

General Notes

All drawings are to be read in conjunction with all relevant specifications, bills of quantities, architectural Services and engineering drawings. Any discrepancies between these documents shall be brought to the attention

of the engineer and architect,

All dimensions are in millimetres, unless noted otherwise.

The contractor is responsible for all temporary works. The contractor must prepare a method statement and submit it to the

Groundworks Notes

All soft and organic material to be removed from under foundations.

Ensure clean, dry, level solid rock base to all footings.

Concrete Notes

Concrete blinding to be 50mm minimum under all structures in direct contact with the ground.

Concrete to all footings to be designation class XC2, as specified in EN1992.

Minimum indicative concrete strength to be C28/35. Maximum aggregate size to be 20mm.

Concrete finishes to be as follows:

Footings/ground beams Plywood shuttering and surfaces to be timber tamped.

Floor slabs Steel float

External ground slabs and footpaths Brushed finish.

Reinforcement to comply with BS 4448 and BS 4483.

Minimum cover to reinforcement to be as follows:

Foundations 50mm

Ground beams 50mm

Mesh 300mm

H10 400mm H12 500mm

H16 650mm H20 800mm

Services Notes

All new drainage pipes up to and including 1500 to be uPVC to BS EN 1401-01, unless otherwise noted

All internal pipes to be provided with 100mm thick mass concrete bed.

Manholes to be constructed using precast manhole rings, unless noted otherwise.

Blockwork notes

Structural masonry to conform to en 1996 eurocode 6 and SR 325

Standard blocks to be solid, standard textured, normal density concrete blocks with a minimum compressive strength of 7.5N/mm2 in accordance with is EN 772-1

Blocks where a painted finish is specified to be solid, fine textured, normal

Mortar to be as outlined in table NA.3 of Irish National annex to EN 1996-1-1 Masonry workmanship in accordance with IS EN 1996-2, SR 325 and Table

Insulation, dpcs and dpms as outlined in architects documents.

Cavity wall ties to be twisted stainless steel with integral drip and insulation retention clip.

Cavity wall ties required at 450mm centres horizontally and 450mm centres vertically.

Steelwork Notes

All Structural Steelwork To Comply With EN 1993 EUROCODE 3 and all should be CE marked

All steel beams will bear on Precast Concrete Padstones 450mm long,

Unless Otherwise Authorised.

The Steelwork Contractor should be certified to execution class 2 and is Responsible For The Accuracy Of All Dimensions And For The Correct

Setting Out Of The Work On Site. External steelwork to be galvanised (Unless Noted Otherwise).

Where custom lintels are indicated then equivalent products may be used if approved by the ENGINEER

All structural steelwork should be coated in paintwork or encased in materials that are certified to provide 30 minutes fire resistance, Unless otherwise authorised in writing by the ENGINEER

Timber Notes

Timber to comply with EN 1995 EUROCODE 5

Structural Timber GRADED in accordance with IS EN 14081 & IS EN 338 Health & Safety Notes

Contractor To Comply With Safety, Health And Welfare At Work (Construction)

Regulations, 2001. Health & Safety Proceedures To Be Followed At All Times, Especially With Regard To Any Works In Or Around Existing Live Sewers, Drains Or Inspection

The Contractor To Be Responsible For Checking The Location Of All Existing

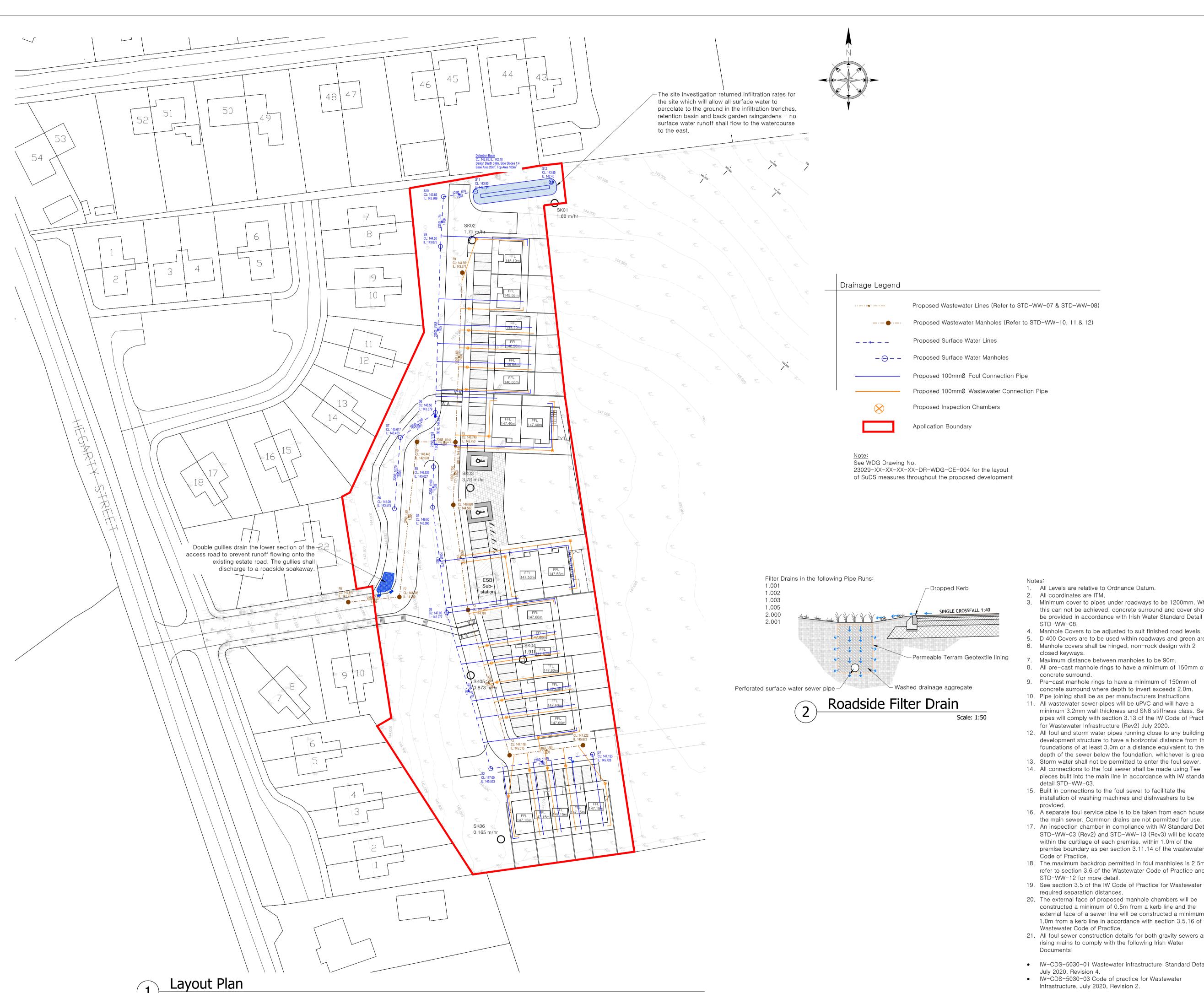


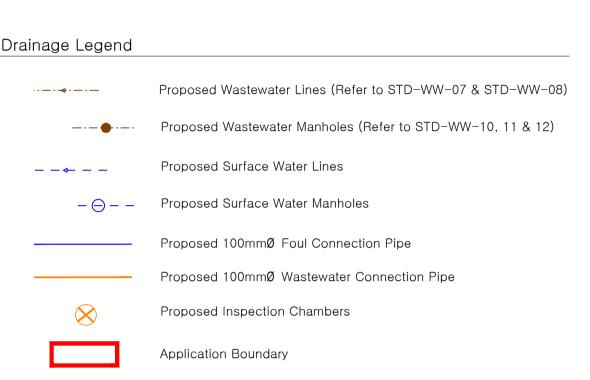
Site Layout Roads & Levels Project: Proposed Residential Development,

Millstreet, Co. Cork ID No: 23029-XX-XX-XX-XX-DR-WDG-CE-001

Date: Scale: 1:250 Purpose: P1 - Information

> © COPYRIGHT WALSH DESIGN GROUP, DOUGLAS, CORK. THIS DRAWING CANNOT BE REPRODUCED WITHOUT WRITTEN PERMISSION.





- 1. All Levels are relative to Ordnance Datum.
- 3. Minimum cover to pipes under roadways to be 1200mm. Where this can not be achieved, concrete surround and cover should be provided in accordance with Irish Water Standard Detail
- 4. Manhole Covers to be adjusted to suit finished road levels. 5. D 400 Covers are to be used within roadways and green areas. 6. Manhole covers shall be hinged, non-rock design with 2
- 7. Maximum distance between manholes to be 90m. 8. All pre-cast manhole rings to have a minimum of 150mm of
- 9. Pre-cast manhole rings to have a minimum of 150mm of
- 10. Pipe joining shall be as per manufacturers instructions 11. All wastewater sewer pipes will be uPVC and will have a minimum 3.2mm wall thickness and SN8 stiffness class. Sewer pipes will comply with section 3.13 of the IW Code of Practice
- 12. All foul and storm water pipes running close to any building or development structure to have a horizontal distance from the foundations of at least 3.0m or a distance equivalent to the depth of the sewer below the foundation, whichever is greater.
- 14. All connections to the foul sewer shall be made using Tee pieces built into the main line in accordance with IW standard
- detail STD-WW-03. 15. Built in connections to the foul sewer to facilitate the installation of washing machines and dishwashers to be
- 16. A separate foul service pipe is to be taken from each house to the main sewer. Common drains are not permitted for use.
- 17. An inspection chamber in compliance with IW Standard Details STD-WW-03 (Rev2) and STD-WW-13 (Rev3) will be located within the curtilage of each premise, within 1.0m of the premise boundary as per section 3.11.14 of the wastewater
- 18. The maximum backdrop permitted in foul manhloles is 2.5m refer to section 3.6 of the Wastewater Code of Practice and STD-WW-12 for more detail.
- 19. See section 3.5 of the IW Code of Practice for Wastewater for
- 20. The external face of proposed manhole chambers will be constructed a minimum of 0.5m from a kerb line and the external face of a sewer line will be constructed a minimum of 1.0m from a kerb line in accordance with section 3.5.16 of the
- 21. All foul sewer construction details for both gravity sewers and rising mains to comply with the following Irish Water
- IW-CDS-5030-01 Wastewater infrastructure Standard Details,
- IW-CDS-5030-03 Code of practice for Wastewater

Manhol	e Schedule			
MH No.	MANHOLE DIAMETER (mm)	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)
S1	1200	147.153	145.728	1.200
S2	1200	147.000	145.553	1.222
S3	1200	147.000	145.277	1.498
S4	1200	146.800	145.096	1.479
S5	1200	146.626	145.027	1.374
S6	1200	145.000	143.575	1.200
S7	1200	145.617	143.453	1.939
S8	1200	146.500	143.379	2.896
S9	1200	144.500	143.075	1.200
S10	1200	143.850	142.869	0.756
S11	1200	143.850	142.734	0.891
S12	1350	143.850	142.400	1.225
F1	1200	147.222	145.872	1.200
F2	1200	147.118	145.515	1.453
F3	1200	147.063	144.787	2.126
F4	1200	146.880	144.582	2.148
F5	1200	146.740	142.753	3.762
F6	1200	146.443	142.678	3.540
F7	1200	143.395	141.900	1.270
F8	1200	142.617	141.270	1.122
F9	1200	144.921	143.571	1.200

