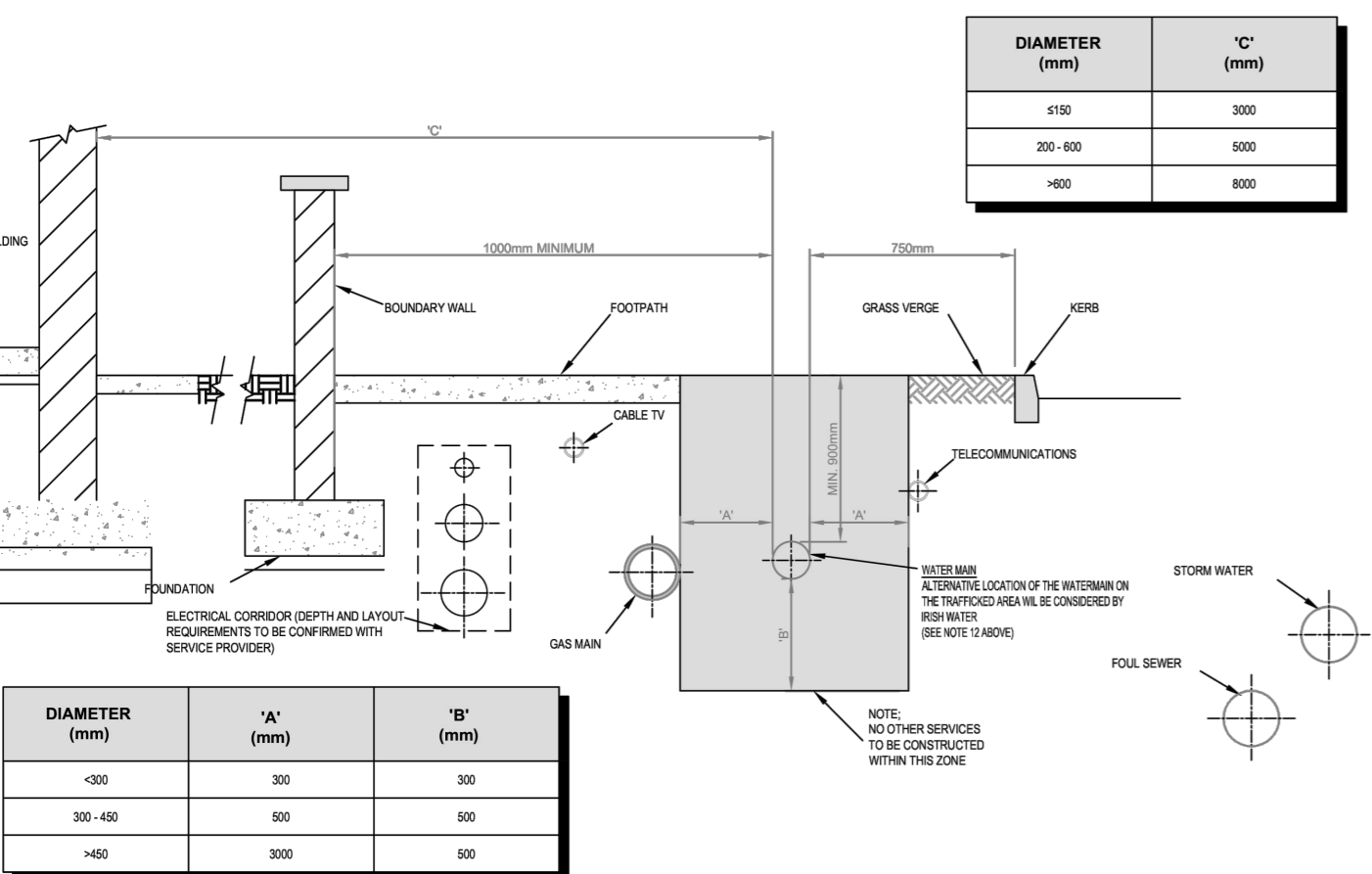
