Mico Pipelines
AM-2.6.3	Ductile Iron Cover and Frames 545mm Nominal Diameter Minimum		AS 3996 210kN (Class D) load rating	<ul> <li>Hygrade 500 HD Hytec Cover and Frame</li> <li>Humes HD Non Rock Cover and Frame</li> </ul>		Humes Pipeline Systems Hynds Pipe Systems Ltd Hygrade Products Ltd

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						Pipe & Infrastructure Ltd
						Mico Pipelines
AM-2.6.4	uPVC Fittings and Bends		AS/NZS 1260	<ul><li>45 degree swept bend</li><li>Solvent welded threaded mall</li></ul>	IPLEX Pipelines New Zealand Ltd (Licence	Keyplas
				fitting  Threaded cap	#SMK1174)	Humes Pipeline Systems
				·	Marley New Zealand Limited (Licence	Hynds Pipe Systems
					#WMKA20224)	Mico Pipelines
AM-2.6.5	Concrete	Lid surround	NZS 3104	■ 17.5MPa	Manufacturers who can supply to the relevant standards	
AM-2.6.6	Reinforcing Steel	Lid surround	AS/NZS 4671	■ D10 Grade 300	Pacific Steel Group	
AM-2.7	Pump Stations			<ul> <li>Fibreglass packaged pump stations by specific design and approval only</li> </ul>		
AM-2.7.1	Wet Well			<ul> <li>FRP pump stations are subject to specific design and approval</li> </ul>		
AM-2.7.1.1	Centrifugally Spun Flushed Jointed Concrete Pipes – Class 2 (X)	Pump stations		<ul> <li>Minimum 1800mm Ø</li> <li>Altex – Carboline product range: Carboguard 504 as the primer to new or used concrete surfaces followed by 2 x coats of Carboguard 690</li> </ul>		Humes Pipeline Systems Hynds Pipe Systems Ltd

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AM-2.7.1.2	Guide Rails	Pump stations		<ul> <li>Schedule 10, 316-grade stainless steel pipe</li> <li>Any joints to be an internal pressed fit stainless steel sleeve</li> </ul>		
AM-2.7.1.3	Guide Rail Brackets	Pump stations		Flygt 316-grade stainless steel		
AM-2.7.1.4	Cable Brackets	Pump stations		316-grade stainless steel		
AM-2.7.2	Pump Valve Chamber					
AM-2.7.2.1	Chamber Walls	Pump stations		■ 200mm concrete block		
AM-2.7.2.2	Chamber Floor	Pump stations		■ Cast in-situ concrete – 17.5MPa		
AM-2.7.2.3	Chamber Top Slab	Pump stations		Concrete may be precast – 17.5MPa		
AM-2.7.2.4	Flanges	Pump stations		Gaskets shall be 3mm full face neoprene		
AM-2.7.2.5	Access Lids	Pump stations		<ul> <li>6mm aluminium chequer plate</li> <li>Stainless steel 316-grade frame and fittings</li> <li>Specific design that considers odour and water infiltration</li> </ul>		
AM-2.7.2.6	Valves ≥50mm Resilient Seated Anti-Clockwise Closing Rated at PN16	Pump stations	AS/NZS 2638.2 NZS/BS 5163 Class 1	<ul> <li>Teflon gland packing or 2 or more O ring seals and dust cover</li> <li>In-line values should be the same diameter as the reticulation main</li> </ul>	AVK Australia Pty Ltd Gillies Metaltech	Humes Pipeline Systems Hynds Pipe Systems Ltd

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	External and Internal Protective Coating Flanges to be raised		AS/NZS 4158 and amendments	<ul><li>Resilient seated anti-clockwise closing</li><li>Rated at PN16</li></ul>	Asmuss Water Systems	Mico Pipelines
	face and drilled as Per Standard		AS 4087	<ul> <li>External and internal protective coating</li> <li>Flanges to be raised face and drilled as per standard</li> <li>Valves to have hand wheels</li> <li>AVK Australia Licence #SAI2420 and 2573</li> <li>Crevet Pipelines Licence #1327</li> <li>Hawle 4060E2 and 4500E2AS series Licence #SMK20123</li> </ul>	Crevet Pipelines Hawle	Asmuss Water Systems
AM-2.7.2.7	Ductile Iron Non- Return Valves PN16	Pump stations	AS 4974	<ul> <li>Ball type</li> <li>Other types require specific approval</li> </ul>		Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
AM-2.7.2.8	Ductile Iron Fittings PN16	Pump stations	AS 2280 AS/NZS 4158	<ul> <li>All ductile valves, fittings and pipes should be coated in accordance with AS/NZS 4158</li> </ul>		Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
AM-2.7.2.9	Entry Safety Grill			Specific Design and approval		
AM-2.7.3	Pumps	Pump stations		<ul> <li>Flygt Submersible wastewater pumps</li> </ul>	ITT Flygt Ltd	

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AM-2.7.4	Pump Discharge Pipes	Pump stations	AS 2280	<ul> <li>Ductile iron pipes and fittings AS 2280:1999</li> <li>Schedule 10, 316-grade stainless steel</li> </ul>		Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
AM-2.7.5	Rising Main PE100 or PE80 Polyethylene Pipe Minimum PN12	Pump stations	AS/NZS 4130	■ Welded or flanged joints		RX Plastics Ltd  Humes Pipeline Systems  Hynds Pipe Systems Ltd  Mico Pipelines
AM-2.7.6	Bolts, Nuts and Washers	Pump stations		All to be 316-grade stainless steel and coated before installation to prevent "binding"		Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines
AM-2.7.7	Tracer Wire	Rising main		<ul> <li>A continuous 4.0mm² multi- strand (minimum of 4) polyethylene sleeved cable</li> </ul>		Humes Pipeline Systems Hynds Pipe Systems Ltd Mico Pipelines

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AM-2.7.8	Ductile Iron Fittings and Pipes	For water supply connections and sewerage pressure pipelines.	AS/NZS 2280:2014 ISO9001:2015	Product must be fit for purpose	Derwent Industries Ltd	Hygrade, Hynds, Mico, Plumbing world, Pipe & Infrastructure, Water supply products
AM-2.7.10	PE/PP Pipe and Structures	For useStormwater and Wastewater pipe systems	AS/NZS 5065:2005	Product must be fit for purpose	Frank PKS NZ Ltd	Frank PKS NZ Ltd
AM-2.7.11	Submersible Pumps	For water and wastewater pumping	Sira Certification - ISO9001:2015	Product must be fit for purpose	Sulzer Australia PTY Ltd	Sulzer Australia PTY LTD, Pump and Valve Specialties Ltd, Wallace Murray Electrical Ltd