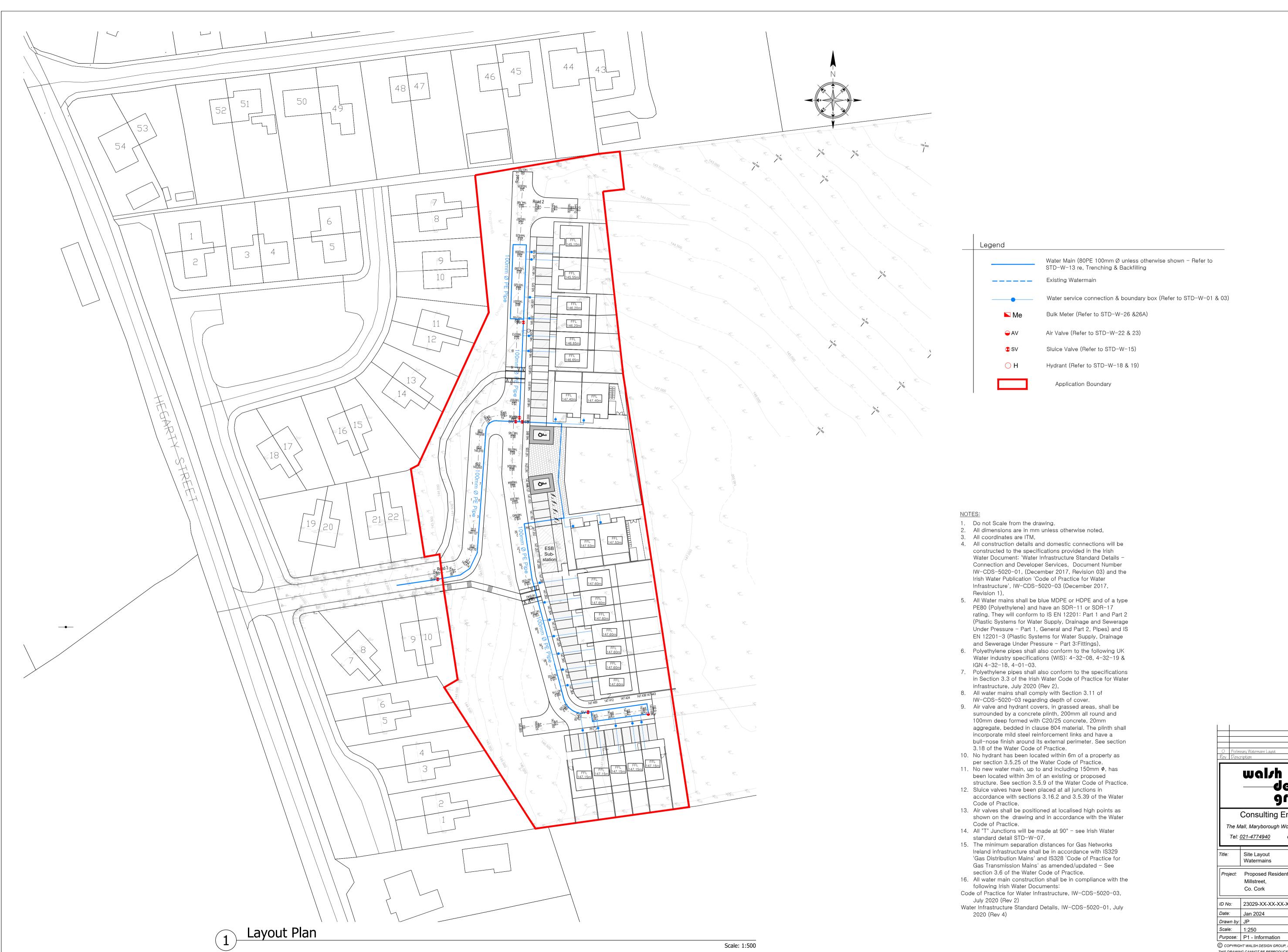
0	Revised layout	17.01.24	IR.	1.41
0	SW Drainage Scheme revised	20.12.23	IR	MW
0	SW Drainage Scheme revised	13.12.23	IR	MW
0	Issued for Information	31.10.23	BW	MW
Rev	Description	Date	Drn	Cka
	walsh	₩ N:	100	UALITY 0 MOST 2015
	- de	rign oup		SAI Certified
	Consulting En	ουρ		SAI Certified
	910	gineers		

Title:	Site Layout Drainage
Project:	Proposed Residential Developmen Millstreet,
	Co. Cork

ID No: 23029-XX-XX-XX-DR-WDG-CE-002 Date: Scale: 1:250

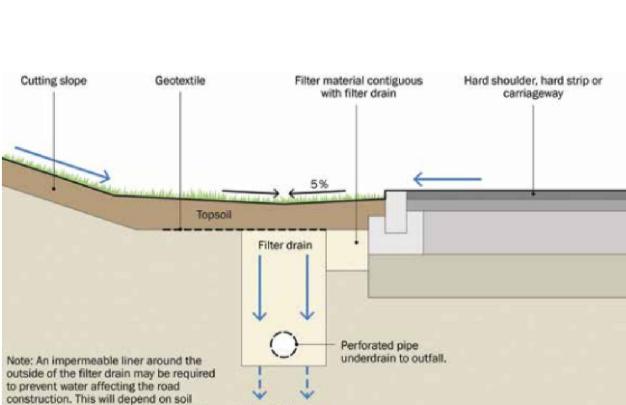
Purpose: P1 - Information © COPYRIGHT WALSH DESIGN GROUP, DOUGLAS, CORK. THIS DRAWING CANNOT BE REPRODUCED WITHOUT WRITTEN PERMISSION.

Scale: 1:500



Consulting Engineers The Mall, Maryborough Woods, Douglas, Cork email: <u>info@wdg.ie</u> Project: Proposed Residential Development, ID No: 23029-XX-XX-XX-DR-WDG-CE-003 © COPYRIGHT WALSH DESIGN GROUP, DOUGLAS, CORK. THIS DRAWING CANNOT BE REPRODUCED WITHOUT WRITTEN PERMISSION.





Some infiltration into soils

SuDs Features Legend

Permeable Paving - Overflows connected to the main surface water network

Roadside Bioretention Tree Pits - overflows connested to the main surface network (Details on WDG drawing No. 23029-XX-XX-XX-DR-WDG-CE-504

(Details on WDG drawing No. 23029-XX-XX-XX-XX-DR-WDG-CE-504

Roadside Filter Drains (225mm Ø slotted uPVC pipes surrounded in

washed drainage sone and terram geotextile)

