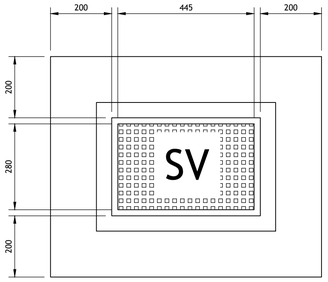
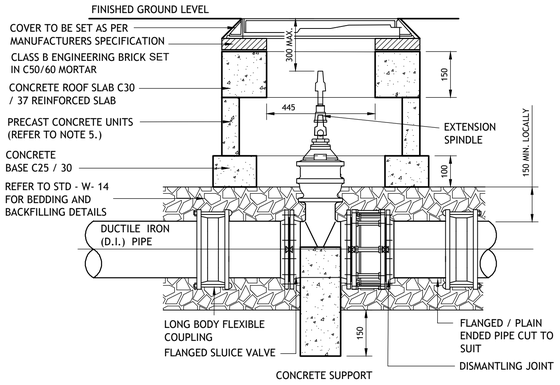


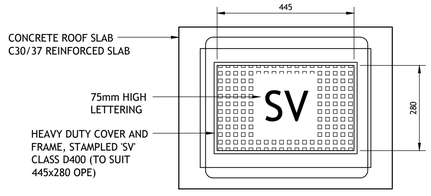
PLINTH DETAIL IN GRASS AREAS

NOTES:

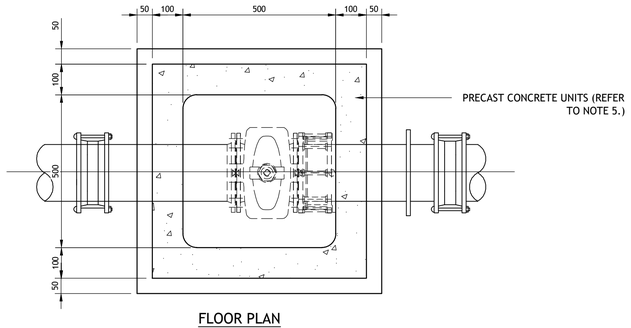
1. ALL DIMENSIONS IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. HYDRANT CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 AND BS 5834 COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO THE APPROVAL OF IRISH WATER.
3. HYDRANTS SHALL BE DOUBLE FLANGED DRILLED TO PN 16. THEY SHALL COMPLY WITH BS 750: 2012. THE HYDRANT SHALL INCORPORATE A SCREW DOWN GATE VALVE, UNDERGROUND "GUIDE TO HEAD" TYPE WITH SCREW DOWN CONNECTION OUTLET AND FALSE SPINDLE CAP AND IRON CHAIN.
4. ALL HYDRANTS SHALL BE CLOCKWISE CLOSING.
5. HYDRANT CHAMBER TO BE CONSTRUCTED OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCKWORK. ALTERNATIVELY PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO APPROVAL FROM IRISH WATER.
6. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 804 MATERIAL AS PER STD-W-14.
7. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545.
8. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STAINLESS STEEL METAL BAND AROUND COVERS IN GREEN AREAS.
9. THRUST BLOCKS (NOT SHOWN ON DRAWING), TO BE PROVIDED AS PER STANDARD DRAWING STD-W-40 AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.
10. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
11. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.



SECTION

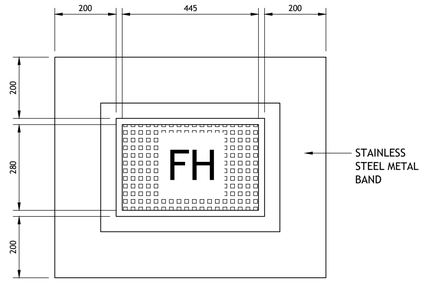


ROOF PLAN



FLOOR PLAN

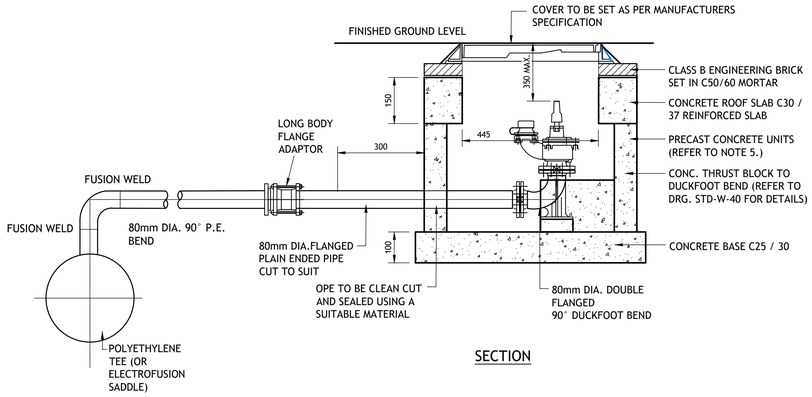
SLUICE VALVE CHAMBER (PRECAST CONCRETE CONSTRUCTION)



