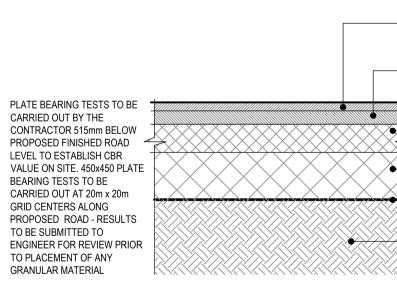
		IRISH WATER WASTEWATER DETAILS	
	Drawing No.	Drawing Title	
N	STD-WW-01	Watewater service connection maintenance responsibility	
N	STD-WW-02	Typical layout for sewer within developments	
Y	STD-WW-03	Drain & service connection pipework	
Y	STD-WW-04	Typical sewer/service pipe connection	
Y	STD-WW-05	Typical service layout indicating seperation distances	
Y	STD-WW-05A	Wastewater service connection vertical serperation distances	
Y	STD-WW-06	Restrictions on wastewater infrustructure works adjacent to trees	
Y	STD-WW-06A	Restrictions on wastewater infrustructure works adjacent to sewers	
Y	STD-WW-07	Trench backfill & bedding	
Y	STD-WW-08	Concrete protection slab, bed, haunch & surround to wastewater pipes	
Y	STD-WW-09	Tblockwork manhole (<450mm dia.)	
Y	STD-WW-10	Pre-cast concrete manhole with cast in-situ base	
Y	STD-WW-10A	Pre-cast concrete manhole with pre-cast base	
N	STD-WW-10B	Pre-cast concrete pumping station inlet manhole with cast in-situ concrete base	
N	STD-WW-10C	Pre-cast concrete pumping station inlet manhole with pre-cast concrete base	
N	STD-WW-11	In-situ concrete manhole	
N	STD-WW-11A	Cast in-situ concrete pumping station inlet manhole	
Y	STD-WW-12	Backdrop and cascade manholes	
Y	STD-WW-13	Private side inspection shambers	
N	STD-WW-14	Trust blocks for rising mains	
N	STD-WW-15	Scour valve chamber (foul rising main <200mm dia.)	
N	STD-WW-16	Sluice valve details for rising mains ductile iron (D.I) pipe (<200mm dia.) (sheet 1 of 2)	
N	STD-WW-17	Sluice valve details for rising mains polyethylene (P.E) pipe (<200mm dia.) (sheet 2 of 2)	
N	STD-WW-18	Air valve chamber (foul rising main <200mm dia.)	
N	STD-WW-19	Duct chamber	
N	STD-WW-20	Emergency overflow structure & eme4rgency overflow to storm sewer	
N	STD-WW-21	Typical ditch/stream crossing for gravity sewer (sheet 1 to 2)	
N	STD-WW-22	Typical ditch/stream crossing for ductile iron rising main (sheet 2 to 2)	
N	STD-WW-22A	Typical ditch/stream crossing for polyethylene rising main	
N	STD-WW-23	Typical bridge crossing for rising main (sheet 1 of 2)	
N	STD-WW-24	Typical bridge crossing for rising main (sheet 2 of 2)	
N	STD-WW-24A	Typical culvert and services crossing details for rising main	
N	STD-WW-25	Security gate & fencing palisade option (preferred)	
N	STD-WW-25A	Security gate & fencing wire mesh option	
N	STD-WW-26	Indicatice pumping station site layout - access via lay-by	
N	STD-WW-26A	Indicatice pumping station site layout - direct access from public road	
N	STD-WW-27	Flow meter chamber (foul rising main <200mm dia.) cast in-situ concrete option	
N	STD-WW-27A	Flow meter & valve chamber (foul rising main <200mm dia.) cast in-situ concrete option	
N	STD-WW-27B	Flow meter & valve chamber (foul rising main <200mm dia.) pre-cast concrete option	
N	STD-WW-27C	Flow meter & valve chamber (foul rising main <200mm dia.) pre-cast concrete option	
N	STD-WW-28 STD-WW-28A	Cast in-situ Indicatice submersible pumping station with cast in-situ valve chamber	
N N	STD-WW-28A	Indicative pre-cast concrete submersible pumping station and cast in-situ valve chamber Indicative pre-cast concrete submersible pumping station and pre-cast valve chamber	
N	STD-WW-29	Rising main discharge stand off manhole	
N	STD-WW-30	Type 1 pumping station control kiosk	
N	STD-WW-30A	Type 2 and type 3 pumping station contriol kiosk	
N N	STD-WW-31 STD-WW-31A	Pumping station wet kiosk Pumping station wet kiosk water service connection arrangment	
N	STD-WW-32	Pumping station wet klosk water service connection arrangment Hardstanding area pumping station (permeable & impermeable)	
N	STD-WW-33	Lamp bollard & lamp standard	
Y	STD-WW-34	Vent Stack	
N	STD-WW-35 STD-WW-35A	Rising main rodding chamber in-situ concrete option Rising main rodding chamber pre-cast concrete option	
N N	STD-WW-36	Marker posts/plates	
N	STD-WW-37	Section showing wastewater services seperation details in high density developments 2.5m v	
.3		footpaths with 6.0m wide carrigeways.	
N	STD-WW-38	Layout plan showing below ground services serperation details in high density developments 2.5m wide footpaths with 6.0m wide carriageways	
		Section showing wastewater services seperation details in high density developments 1.8m v	
N	STD-WW-39	footpaths, 2.45m wide parralle parking bays with 6.0m wide carrigeways.	
	STD-WW-40	Layout plan showing below ground services serperation details in high density developments	