300 Litre Water Butts

Raingarden Soakaways

Application Boundary

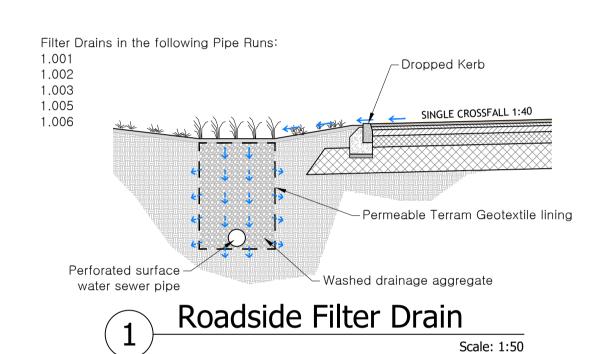
Roadside Filter Drain



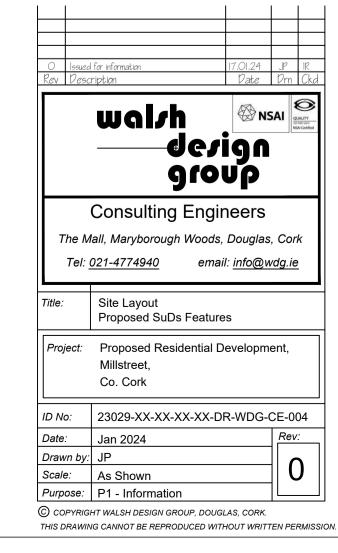
Roadside Bioretention Tree Pits

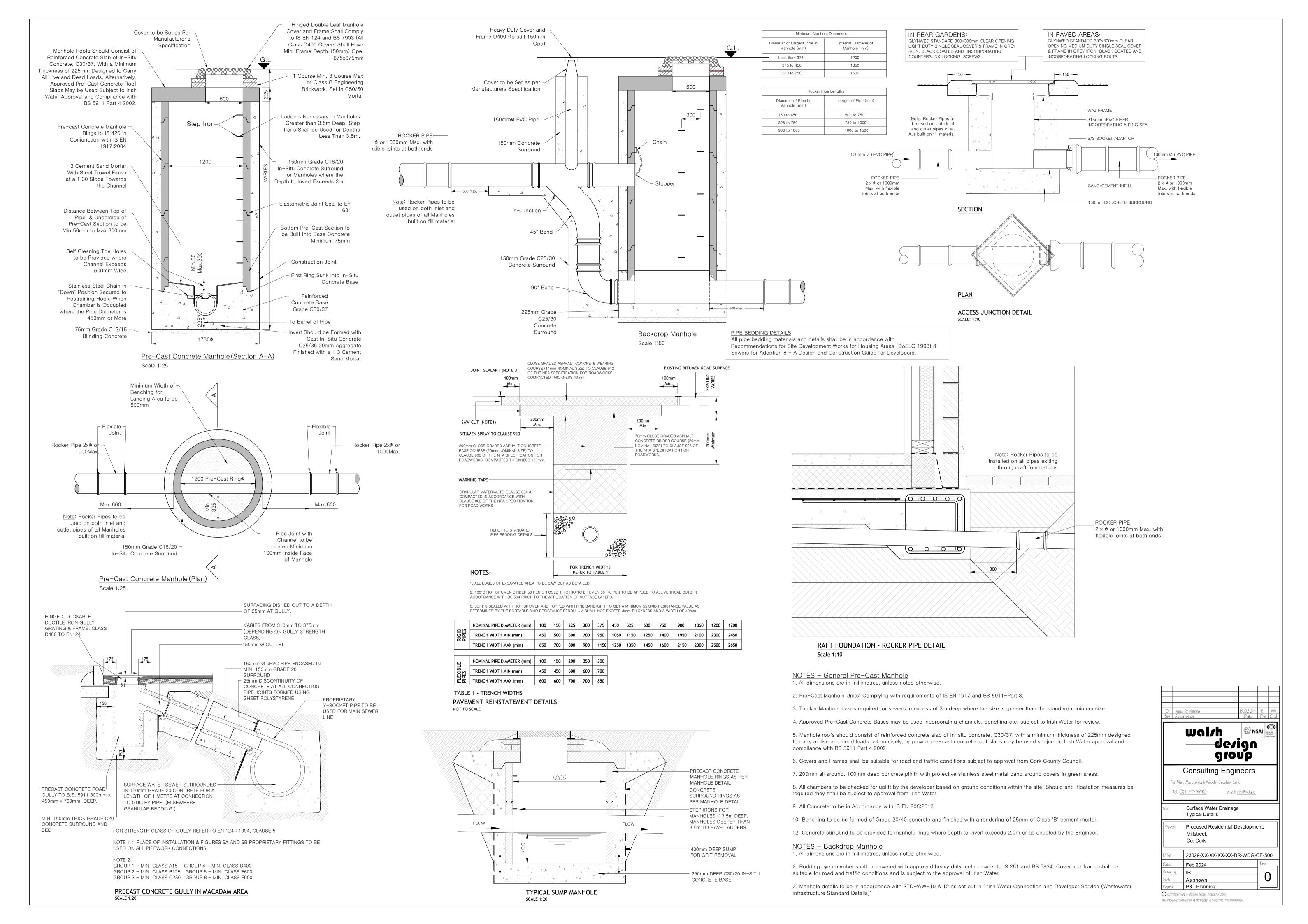


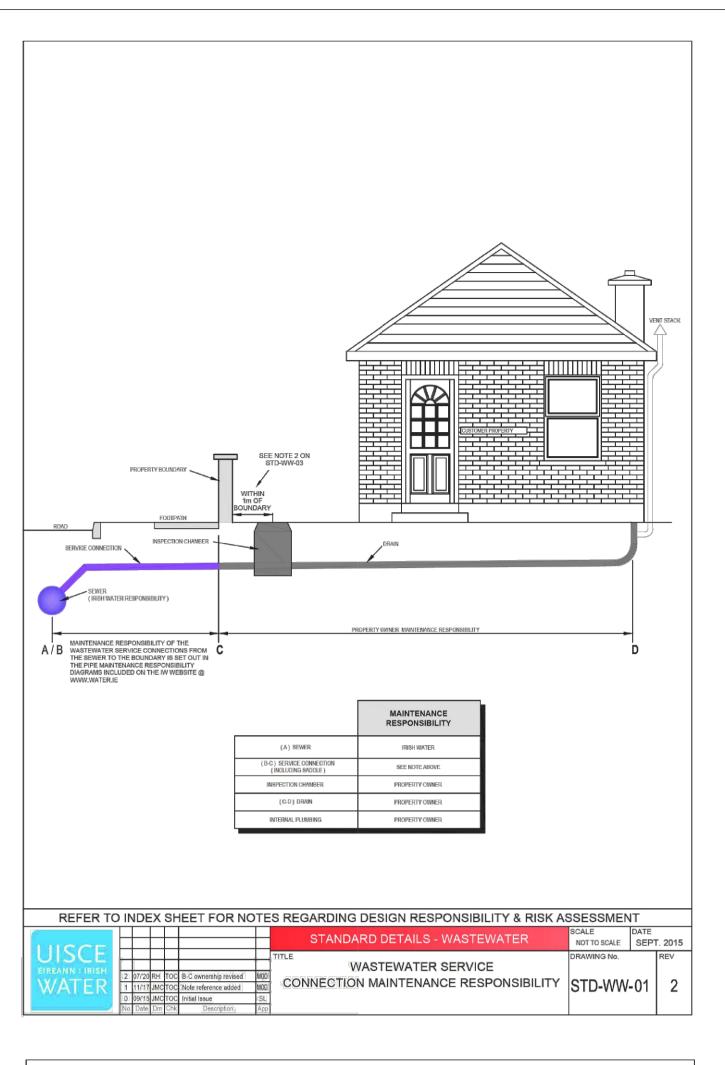
Raingarden Soakaways

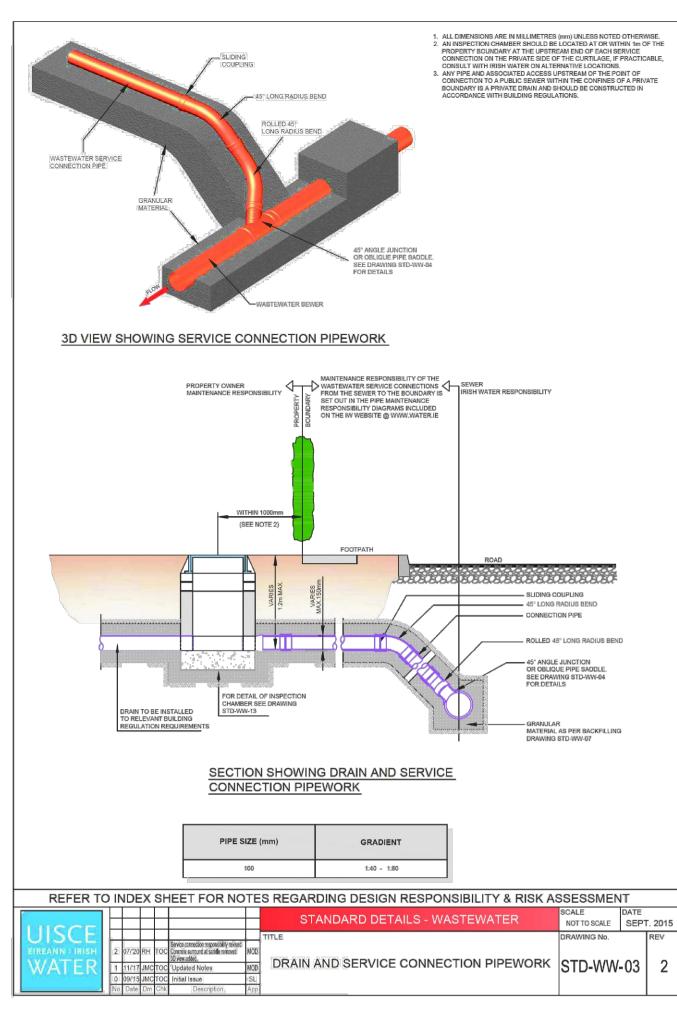


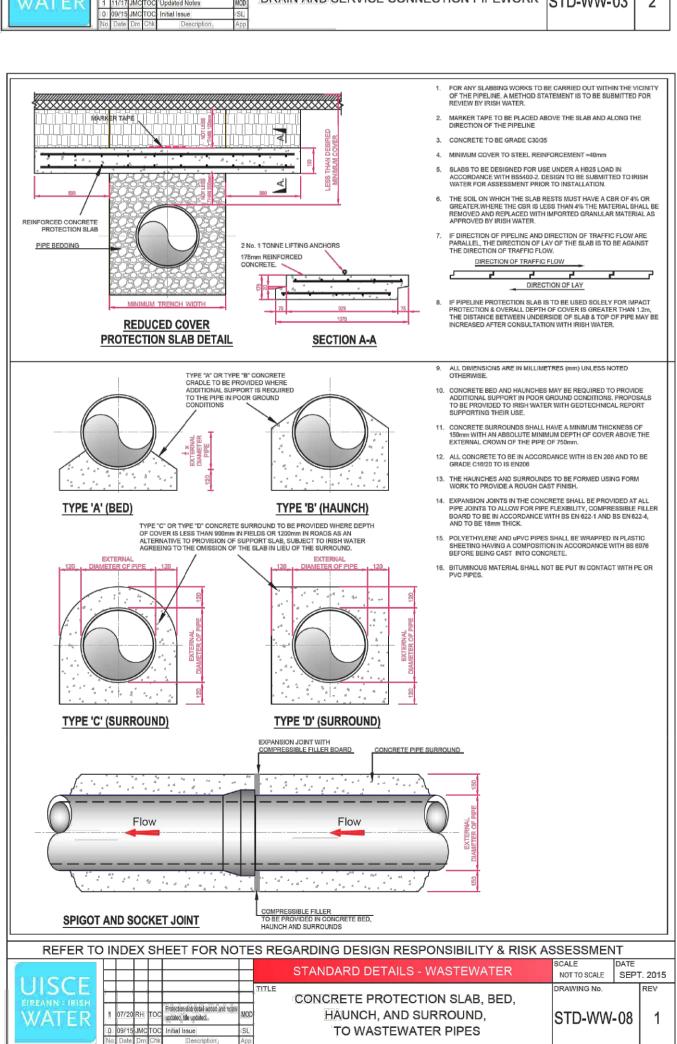
- 1. All Levels are relative to Ordnance Datum.
- All coordinates are ITM,
- Minimum cover to pipes under roadways to be 1200mm. Where this can not be achieved, concrete surround and cover should be provided in accordance with Irish Water Standard Detail STD-WW-08.
- 4. Manhole Covers to be adjusted to suit finished road levels.
- 5. D 400 Covers are to be used within roadways and green areas.
- 6. Manhole covers shall be hinged, non-rock design with 2
- closed keyways. 7. Maximum distance between manholes to be 90m.
- 8. All pre-cast manhole rings to have a minimum of 150mm of concrete surround. 9. Pre-cast manhole rings to have a minimum of 150mm of
- concrete surround where depth to invert exceeds 2.0m.
- 10. Pipe joining shall be as per manufacturers instructions 11. All wastewater sewer pipes will be uPVC and will have a minimum 3.2mm wall thickness and SN8 stiffness class. Sewer pipes will comply with section 3.13 of the IW Code of Practice for Wastewater Infrastructure (Rev2) July 2020.
- 12. All foul and storm water pipes running close to any building or development structure to have a horizontal distance from the foundations of at least 3.0m or a distance equivalent to the depth of the sewer below the foundation, whichever is greater.
- 13. Storm water shall not be permitted to enter the foul sewer. 14. All connections to the foul sewer shall be made using Tee pieces built into the main line in accordance with IW standard
- detail STD-WW-03. 15. Built in connections to the foul sewer to facilitate the installation of washing machines and dishwashers to be
- 16. A separate foul service pipe is to be taken from each house to the main sewer. Common drains are not permitted for use.
- 17. An inspection chamber in compliance with IW Standard Details STD-WW-03 (Rev2) and STD-WW-13 (Rev3) will be located within the curtilage of each premise, within 1.0m of the premise boundary as per section 3.11.14 of the wastewater Code of Practice.
- 18. The maximum backdrop permitted in foul manhloles is 2.5m refer to section 3.6 of the Wastewater Code of Practice and STD-WW-12 for more detail.
- 19. See section 3.5 of the IW Code of Practice for Wastewater for required separation distances.
- 20. The external face of proposed manhole chambers will be constructed a minimum of 0.5m from a kerb line and the external face of a sewer line will be constructed a minimum of 1.0m from a kerb line in accordance with section 3.5.16 of the Wastewater Code of Practice.
- 21. All foul sewer construction details for both gravity sewers and rising mains to comply with the following Irish Water Documents:
- IW-CDS-5030-01 Wastewater infrastructure Standard Details, July 2020, Revision 4.
- IW-CDS-5030-03 Code of practice for Wastewater Infrastructure, July 2020, Revision 2.