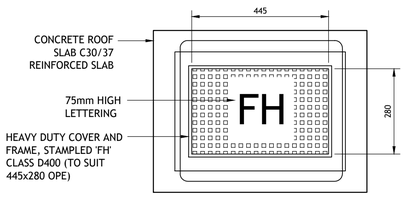
PLINTH DETAIL IN GRASS AREA

NOTES:

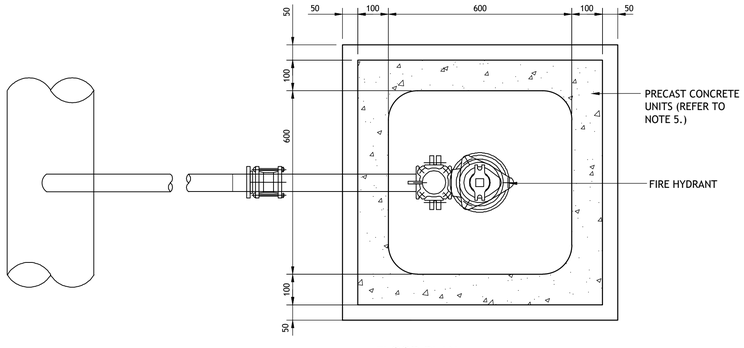
1. ALL DIMENSIONS IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. HYDRANT CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 AND BS 5834 COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO THE APPROVAL OF IRISH WATER.
3. HYDRANTS SHALL BE DOUBLE FLANGED DRILLED TO PN 16. THEY SHALL COMPLY WITH BS 750: 2012. THE HYDRANT SHALL INCORPORATE A SCREW DOWN GATE VALVE, UNDERGROUND "GUIDE TO HEAD" TYPE WITH SCREW DOWN CONNECTION OUTLET AND FALSE SPINDLE CAP AND IRON CHAIN.
4. ALL HYDRANTS SHALL BE CLOCKWISE CLOSING.
5. HYDRANT CHAMBER TO BE CONSTRUCTED OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCKWORK. ALTERNATIVELY PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO APPROVAL FROM IRISH WATER.
6. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 804 MATERIAL AS PER STD-W-14.
7. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545.
8. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STAINLESS STEEL METAL BAND AROUND COVERS IN GREEN AREAS.
9. THRUST BLOCKS (NOT SHOWN ON DRAWING), TO BE PROVIDED AS PER STANDARD DRAWING STD-W-40 AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.
10. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
11. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.
12. TEE BRANCH: DEPTH OF TAKE-OFF PIPEVORK < 900mm, TAKE-OFF TEE MAY BE ROTATED TO ENSURE MIN. DEPTH OF COVER IS MAINTAINED, OR ALTERNATIVELY, PROVIDE PROTECTION TO TAKE-OFF PIPE.



SECTION



ROOF PLAN



FLOOR PLAN

FIRE HYDRANT CHAMBER (PRECAST CONCRETE CONSTRUCTION)

Date Drawn: 2021-01-07
Drawn By: Colin O'Sullivan
Colour Drawing:

BUILDING INFORMATION MODELLING (BIM) I.S. EN ISO 19650-2:2018 NSAI Certified

Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	MOC	21/02/2022

Client: Comhairle Cathrach Chorcaí Cork City Council

Job Title: WESTSIDE SOCIAL HOUSING DEVELOPMENT
Dwg Title: PROPOSED CONSTRUCTION DETAILS SHEET 4
Job No: 194191 Model Ref: WES-PUNCH-XX-XX-M2-0525 Drawing Status: A0