	Drg No.	Drawing Title
N	STD-W-01	Water service connection responsibility
N	STD-W-02	Typical layout for water mains within developments
Y	STD-W-03	Customer connection and boundary box (25mm OD pipe)
Y	STD-W-04	General pipe connections (Sheet 1 of 7)
Y	STD-W-05	General pipe connections (Sheet 2 of 7)
Y	STD-W-06	General pipe connections (Sheet 3 of 7)
Y	STD-W-07	General pipe connections (Sheet 4 of 7)
(STD-W-08	General pipe connections (Sheet 5 of 7)
(STD-W-09	General pipe connections (Sheet 6 of 7)
Y	STD-W-10	General pipe connections (Sheet 7 of 7)
<u>(</u>	STD-W-11 STD-W-12	Typical service layout indicating seperation distances Restrictions on Water Infrustructure works adjacent to existing trees
<u>/</u>	STD-W-12 STD-W-12A	
<u>(</u>	STD-W-12A	Restrictions on new trees/shrubs planting adjacent to Water mains Trench Backfill/bedding & reduced cover protection slab detail
Y	STD-W-13	Sluice valve for ductile iron (D.I) pipe (Sheet 1 of 4)
1	STD-W-15	Sluice valve for polyethylene (P.E) pipe (<350mm dia.) (Sheet 2 of 2)
J	STD-W-16	On-line hydrant for ductile iron (D.I) pipe (Sheet 1 of 4)
J	STD-W-17	Off-line hydrant for ductile iron (D.I) pipe (Sheet 2 of 4)
J	STD-W-18	On-line hydrant for polyethylene (P.E) pipe (Sheet 3 of 4)
(STD-W-19	Off-line hydrant for polyethylene (P.E) pipe (Sheet 2 of 4)
1	STD-W-20	On-line air valve for ductile iron (D.I) pipe (Sheet 1 of 4)
l	STD-W-21	Off-line air valve for ductile iron (D.I) pipe (Sheet 2 of 4
I	STD-W-22	On-line air valve for polyethylene (P.E) pipe (Sheet 3 of 4)
l.	STD-W-23 STD-W-24	Off-line air valve for polyethylene (P.E) pipe (Sheet 4 of 4
N N	STD-W-24	Presure reducing/sustaining valve chamber in-situ R.C option Booster pump station arrangement
J	STD-W-26	Electromagnetic meter chamber (dn80 - dn250mm Dia.)
u J	STD-W-26A	Chamber for flanged mech. Meter without strainer (dn40 - dn250mm Dia.)
J	STD-W-26B	Chamber for flanged mech. meter (dn40 - dn250mm Dia.) with separate strainer chamber
J	STD-W-26C	Threaded rotary piston flow meter chamber (dn30 - dn40mm Dia.) In-situ Concrete option
l	STD-W-26D	Threaded rotary piston flow meter chamber (dn30 - dn40mm Dia.) Precast Concrete option
J	STD-W-26E	Threaded rotary piston flow meter chamber (dn30 - dn40mm Dia.) Blockwork option
N	STD-W-26F	By-pass flow meter chamber (25-32mm O.D.Dia) For developments with <20m3/day water u
N	STD-W-26G	Flow meter chamber (25-32mm O.D.Dia)
1	STD-W-27	Marker posts/plates
(STD-W-28	Watermain thrust and support blocks
N	STD-W-29	Duct chamber
N	STD-W-30	Scour chamber and head wall arrangements
N	STD-W-30A	Washout hydrant