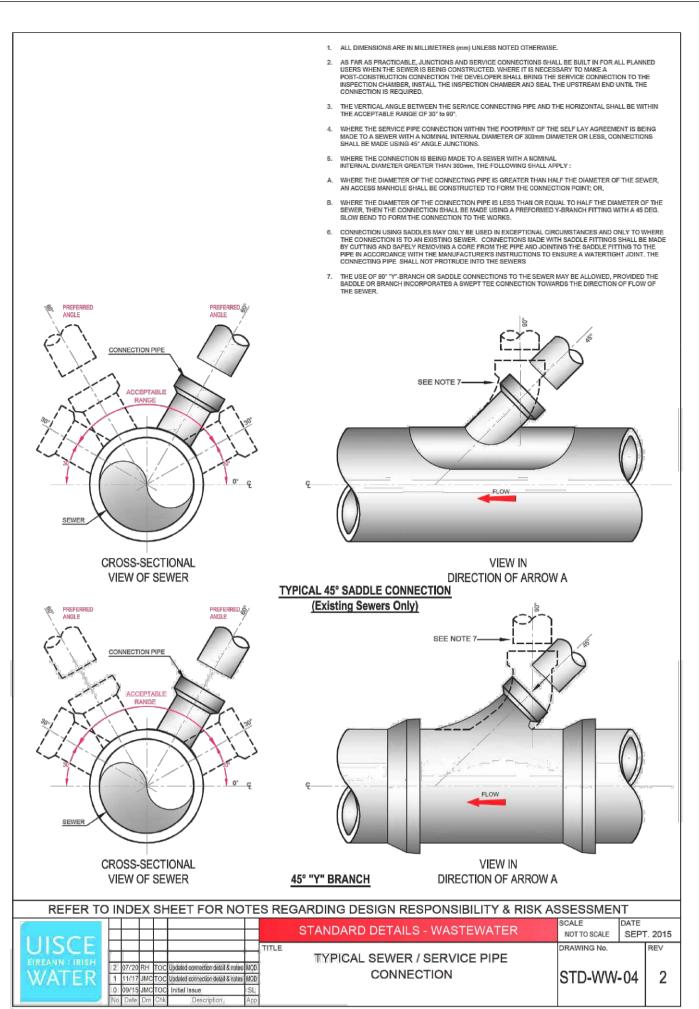


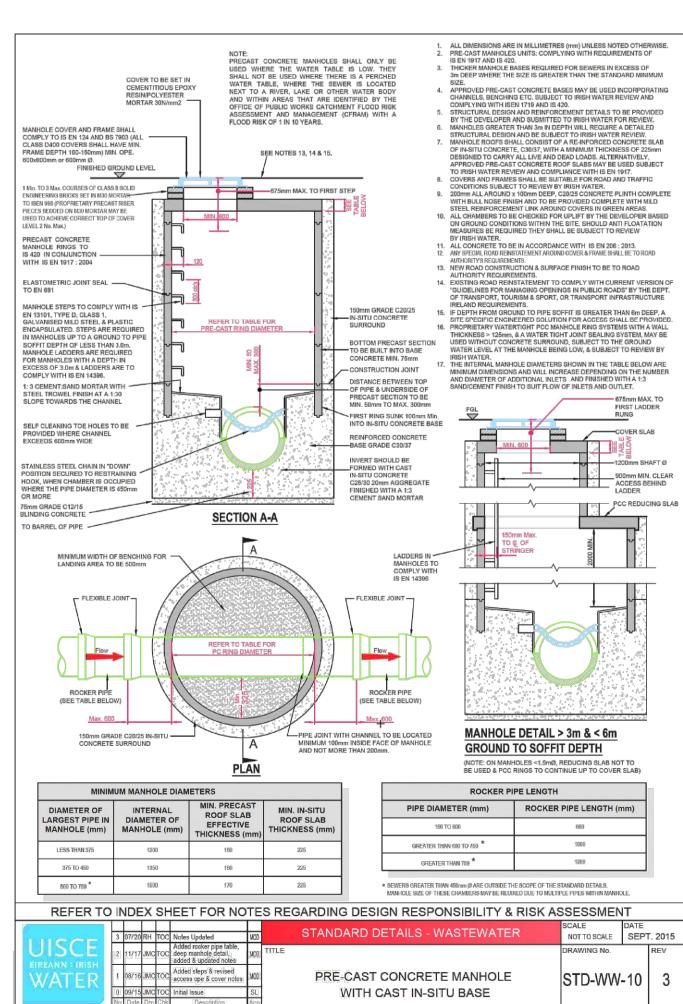


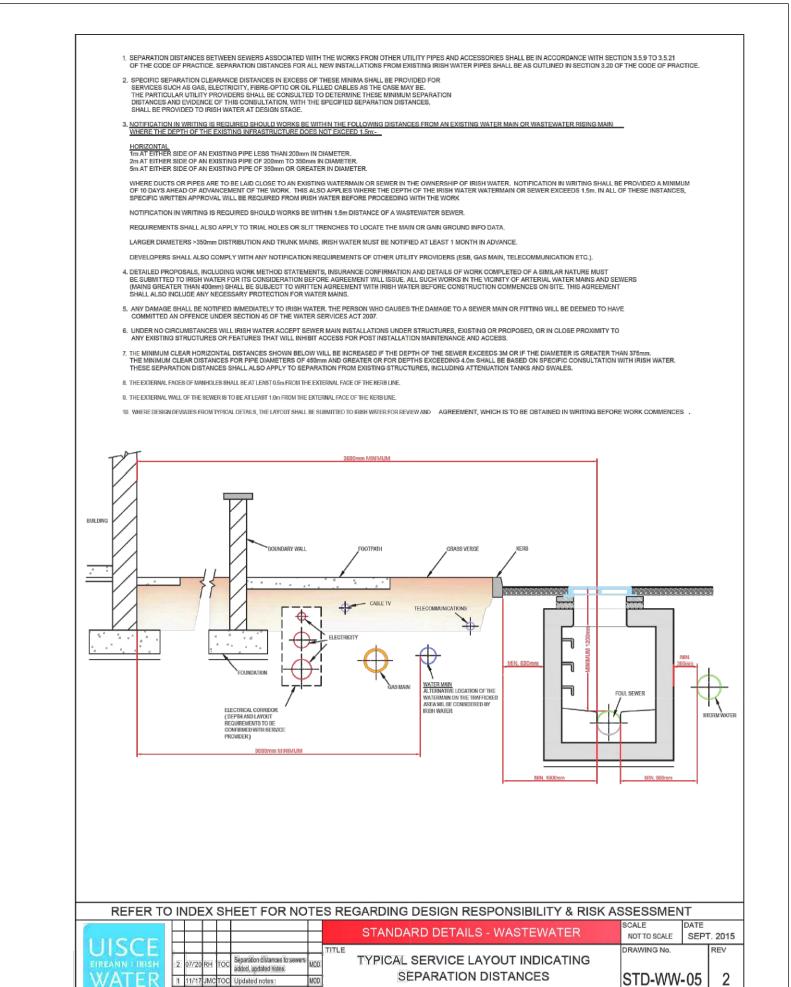












Standard Irish Water Detail References:

STD-WW-01 Waste water service connection responsibility

STD-WW-03 Drain & Service connection pipework

STD-WW-04 Typical Sewer/ Service pipe connection

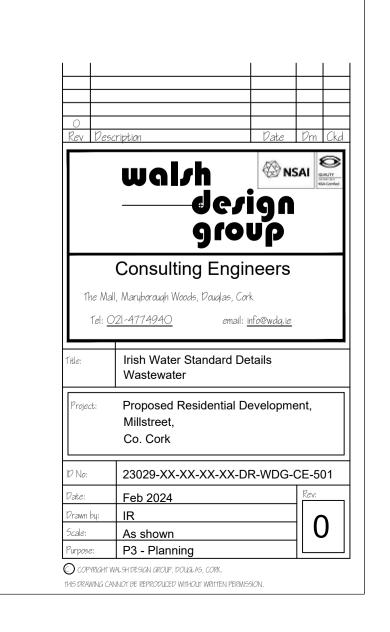
STD-WW-05 Typical Service layout indicating separation distances

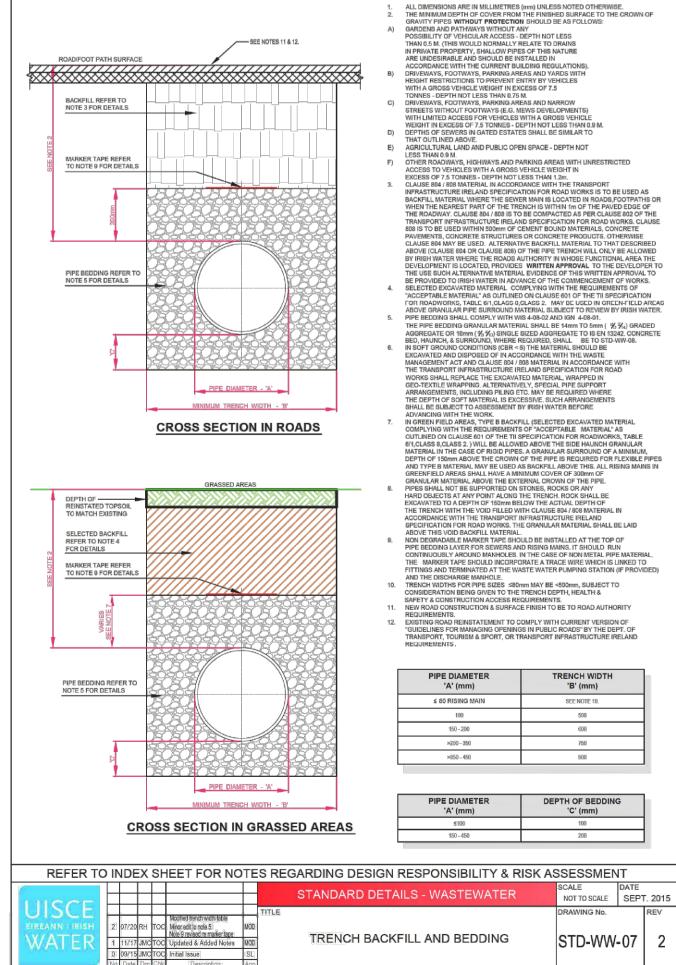
STD-WW-07 Trench Backfill & Bedding

STD-WW-08 Concrete bed, Haunch & surround to wastewater pipes

STD-WW-10 Pre-cast concrete manhole with cast in-situ base

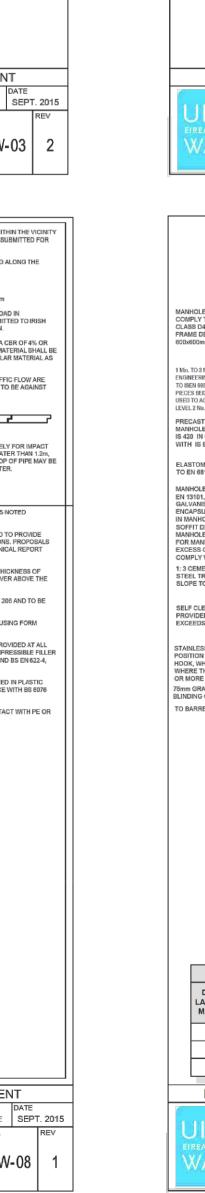
Refer to dwg no. 23029-XX-XX-XX-XX-DR-WDG-CE-002 for plan layout