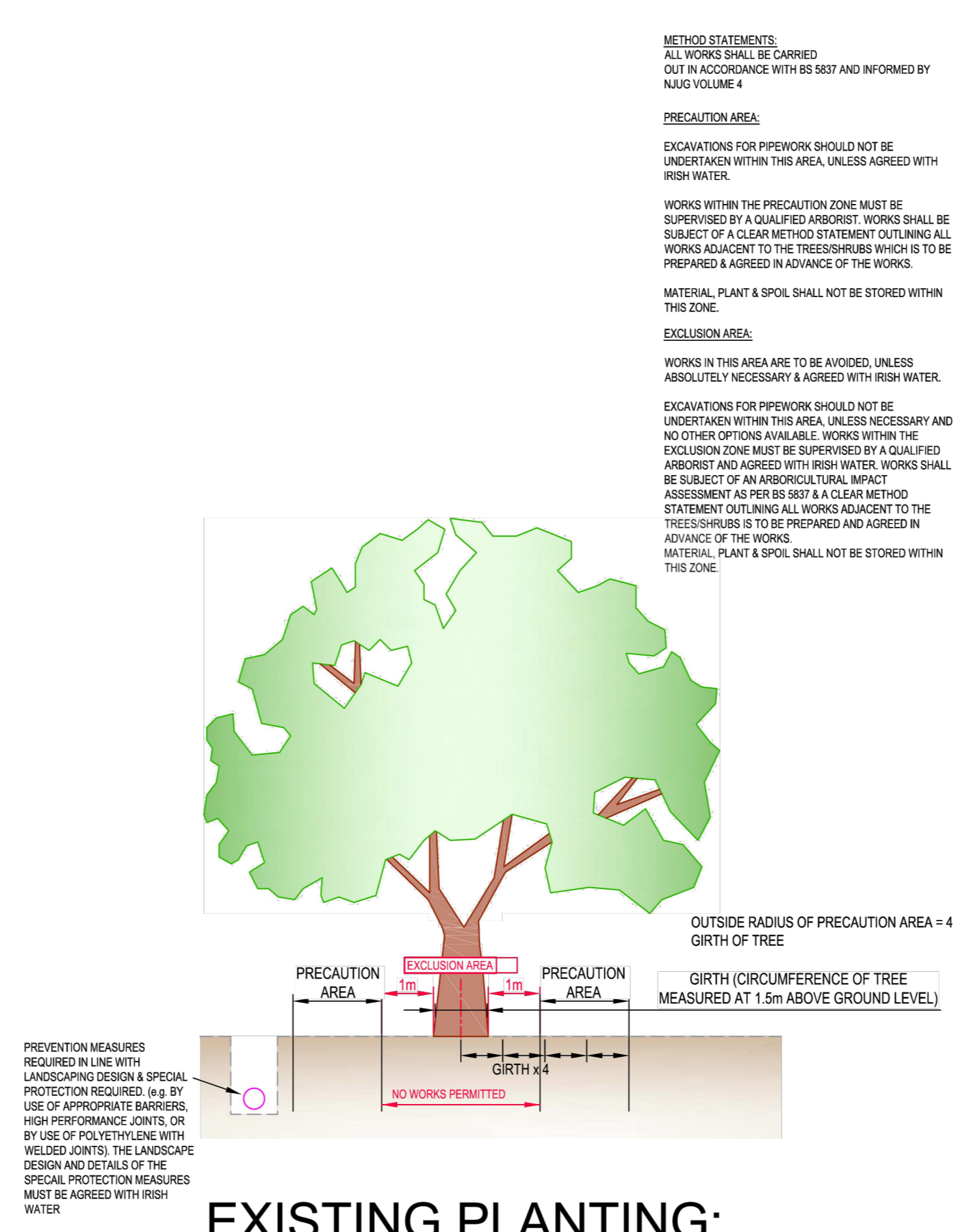