J	STD-W-30B	Scour chamber to storm sewer arrangements
l.	STD-W-31 STD-W-31A	Typical ditch/stream crossing for watermain ductile iron option Typical ditch/stream crossing for watermain polyethylene option
d I	STD-W-31A STD-W-32	Typical ditch/stream crossing for watermain polyethylene option Typical bridge crossing for watermain (Sheet 1 of 2)
N	STD-W-32	Typical bridge crossing for watermain (Sheet 1 of 2)
N	STD-W-33A	Typical culvert and services crossing details for watermain
J	STD-W-34	Security gate and fencing palisade option (preferred)
1	STD-W-34A	Security gate and fencing wire mesh option
_	STD-W-35	Pipe repair to existing mains
1	STD-W-36	Flow meter klosk
		DDV/DCV
N N	STD-W-36A	PRV/PSV control Kiosk
N N	STD-W-36A STD-W-37	Lamp bollard and lamp standards
N N N	STD-W-36A STD-W-37 STD-W-38	Lamp bollard and lamp standards Watermain loop detail ductile iron option
1 1 1	STD-W-36A STD-W-37	Lamp bollard and lamp standards Watermain loop detail ductile iron option Watermain loop detail polyethylene option
	STD-W-36A STD-W-37 STD-W-38	Lamp bollard and lamp standards Watermain loop detail ductile iron option Watermain loop detail polyethylene option Section showing wastewater services seperation details in high density developments 2.5m
	STD-W-36A STD-W-37 STD-W-38 STD-W-39 STD-W-40	Lamp bollard and lamp standards Watermain loop detail ductile iron option Watermain loop detail polyethylene option Section showing wastewater services seperation details in high density developments 2.5m wide footpaths with 6.0m wide carrigeways.
	STD-W-36A STD-W-37 STD-W-38 STD-W-39	Lamp bollard and lamp standards Watermain loop detail ductile iron option Watermain loop detail polyethylene option Section showing wastewater services seperation details in high density developments 2.5m
N N N N	STD-W-36A STD-W-37 STD-W-38 STD-W-39 STD-W-40 STD-W-41	Lamp bollard and lamp standards Watermain loop detail ductile iron option Watermain loop detail polyethylene option Section showing wastewater services seperation details in high density developments 2.5m wide footpaths with 6.0m wide carrigeways. Layout plan showing below ground services serperation details in high density development
	STD-W-36A STD-W-37 STD-W-38 STD-W-39 STD-W-40	Lamp bollard and lamp standards Watermain loop detail ductile iron option Watermain loop detail polyethylene option Section showing wastewater services seperation details in high density developments 2.5m wide footpaths with 6.0m wide carrigeways. Layout plan showing below ground services serperation details in high density developments 2.5m 2.5m wide footpaths with 6.0m wide carriageways