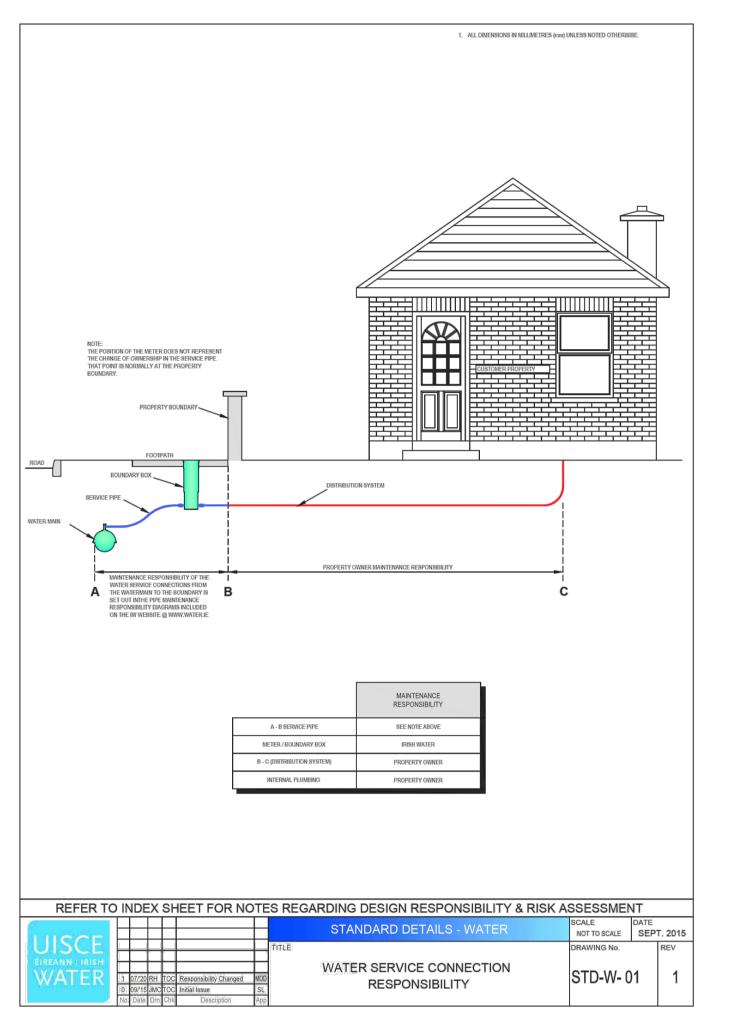


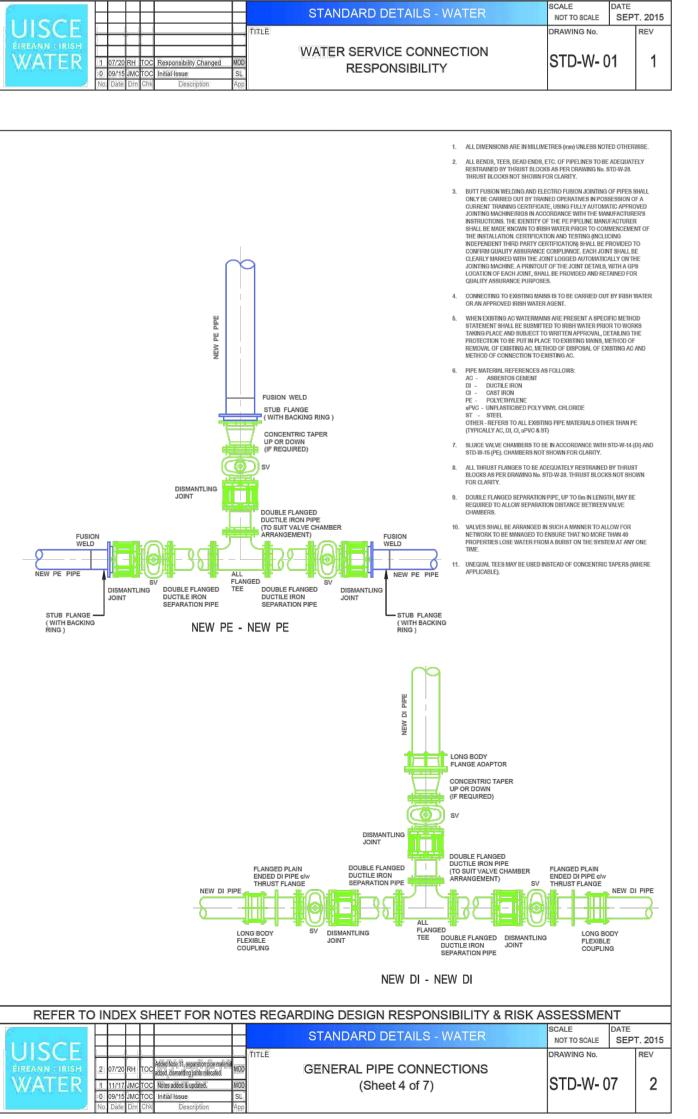


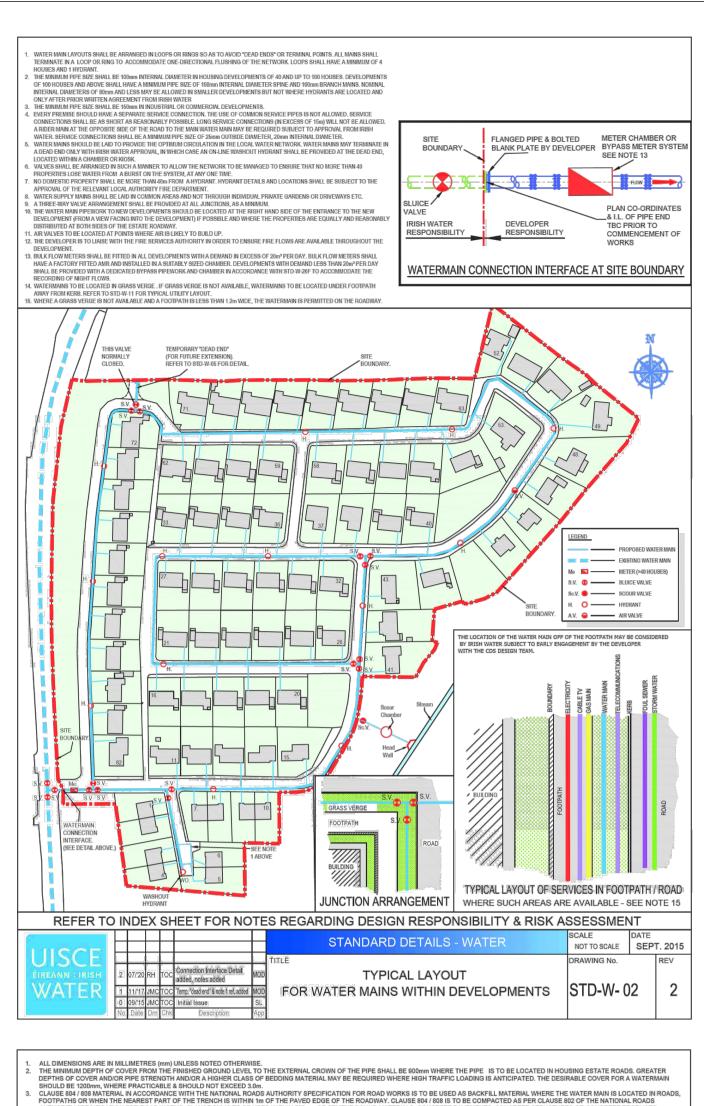
TRENCH BACKFILL AND BEDDING

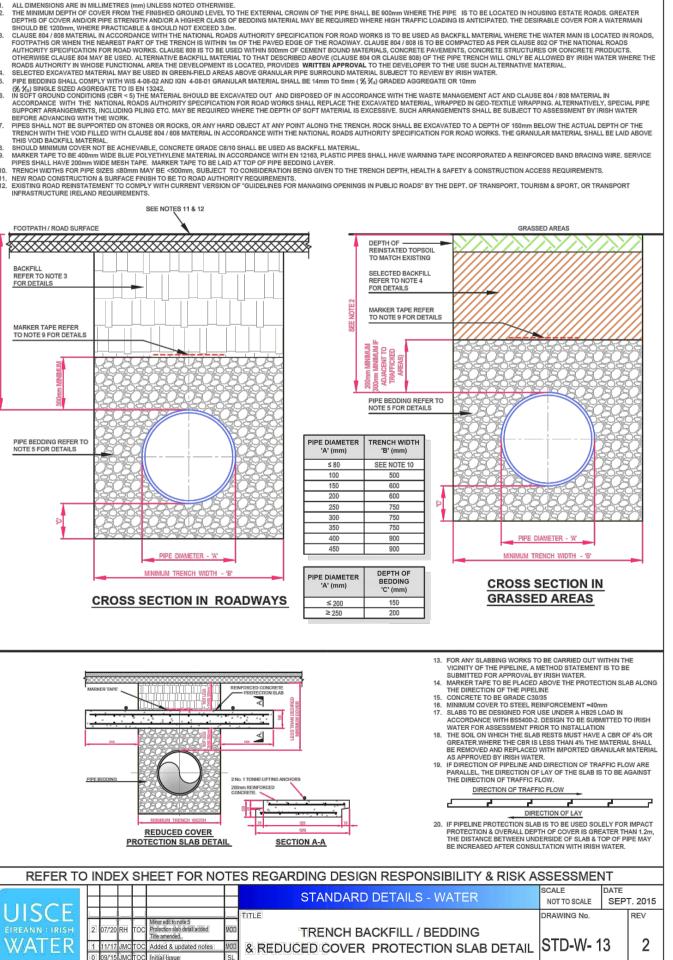
STD-WW-07

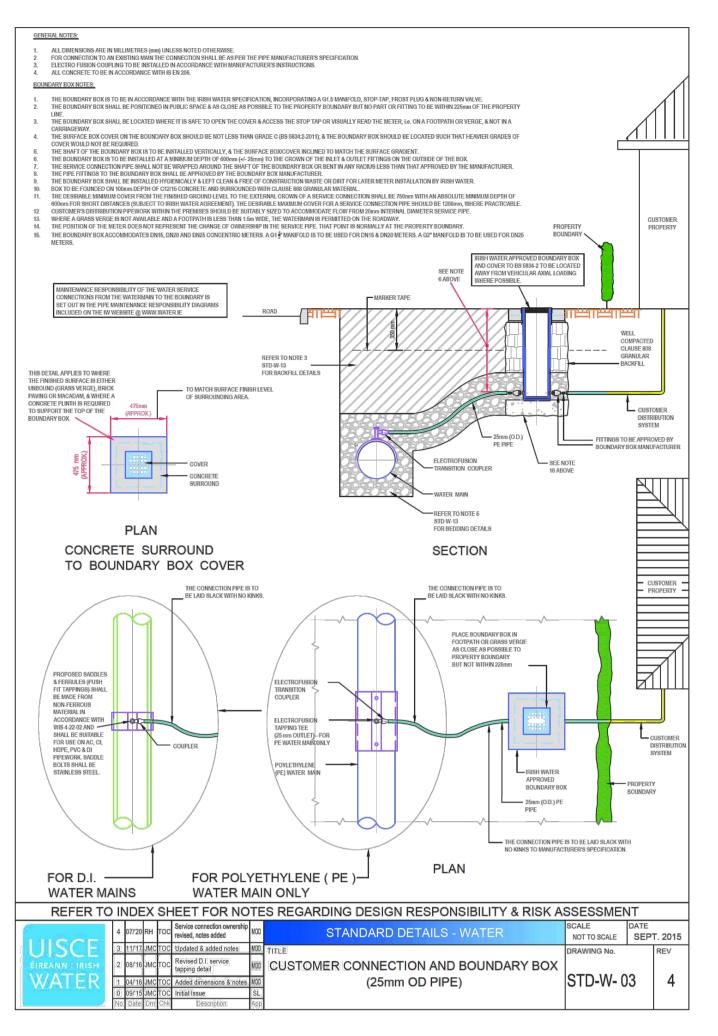


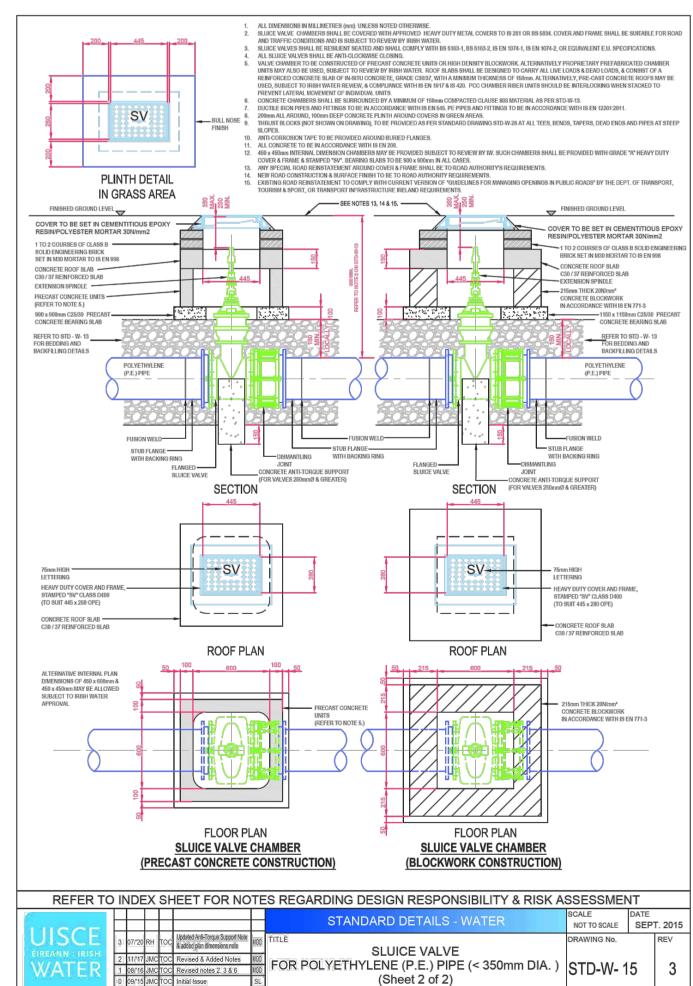