PUNCH consulting engineers
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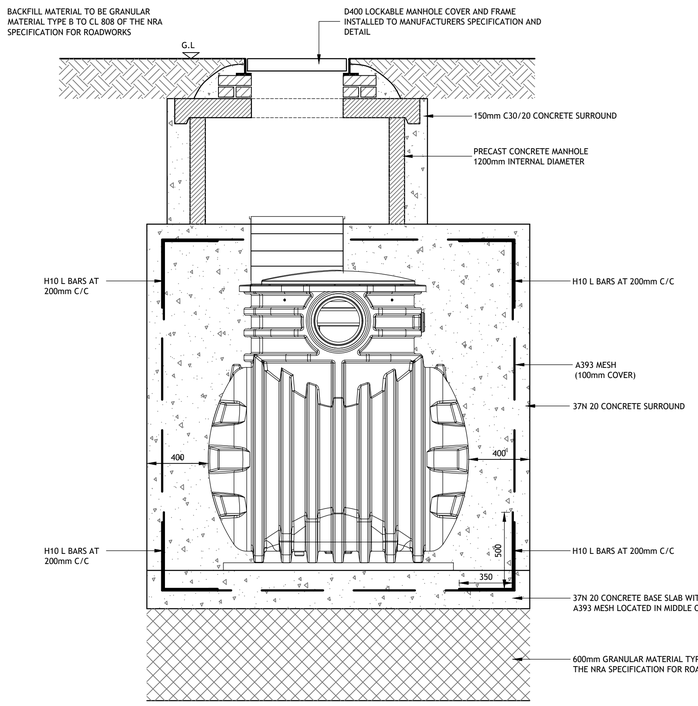
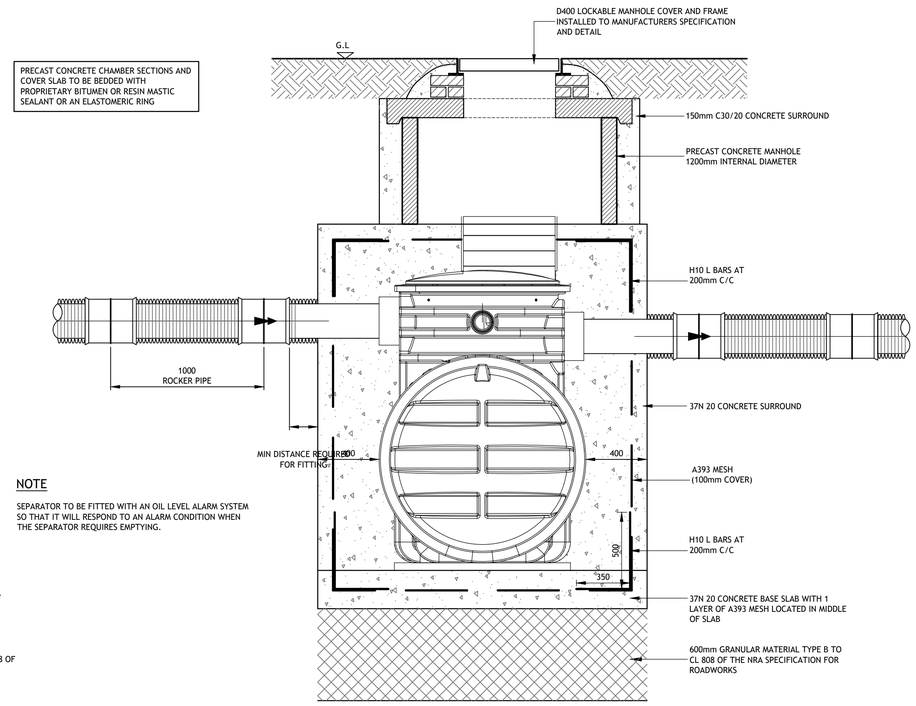
Scale @ A1: 1:10
Technician Check: Colin O'Sullivan
Engineer Check: Mike O'Connor
Approved: David O'Donovan
Document No: WES-PUNCH-XX-XX-DR-0525
Revision No: C01



PETROL INTERCEPTOR , SURROUND DETAILS

SCALE 1:20

PRECAST CONCRETE CHAMBER SECTIONS AND COVER SLAB TO BE BEDDED WITH PROPRIETARY BITUMEN OR RESIN MASTIC SEALANT OR AN ELASTOMERIC RING



NOTE

SEPARATOR TO BE FITTED WITH AN OIL LEVEL ALARM SYSTEM SO THAT IT WILL RESPOND TO AN ALARM CONDITION WHEN THE SEPARATOR REQUIRES EMPTYING.

Date Drawn: 2021-01-07

Drawn By: Colin O'Sullivan

Colour Drawing:

BUILDING INFORMATION MODELLING (BIM) I.S. EN ISO 19650-2:2018 NSAI Certified

Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	MOC	21/02/2022

Client: Comhairle Cathrach Chorcaí Cork City Council

Job Title: WESTSIDE SOCIAL HOUSING DEVELOPMENT
Dwg Title: PROPOSED CONSTRUCTION DETAILS SHEET 3
Job No: 194191 | Model Ref: WES-PUNCH-XX-XX-M2-0502 | Drawing Status: A0