STD-W-05 GENERAL PIPE CONNECTIONS. NTS

- SEPARATION DISTANCES BETWEEN WATERMANS ASSOCIATED WITH THE WORKS FROM OTHER UTILITY PIPES AND ACCESSORIES SHALL BE IN ACCORDANCE WITH SECTION 3.6 OF THE CODE OF PRACTICE. SEPARATION DISTANCES FOR ALL NEW INSTALLATIONS FROM EXISTING IRISH WATER PIPES SHALL BE AS OUTLINED IN SECTION 3.7 OF THE CODE OF PRACTICE. THE SEPARATION DISTANCES SPECIFIED ARE MINIMUM DISTANCES.
- SPECIFIC SEPARATION DISTANCES IN EXCESS OF THESE MINIMA SHALL BE PROVIDED FOR SERVICES SUCH AS GAS, ELECTRICITY, FIBRE-OPTIC OR ON-NAME WASHOUT HYDRANT. THE DESIGNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS AND EVIDENCE OF THIS CONSULTATION, WITH THE SPECIFIED SEPARATION DISTANCES, SHALL BE PROVIDED TO IRISH WATER AT DESIGN STAGE.
- MINIMUM SEPARATION DISTANCES FROM EXISTING WATERMANS SHALL BE AS FOLLOWS:
 - 1.5m AT EITHER SIDE OF MAINS OF 300mm AND 450mm DIAMETER.
 - 3m AT EITHER SIDE OF MAINS OF 600mm AND 900mm DIAMETER.
 - 3m AT EITHER SIDE OF TRUNK MAINS OF 150mm DIAMETER.
 - 3m AT EITHER SIDE OF TRUNK MAINS OF 200mm DIAMETER.
 - 3m AT EITHER SIDE OF TRUNK MAINS OF 250mm DIAMETER.
 - 3m AT EITHER SIDE OF TRUNK MAINS OF 300mm DIAMETER.
 - 3m AT EITHER SIDE OF TRUNK MAINS OF 350mm DIAMETER.
 - 3m AT EITHER SIDE OF TRUNK MAINS OF 400mm DIAMETER.
 - 3m AT EITHER SIDE OF TRUNK MAINS OF 450mm DIAMETER.
 - 3m AT EITHER SIDE OF TRUNK MAINS OF 500mm DIAMETER.
 - 3m AT EITHER SIDE OF TRUNK MAINS OF 600mm DIAMETER.
 - 3m AT EITHER SIDE OF TRUNK MAINS OF 700mm DIAMETER.
 - 3m AT EITHER SIDE OF TRUNK MAINS OF 800mm DIAMETER.
 - 3m AT EITHER SIDE OF TRUNK MAINS OF 900mm DIAMETER.
- ANY PROPOSED PIPE CROSSING SHOULD BE LOCATED MIDWAY BETWEEN THE WATER JOINTS WITH MINIMUM CLEARANCE OF 300mm AND UP TO 500mm. ALL CROSSINGS SHOULD BE AT LEAST 300mm AWAY FROM FITTINGS OR JOINTS.