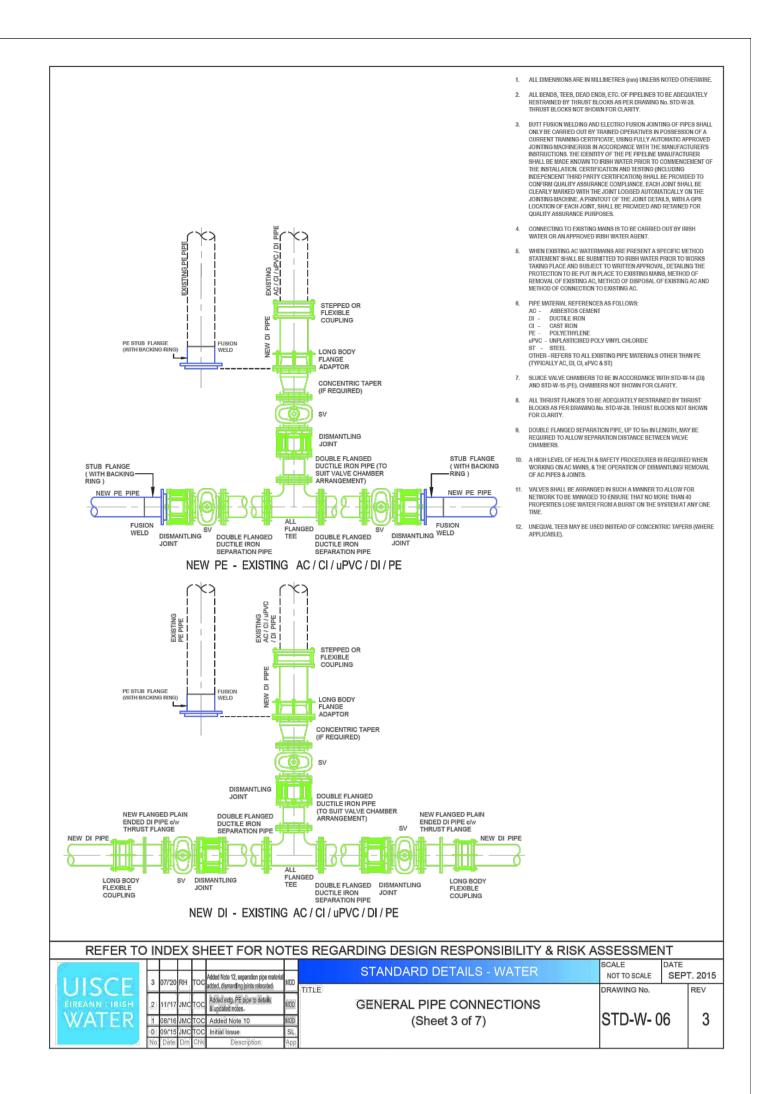












Standard Irish Water Detail References:

STD-W-01 Water Service Connection responsibility

STD-W-02 Typical Layout for Water Mains within developments

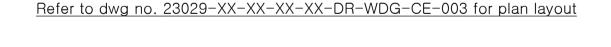
STD-W-03 Customer connection & boundary box