*DETAILS ABOVE TO BE USED FOR SURFACE WATER NETWORK



40mm PMSMA (POLYMER MODIFIED STONE MASTIC ASPHALT) SURFACE COURSE TO CLAUSE 942 OF NRA SPECIFICATION FOR ROADWORKS (10mm NOMINAL SIZE AGGREGATE). PIGMENT OF SELECTED COLOUR TO BE ADDED TO WEARING COURSE IN PROPOSED PARKING BAYS 60mm DENSE ASPHALT CONCRETE BINDER COURSE TO CLAUSE 906 OF NRA SPECIFICATION (20mm NOMINAL SIZE AGGREGATE) 150mm GRANULAR MATERIAL TYPE B SUB-BASE TO CLAUSE 808 - COMPACTED IN LAYERS IN ACCORDANCE WITH CLAUSE 802 OF

THE NRA SPECIFICATION FOR ROADWORKS _ 250mm GRANULAR MATERIAL 6F2 TO TABLE 6/1 OF THE NRA SPECIFICATION FOR ROAD WORKS _ GEOTEXTILE AS PER CL 609 OF THE NRA SPECIFICATION FOR ROADWORKS

SELECTED GRANULAR FILL TO CLASS 6C - OF TABLE 6/1 OF THE NRA SPECIFICATION FOR ROADWORKS (IF REQUIRED)

Road Build To Be Used Where CBR Values Are Greater Than 5% Scale - 1:20

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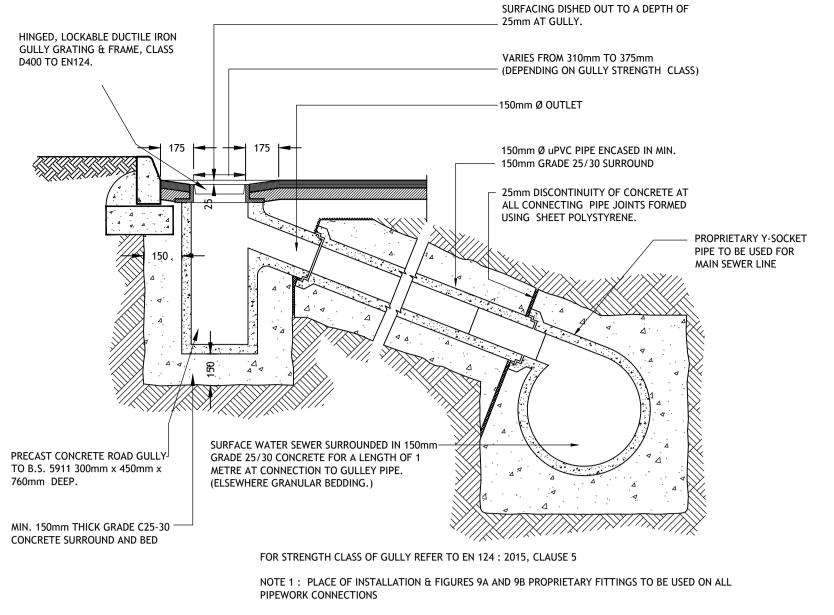
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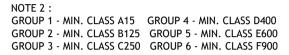
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Date Drawn: Nov 2020 Drawn By: R.A Date Issued: Nov 2020 Issued By: D.F





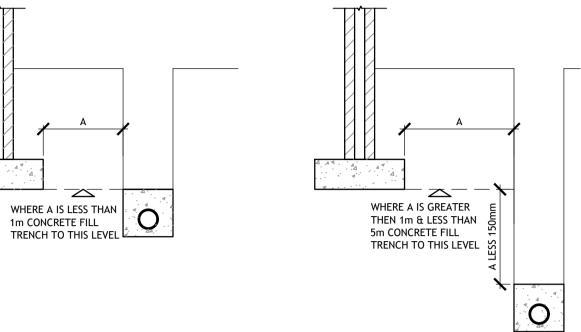


PRECAST CONCRETE GULLY IN MACADAM AREA SCALE 1:20

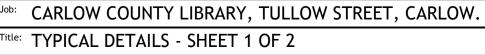


Rev	Amendment	Ву	Date	Client
PR0	ISSUED FOR STAGE 2A	DF	30/11/2020	





8: Concrete Surround To Pipe Run Near Building Scale - NTS





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Stage: Preliminary							
Scale @ A1: As Shown							
Technician Check: P.J. Mulcahy Engineer Check: David Fitzpatrick Approved: C O'B							
						Drawing No:	Rev:
						191-284-006	PR0