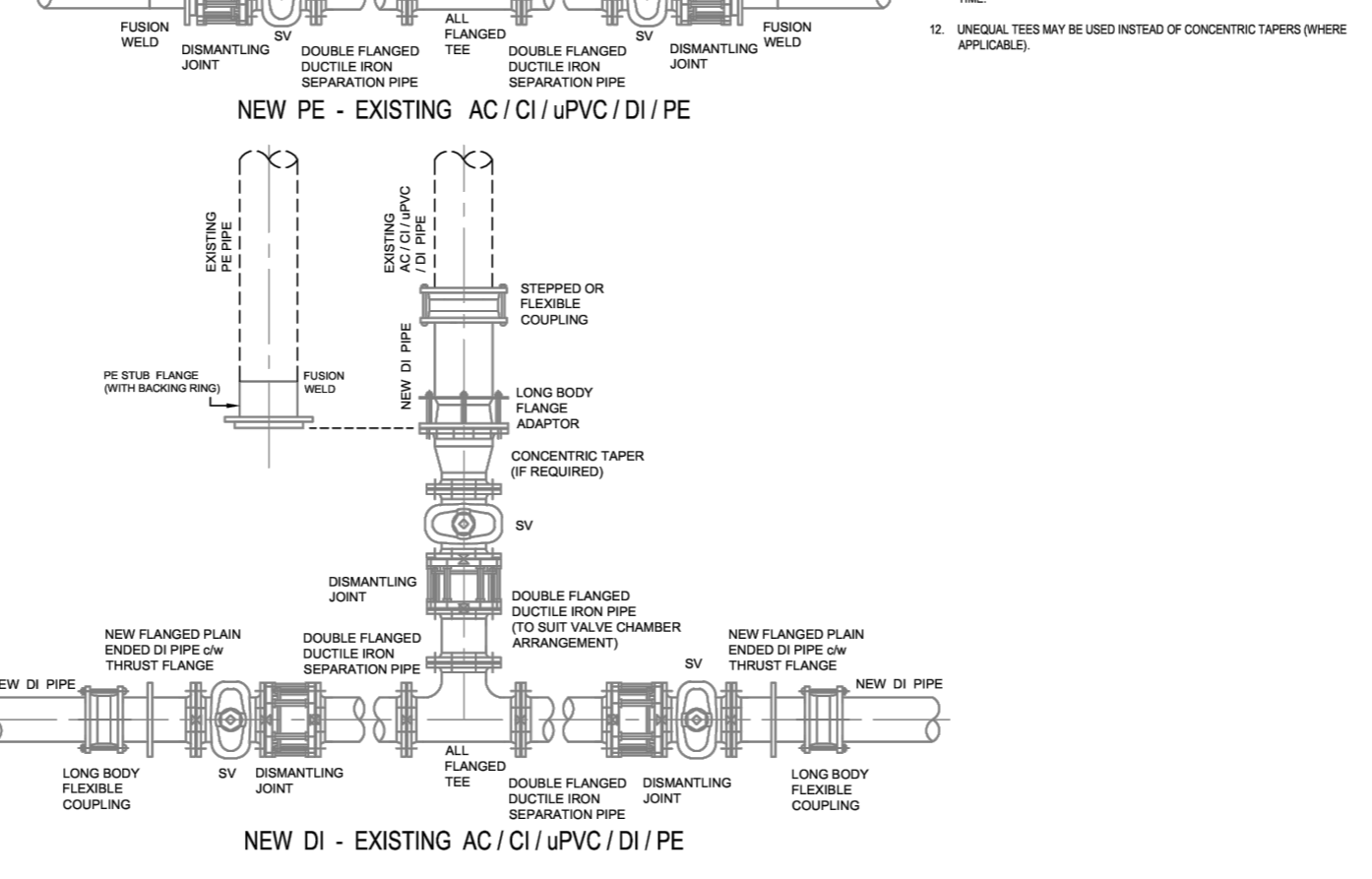


STD-W-11 TYPICAL SERVICE LAYOUT INDICATING SEPARATION DISTANCES. NTS