STD-W-06 General Pipe Connection

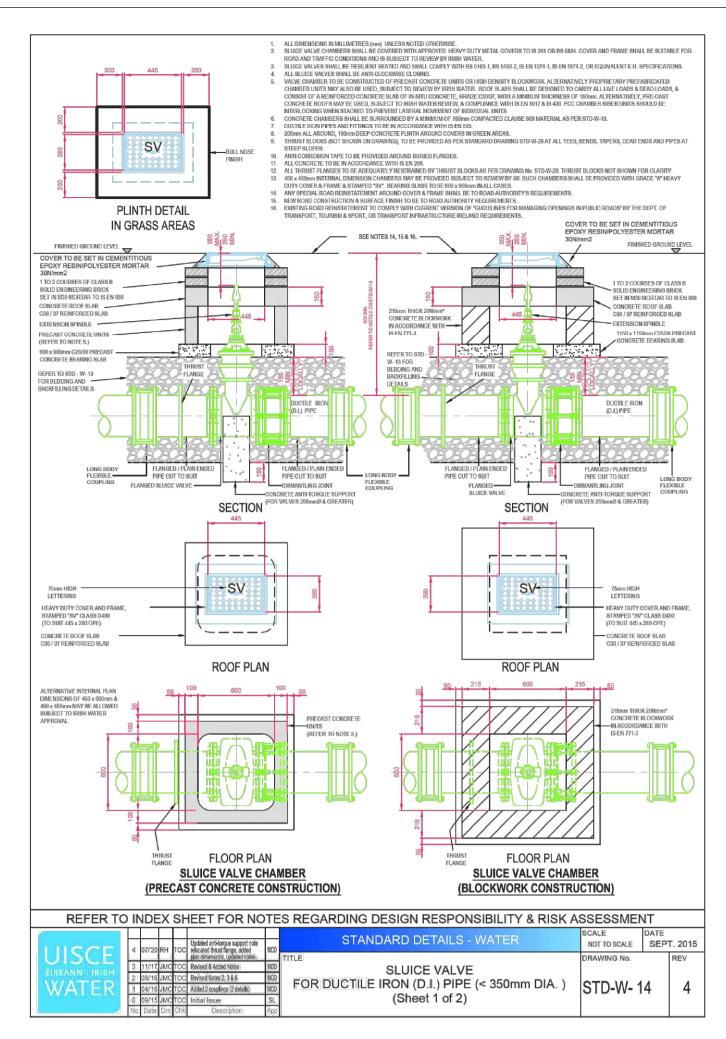
STD-W-07 General Pipe Connection

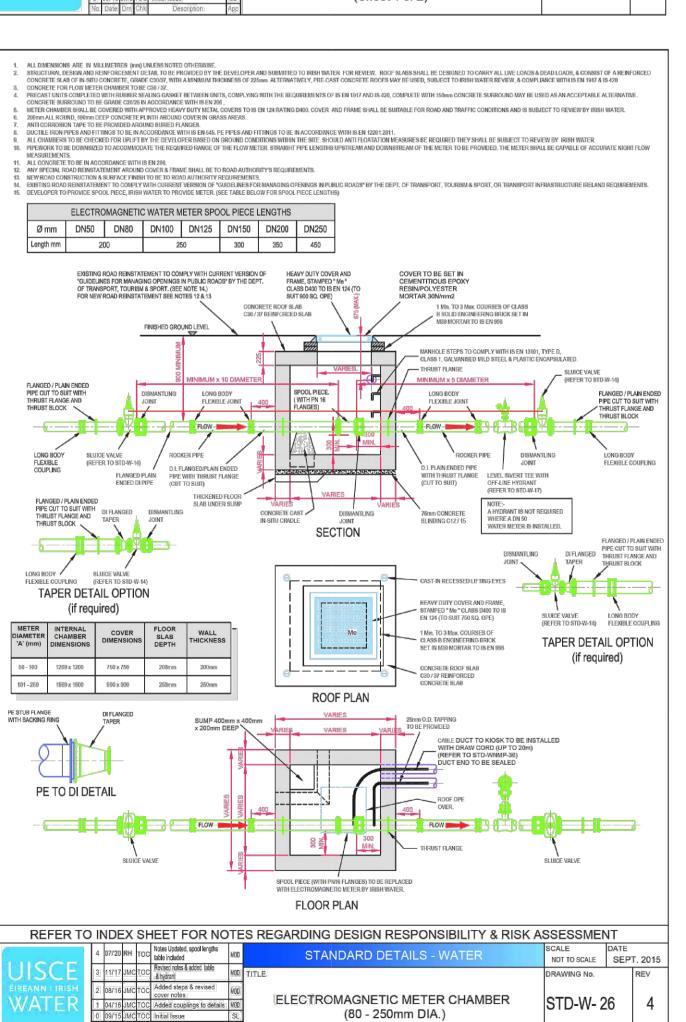
STD-W-13 Trench Backfill & Bedding

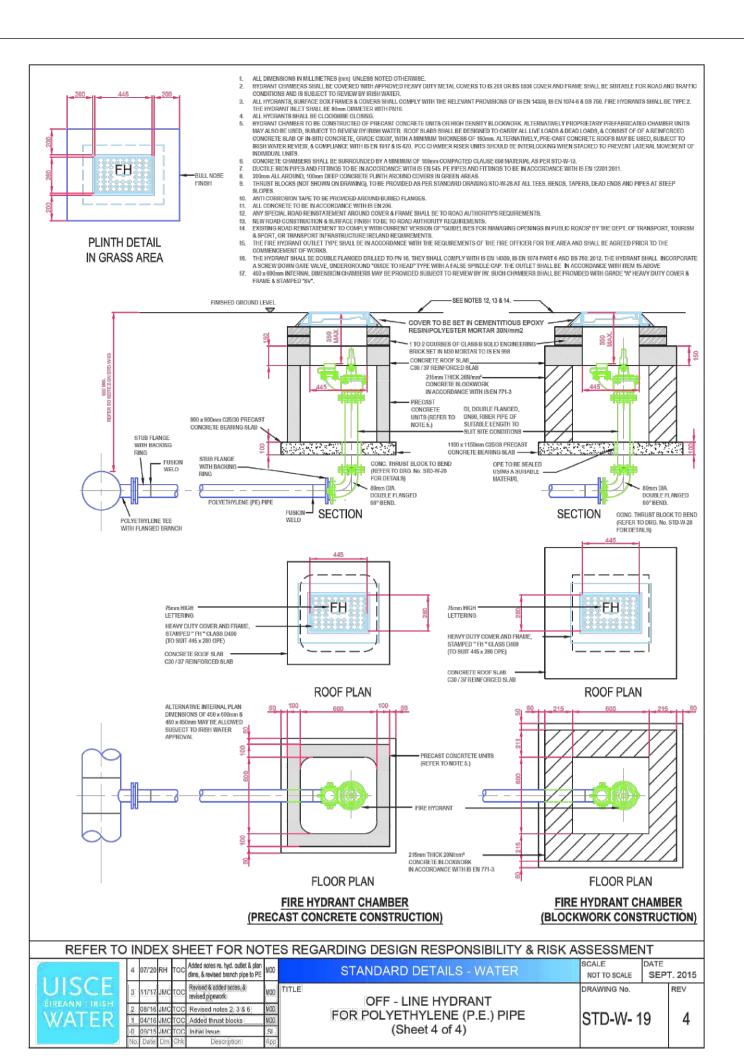
STD-W-15 Sluice valve for Polyethylene (P.E.) Pipe (<350mmø)

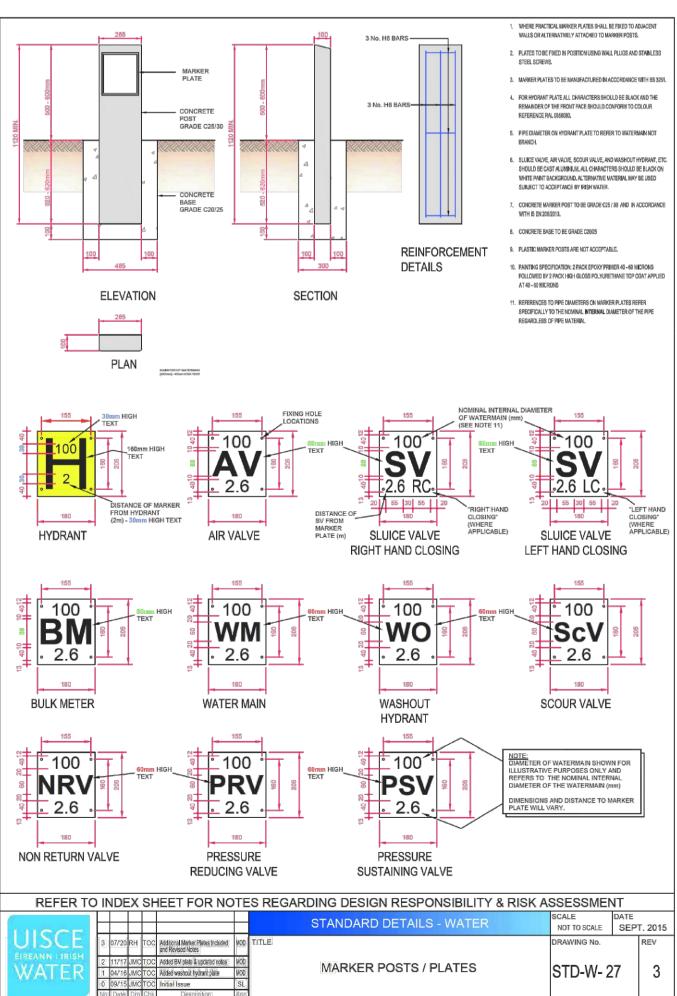


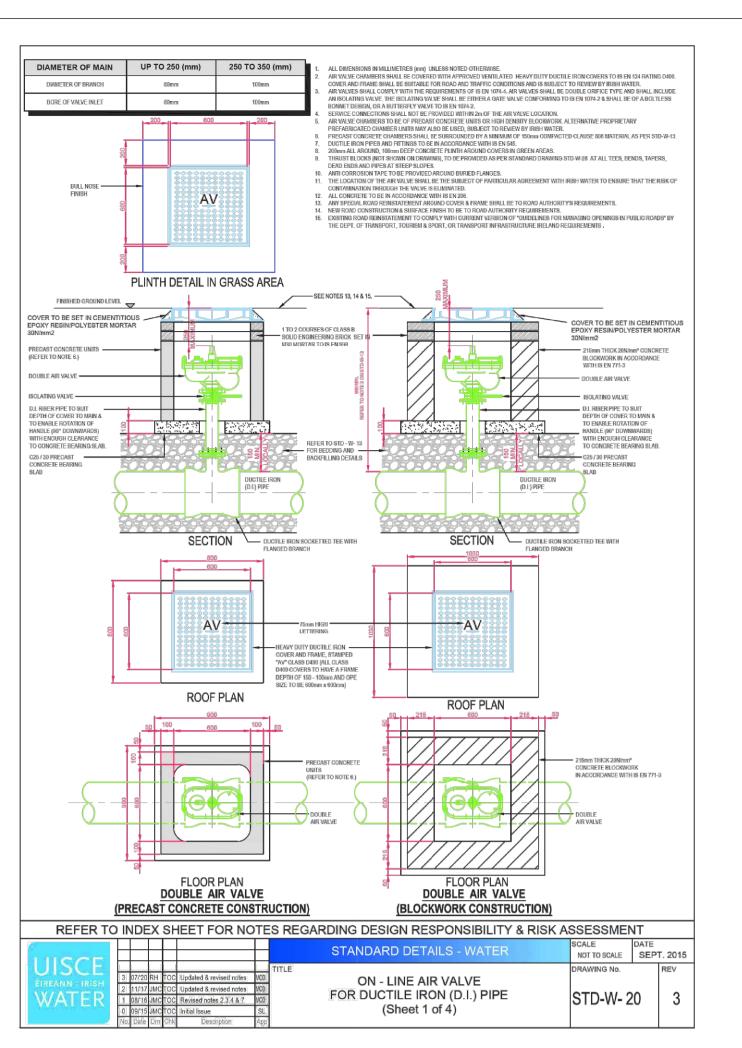


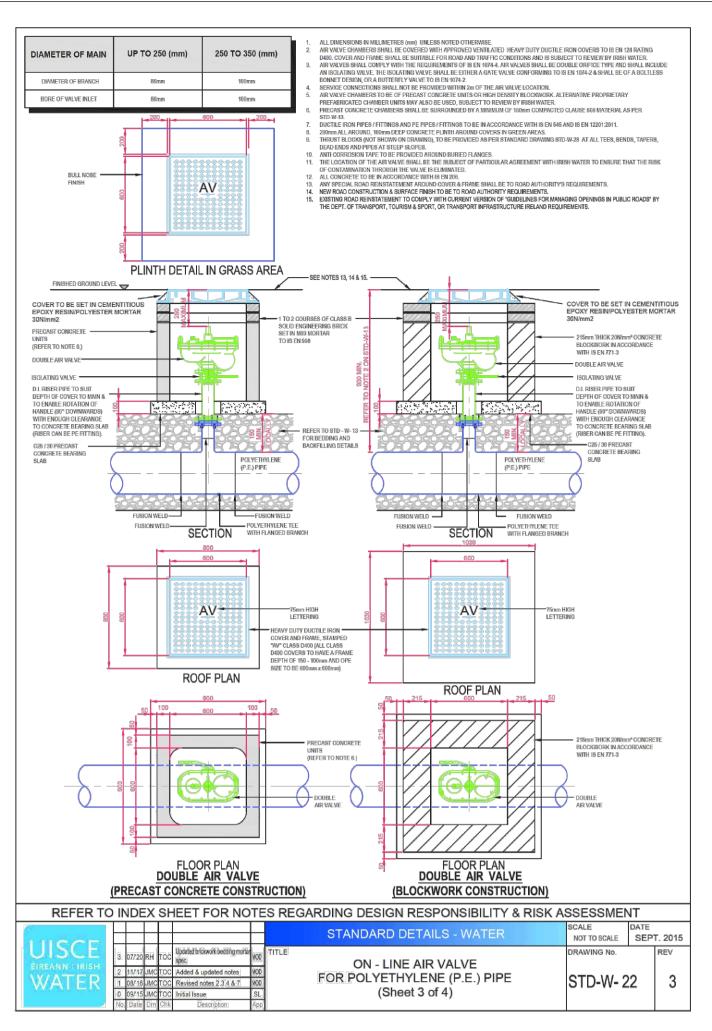


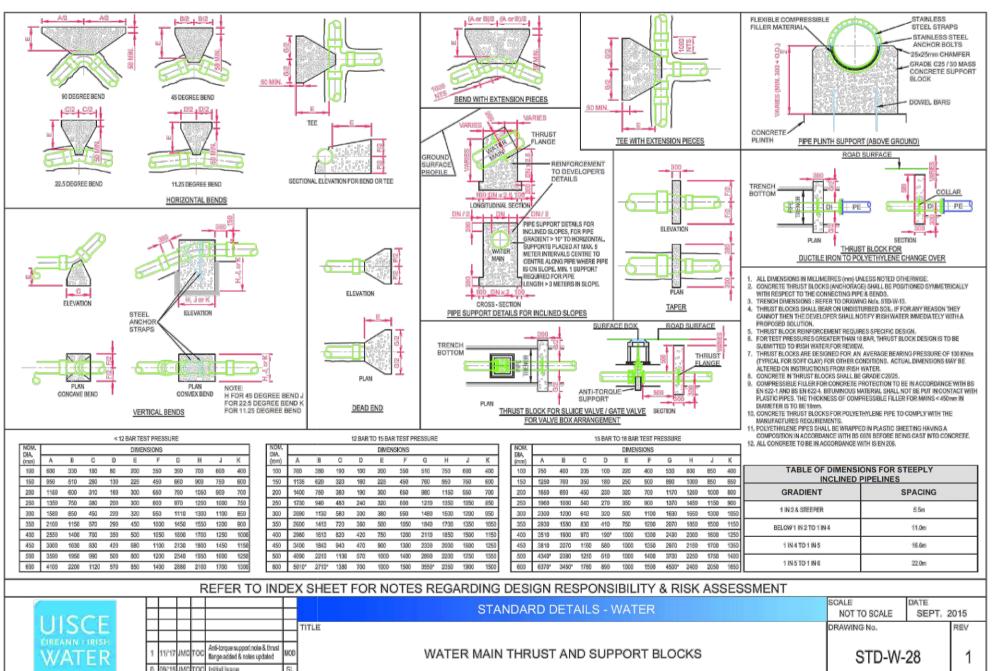












Standard Irish Water Detail References:

STD-W-14 Sluice valve for Ductile Iron (D.I.) Pipe (<350mm\$\phi\$) STD-W-19 Off-line hydrant for Polyethylene (P.E.) Pipe STD-W-20 On-line Air Valve for Ductile Iron (D.I.) Pipe STD-W-22 On-line Air Valve for Polyethylene (P.E.) Pipe

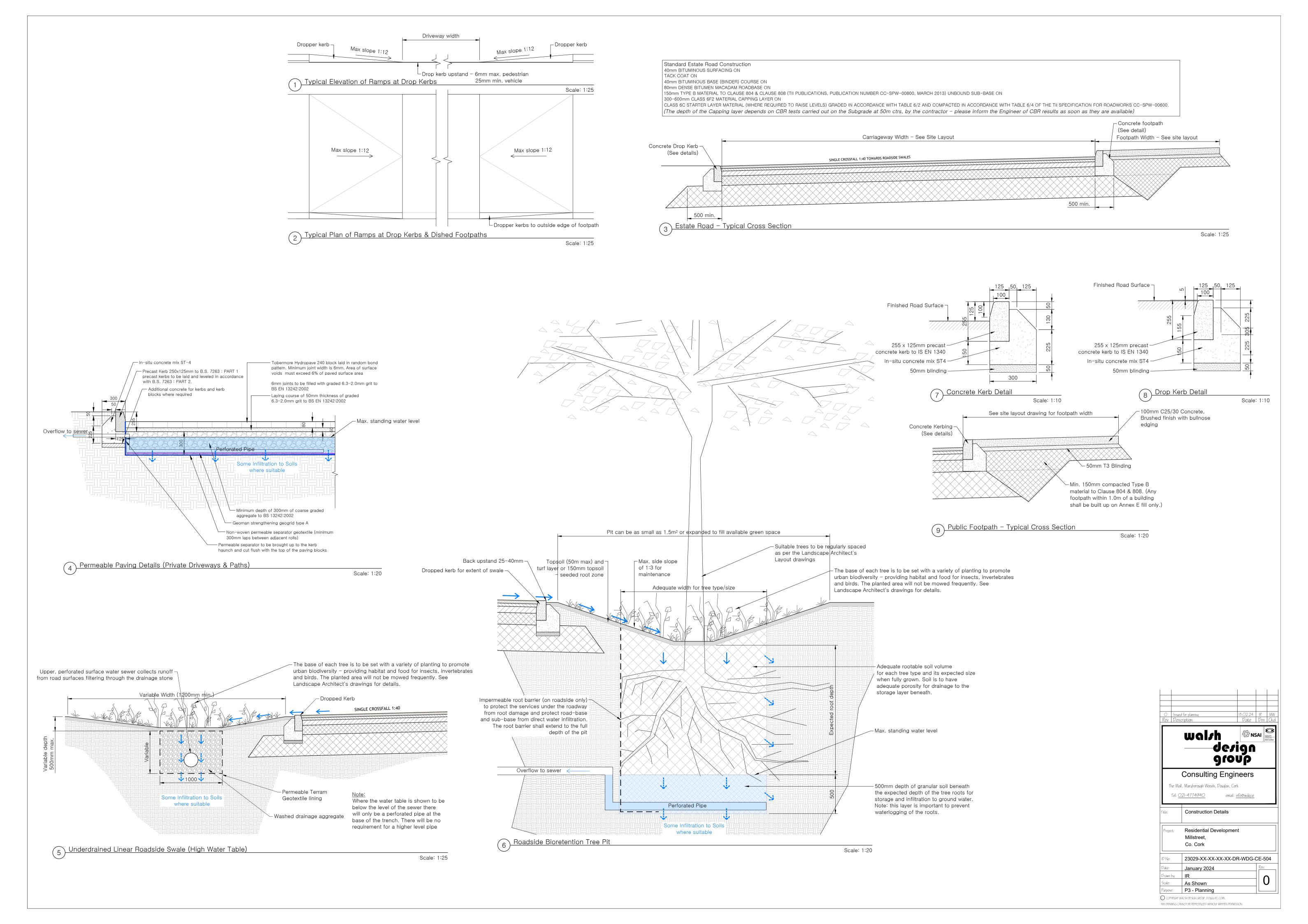
STD-W-26 Meter chamber (≤300mm ∅)

STD-W-27 Marker posts/ Plates

STD-W-28 Water main thrust & support blocks

Refer to dwg no. 23029-XX-XX-XX-XX-DR-WDG-CE-003 for plan layout







Issued by:



Walsh Design Group

Consulting Engineers The Mall, Maryborough Woods, Douglas, Cork, T12 K8YT

About Sing Development at Millstreet	Project: Cork County Council WDG Job No.: 23029 Project ID: 23029		Email: reception@wdg.ie Tel: 021 4774940 Document Register													
Document ID Title Month 11 12 2 1 1 1 2 2 1 1	- Housing Development	at Millstreet	Date of	Issue												
	The state of the s		Day	1	17	9	15				1			П	T	П
Decument			Month	11	1	2	2							П	\dashv	一
Decument				-	24				+	\top	+		+	\vdash	\dashv	\neg
Site Layout - Proposed Support Develops	Decument ID	Title		_	_		_	\vdash	++	+	+	\vdash	+	\vdash	\dashv	\dashv
Steadard Details		Title	/0	"	-		J								_	_
28/29/JOX/CXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		Cita Lavaut. Deede and Lavale			^	0	_		-						-	
20029-000-000-000-000-000-000-000-000-00					_				-							
Standard Details					_				-							
Standard Details					-		_		-							
Surface Water Disninger - Tiplical Details March Water Standard Details - Waterwater March Water Standard Details - Water Water March Water Standa	23029-XX-XX-XX-XX-DR-WDG-CE-004	Site Layout - Proposed SUDS Features			0	0	0									
23029-XX-XXX-XX-NR-WDG-CE-501																
23023-XX-XX-XX-XX-DR-WDG-CE-503							_									
23025XXXXXXXDR_WDG_CE_504	23029-XX-XX-XX-XX-DR-WDG-CE-501	Irish Water Standard Details - Wastewater					0									
23029-XXXXXX-DR-WDG-CE-504 Construction Details	23029-XX-XX-XX-XX-DR-WDG-CE-502	Irish Water Standard Details - Watermain 1 of 2			T		0								Т	
Documents	23029-XX-XX-XX-XX-DR-WDG-CE-503	Irish Water Standard Details - Watermain 2 of 2					0									
23029-XX-XX-XX-XX-RP-WDG-CE-001 Civil Engineering Report	23029-XX-XX-XX-XX-DR-WDG-CE-504	Construction Details					0									
23029-XX-XX-XX-XX-RP-WDG-CE-001	Documents															
23029-XX-XX-XX-XX-XX-RP-WDG-CE-001		Civil Engineering Report					0									
Distribution					-				+	-	+				-	
C C C C C C C C C C																
Architect		·	•	"N" c	of F			ppies	E=	Ema	il Issı	ue	•			
Project Managers																
Civil / Structural Consultant Consulting Engineers E C C C C C C C C C	Architect				С	С	С									
Consulting Engineers Main Contractor Landscape Architect Mac Consultant Ma	Project Managers															
Main Contractor And Contractor And Contractor And Contractor And Consultant Beconsultant Becon	r roject waragers															
Landscape Architect M&E Consultant Book Book Book Book Book Book Book Boo																
M&E Consultant Mathematican Mat	Civil / Structural Consultant			E												
C C C C C C C C C C	Civil / Structural Consultant Consulting Engineers			Е												
Local Authority Quantity Surveyor Purpose of Issue P1- Information N2 N N N N N N N N N N N N N N N N N N	Civil / Structural Consultant Consulting Engineers Main Contractor				С	С	С									
Quantity Surveyor Information X<	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect				_		_									
Purpose of Issue P1 - Information X <td>Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant</td> <td></td> <td></td> <td></td> <td>С</td> <td>С</td> <td>С</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant				С	С	С									
P1 - Information	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist				С	С	С									
P2 - Coordination P3 - Planning Permission P4 - Fire Safety Cert Application P5 - Disability Access Cert Application P6 - Building Control Compliance P7 - Pre-Tender P8 - Tender P9 - Contract / Construction P10 - Handover	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority				C C	C	C									
P2 - Coordination	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor				C C	C	C									
P4 - Fire Safety Cert Application Image: Cert Appl	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor Purpose of Issue				C C	C C	C C									
P4 - Fire Safety Cert Application Image: Control Construction Image: Control Construction Image: Control Control Construction Image: Control Contro	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor Purpose of Issue P1 - Information				C C	C C	C C									
P5 - Disability Access Cert Application Image: Control Compliance	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor Purpose of Issue P1 - Information P2 - Coordination				C C	C C	C C									
P6 - Building Control Compliance 0	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor Purpose of Issue P1 - Information P2 - Coordination P3 - Planning Permission				C C	C C	C C									
P7 - Pre-Tender	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor Purpose of Issue P1 - Information P2 - Coordination P3 - Planning Permission P4 - Fire Safety Cert Application				C C	C C	C C									
P8 - Tender	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor Purpose of Issue P1 - Information P2 - Coordination P3 - Planning Permission P4 - Fire Safety Cert Application P5 - Disability Access Cert Application				C C	C C	C C									
P9 - Contract / Construction	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor Purpose of Issue P1 - Information P2 - Coordination P3 - Planning Permission P4 - Fire Safety Cert Application P5 - Disability Access Cert Application P6 - Building Control Compliance				C C	C C	C C									
P10 - Handover	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor Purpose of Issue P1 - Information P2 - Coordination P3 - Planning Permission P4 - Fire Safety Cert Application P5 - Disability Access Cert Application P6 - Building Control Compliance P7 - Pre-Tender				C C	C C	C C									
	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor Purpose of Issue P1 - Information P2 - Coordination P3 - Planning Permission P4 - Fire Safety Cert Application P5 - Disability Access Cert Application P6 - Building Control Compliance P7 - Pre-Tender P8 - Tender				C C	C C	C C									
F11-Outel	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor Purpose of Issue P1 - Information P2 - Coordination P3 - Planning Permission P4 - Fire Safety Cert Application P5 - Disability Access Cert Application P6 - Building Control Compliance P7 - Pre-Tender P8 - Tender P9 - Contract / Construction				C C	C C	C C									
	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor Purpose of Issue P1 - Information P2 - Coordination P3 - Planning Permission P4 - Fire Safety Cert Application P5 - Disability Access Cert Application P6 - Building Control Compliance P7 - Pre-Tender P8 - Tender P9 - Contract / Construction P10 - Handover				C C	C C	C C									
	Civil / Structural Consultant Consulting Engineers Main Contractor Landscape Architect M&E Consultant Ecologist Local Authority Quantity Surveyor Purpose of Issue P1 - Information P2 - Coordination P3 - Planning Permission P4 - Fire Safety Cert Application P5 - Disability Access Cert Application P6 - Building Control Compliance P7 - Pre-Tender P8 - Tender P9 - Contract / Construction P10 - Handover				C C	C C	C C									