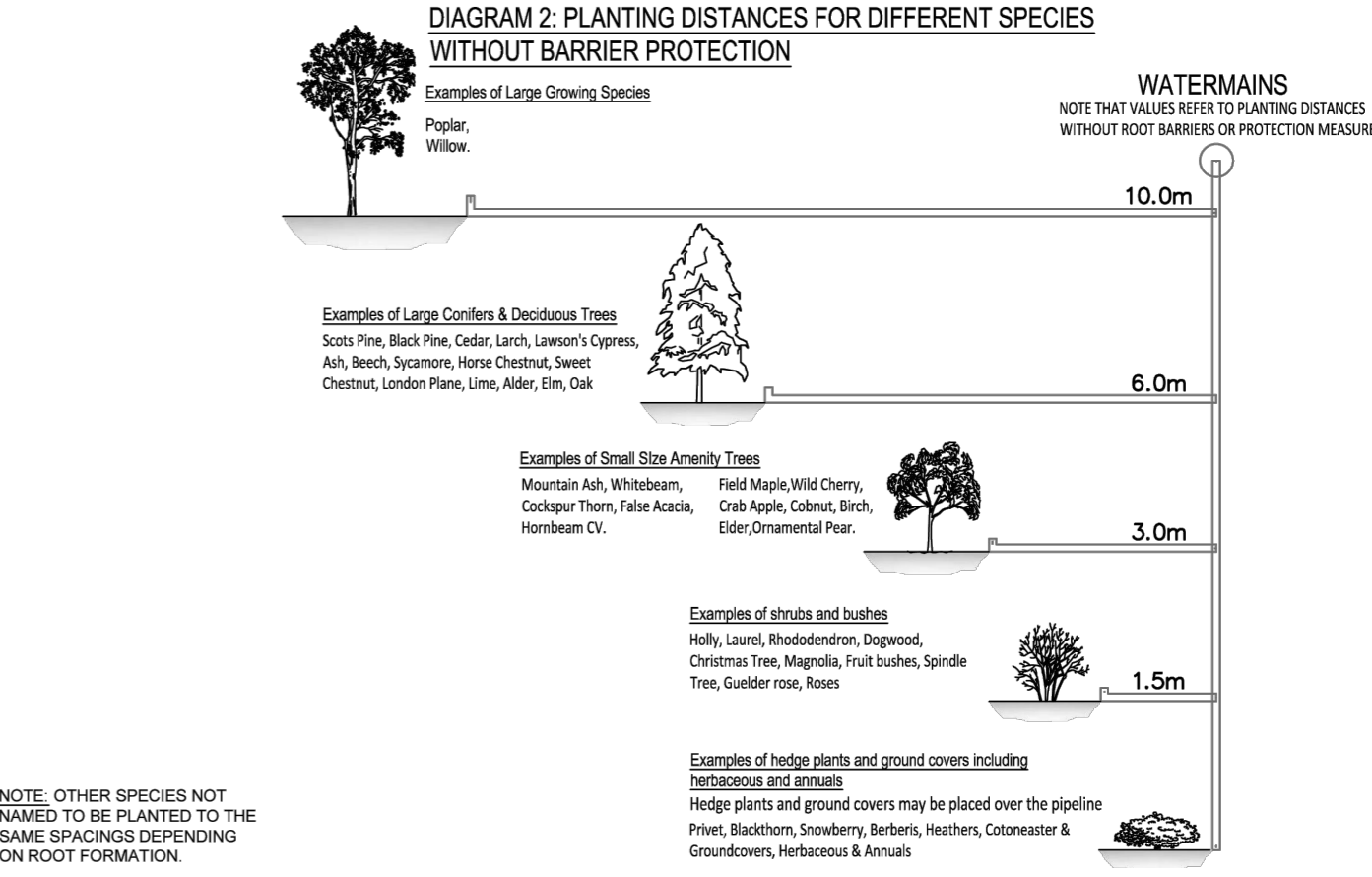
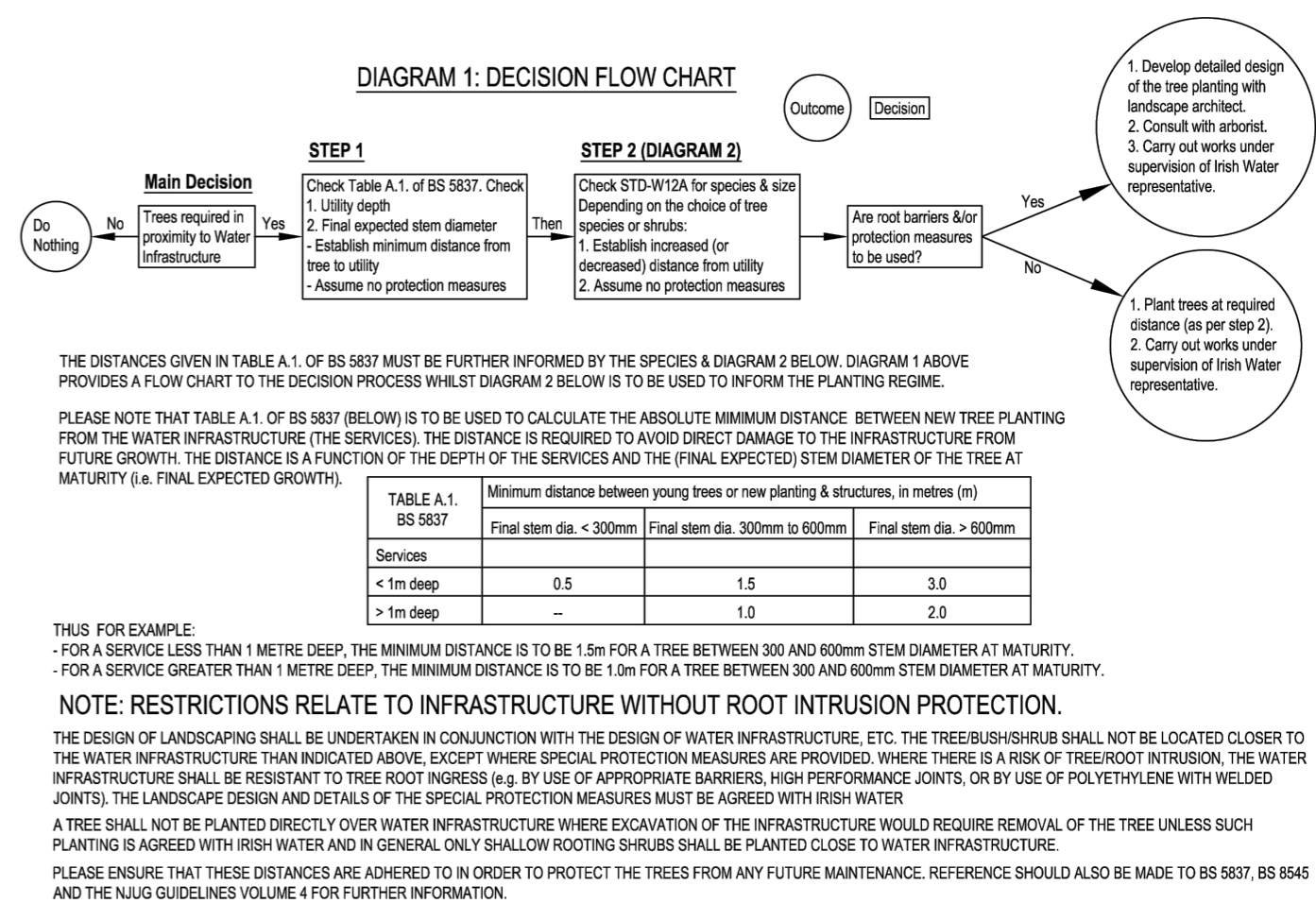


STD-W-12 RESTRICTIONS ON WATER INFRASTRUCTURE WORKS ADJACENT TO EXISTING TREES. NTS

- ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- ALL BENDS, TEES, DEAD ENDS, ETC. OF PIPES TO BE ADEQUATELY RESTRAINED BY THRUST BLOCKS AS PER DRAWING NTS 010. THRUST BLOCKS NOT SHOWN FOR CLARITY.
- BUT FUSION WELDING AND ELECTRIC FUSION JOINTING OF PIPES SHALL ONLY BE CARRIED OUT BY TRAINED OPERATIVES IN POSSESSION OF A CURRENT TRAINING CERTIFICATE. USING FULLY AUTOMATIC APPROVED JOINTING MACHINES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THE QUALITY OF THE PIPE MANUFACTURER SHALL BE MADE KNOWN TO IRISH WATER PRIOR TO COMMENCEMENT OF THE INSTALLATION. CERTIFICATION AND TESTING INCLUDING INDEPENDENT THIRD PARTY CERTIFICATION SHALL BE PROVIDED TO CONFIRM QUALITY ASSURANCE COMPLIANCE. EACH JOINT SHALL BE CLEARLY MARKED WITH THE JOINT LOGGED AUTOMATICALLY ON THE JOINTING MACHINE. A PRINTOUT OF THE JOINT DETAILS WITH A GPS LOCATION OF EACH JOINT SHALL BE PROVIDED AND RETAINED FOR QUALITY ASSURANCE PURPOSES.
- CONNECTING TO EXISTING MAINS IS TO BE CARRIED OUT BY IRISH WATER OR AN APPROVED IRISH WATER AGENT.
- WHERE EXISTING WATERMANS ARE PRESENT A SPECIFIC METHOD STATEMENT SHALL BE SUBMITTED TO IRISH WATER PRIOR TO WORKS TAKING PLACE AND SUBJECT TO WRITTEN APPROVAL. DETAIL THE PROTECTION TO BE PUT IN PLACE TO EXISTING MAINS. METHOD OF REMOVAL OF EXISTING AC METHOD OF DISPOSAL OF EXISTING AC AND METHOD OF CONNECTION TO EXISTING AC.
- PIPE MATERIAL REFERENCES AS FOLLOWS:
 - AC - ASBESTOS CEMENT
 - CI - DUCTILE IRON
 - DI - CAST IRON
 - PE - POLYETHYLENE
 - UPVC - UNPLASTICISED POLY VINYL CHLORIDE
 - OTHER - REFERS TO ALL EXISTING PIPE MATERIALS OTHER THAN PE (TYPICALLY AC, CI, DI, UPVC & ST)
- BLIND VALVE CHAMBERS TO BE IN ACCORDANCE WITH STD-W-14 (DI) AND STD-W-15 (PE). CHAMBERS NOT SHOWN FOR CLARITY.
- ALL THRUST FLANGES TO BE ADEQUATELY RESTRAINED BY THRUST BLOCKS AS PER DRAWING NTS 010. THRUST BLOCKS NOT SHOWN FOR CLARITY.
- DOUBLE FLANGED SEPARATION PIPE UP TO 50mm LENGTH MAY BE REQUIRED TO ALLOW SEPARATION DISTANCE BETWEEN VALVE CHAMBERS.
- A HIGH LEVEL OF HEALTH & SAFETY PROCEDURES IS REQUIRED WHEN WORKING ON OR AROUND NTS 010. THE OPERATION OF DISMANTLING AND REMOVAL OF EXISTING AC SHALL BE IN ACCORDANCE WITH STD-W-14 (DI) AND STD-W-15 (PE). CHAMBERS NOT SHOWN FOR CLARITY.
- VALVES SHALL BE ARRANGED IN SUCH A MANNER TO ALLOW FOR THE NETWORK TO BE MANAGED TO INSURE THAT NO MORE THAN 40% PROPERTIES LOSE WATER FROM A BURST ON THE SYSTEM AT ANY ONE TIME.
- UNUSUAL TEES MAY BE USED INSTEAD OF CONCENTRIC TAPERS (WHERE APPLICABLE).

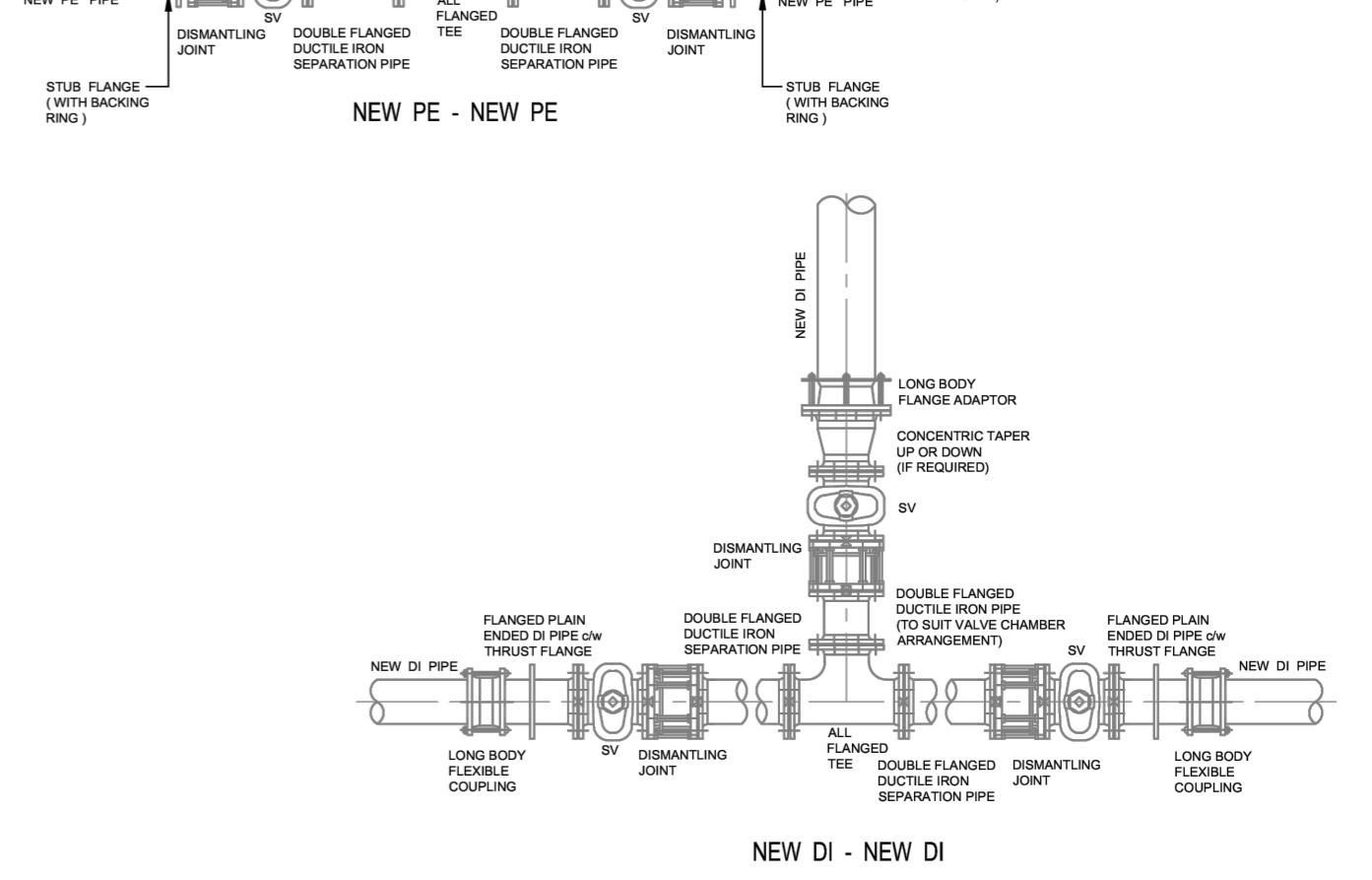


STD-W-06 GENERAL PIPE CONNECTIONS. NTS



STD-W-12A RESTRICTIONS ON NEW TREES/SHRUBS PLANTING ADJACENT TO WATER MAINS. NTS

- ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- ALL BENDS, TEES, DEAD ENDS, ETC. OF PIPES TO BE ADEQUATELY RESTRAINED BY THRUST BLOCKS AS PER DRAWING NTS 010. THRUST BLOCKS NOT SHOWN FOR CLARITY.
- BUT FUSION WELDING AND ELECTRIC FUSION JOINTING OF PIPES SHALL ONLY BE CARRIED OUT BY TRAINED OPERATIVES IN POSSESSION OF A CURRENT TRAINING CERTIFICATE. USING FULLY AUTOMATIC APPROVED JOINTING MACHINES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THE QUALITY OF THE PIPE MANUFACTURER SHALL BE MADE KNOWN TO IRISH WATER PRIOR TO COMMENCEMENT OF THE INSTALLATION. CERTIFICATION AND TESTING INCLUDING INDEPENDENT THIRD PARTY CERTIFICATION SHALL BE PROVIDED TO CONFIRM QUALITY ASSURANCE COMPLIANCE. EACH JOINT SHALL BE CLEARLY MARKED WITH THE JOINT LOGGED AUTOMATICALLY ON THE JOINTING MACHINE. A PRINTOUT OF THE JOINT DETAILS WITH A GPS LOCATION OF EACH JOINT SHALL BE PROVIDED AND RETAINED FOR QUALITY ASSURANCE PURPOSES.
- CONNECTING TO EXISTING MAINS IS TO BE CARRIED OUT BY IRISH WATER OR AN APPROVED IRISH WATER AGENT.
- WHERE EXISTING WATERMANS ARE PRESENT A SPECIFIC METHOD STATEMENT SHALL BE SUBMITTED TO IRISH WATER PRIOR TO WORKS TAKING PLACE AND SUBJECT TO WRITTEN APPROVAL. DETAIL THE PROTECTION TO BE PUT IN PLACE TO EXISTING MAINS. METHOD OF REMOVAL OF EXISTING AC METHOD OF DISPOSAL OF EXISTING AC AND METHOD OF CONNECTION TO EXISTING AC.
- PIPE MATERIAL REFERENCES AS FOLLOWS:
 - AC - ASBESTOS CEMENT
 - CI - DUCTILE IRON
 - DI - CAST IRON
 - PE - POLYETHYLENE
 - UPVC - UNPLASTICISED POLY VINYL CHLORIDE
 - OTHER - REFERS TO ALL EXISTING PIPE MATERIALS OTHER THAN PE (TYPICALLY AC, CI, DI, UPVC & ST)
- BLIND VALVE CHAMBERS TO BE IN ACCORDANCE WITH STD-W-14 (DI) AND STD-W-15 (PE). CHAMBERS NOT SHOWN FOR CLARITY.
- ALL THRUST FLANGES TO BE ADEQUATELY RESTRAINED BY THRUST BLOCKS AS PER DRAWING NTS 010. THRUST BLOCKS NOT SHOWN FOR CLARITY.
- DOUBLE FLANGED SEPARATION PIPE UP TO 50mm LENGTH MAY BE REQUIRED TO ALLOW SEPARATION DISTANCE BETWEEN VALVE CHAMBERS.
- A HIGH LEVEL OF HEALTH & SAFETY PROCEDURES IS REQUIRED WHEN WORKING ON OR AROUND NTS 010. THE OPERATION OF DISMANTLING AND REMOVAL OF EXISTING AC SHALL BE IN ACCORDANCE WITH STD-W-14 (DI) AND STD-W-15 (PE). CHAMBERS NOT SHOWN FOR CLARITY.
- VALVES SHALL BE ARRANGED IN SUCH A MANNER TO ALLOW FOR THE NETWORK TO BE MANAGED TO INSURE THAT NO MORE THAN 40% PROPERTIES LOSE WATER FROM A BURST ON THE SYSTEM AT ANY ONE TIME.
- UNUSUAL TEES MAY BE USED INSTEAD OF CONCENTRIC TAPERS (WHERE APPLICABLE).



STD-W-07 GENERAL PIPE CONNECTIONS. NTS

PLANNING DRAWING.

NOT FOR CONSTRUCTION.

ALL LEVELS GIVEN ARE RELATIVE TO ORDNANCE DATUM.

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Rev. No.	Date	REVISION NOTE	Drn. By	Chkd. By
P1	16.05.2024	ISSUED FOR STAGE 3 PLANNING	JF	GL
P2	28.06.2024	ISSUED FOR STAGE 3 PLANNING	JS	JF
P3	23.07.2024	ISSUED FOR REVIEW	JS	JF
P4	08.08.2024	ISSUED FOR REVIEW	JF	GF
P5	13.08.2024	ISSUED FOR PLANNING SUBMISSION	JS	GF

Client	LDA
Project	Clongriffin Blocks 5 & 6
Title	Watermain Details Sheet 2 of 3
Dwg. No.	CLN-CSC-XX-XX-DR-C-0136
Date	MAY 2024
Drn. by	JS
Chkd. by	JF
Apprd. by	NB
Scale	AS SHOWN @ A1
Revision	P5

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