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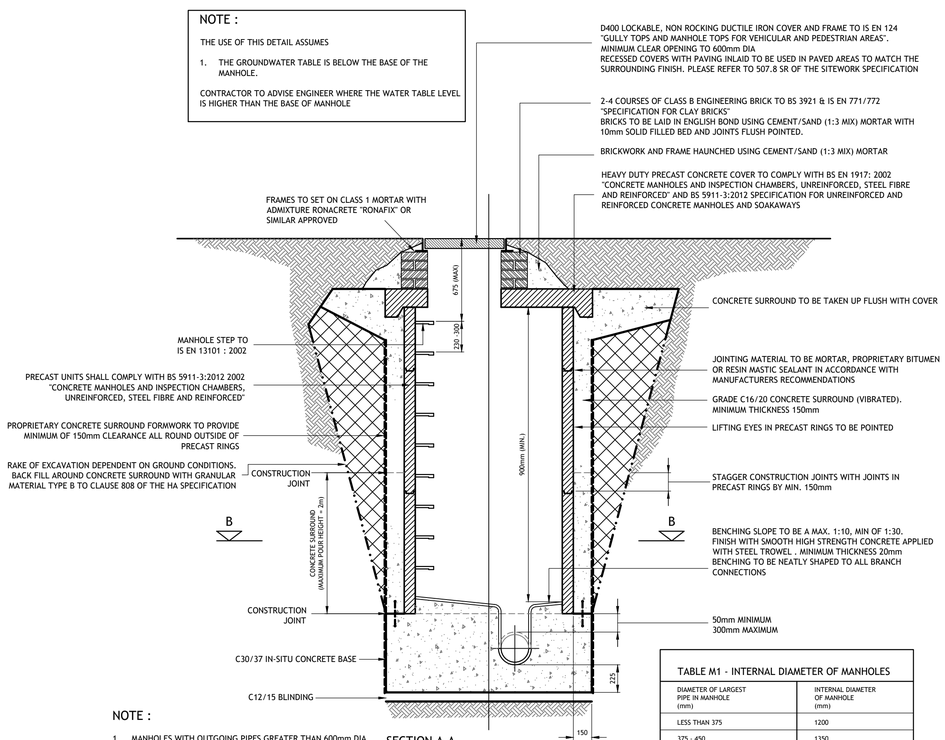
Scale @ A1: 1:20
Technician Check: Colin O'Sullivan
Engineer Check: Mike O'Connor
Approved: David O'Donovan
Document No: WES-PUNCH-XX-XX-DR-0502
Revision No: C01

NOTE :

THE USE OF THIS DETAIL ASSUMES

1. THE GROUNDWATER TABLE IS BELOW THE BASE OF THE MANHOLE.

CONTRACTOR TO ADVISE ENGINEER WHERE THE WATER TABLE LEVEL IS HIGHER THAN THE BASE OF MANHOLE



SECTION A-A
SCALE 1:25

NOTE :

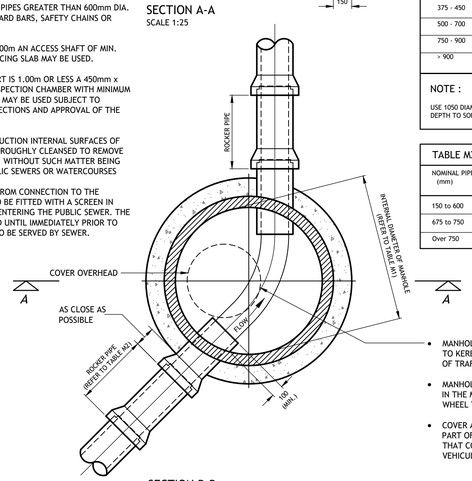
1. MANHOLES WITH OUTGOING PIPES GREATER THAN 600mm DIA. SHOULD BE FITTED WITH GUARD BARS, SAFETY CHAINS OR OTHER SAFETY DEVICES.
2. FOR DEPTHS TO INVERT >2.700m AN ACCESS SHAFT OF MIN. 900mm DIAMETER AND REDUCING SLAB MAY BE USED.
3. WHERE THE DEPTH TO INVERT IS 1.00m OR LESS A 450mm x 450mm (OR 450mm DIA.) INSPECTION CHAMBER WITH MINIMUM COVER SIZES OF 450mm DIA. MAY BE USED SUBJECT TO ACCOMMODATION OF CONNECTIONS AND APPROVAL OF THE LOCAL AUTHORITY.
4. ON COMPLETION OF CONSTRUCTION INTERNAL SURFACES OF MANHOLE & SEWERS TO THOROUGHLY CLEANSED TO REMOVE ALL DELETERIOUS MATERIAL, WITHOUT SUCH MATTER BEING PASSED FORWARD INTO PUBLIC SEWERS OR WATERCOURSES
5. FIRST MANHOLE UPSTREAM FROM CONNECTION TO THE (EXISTING) PUBLIC SEWER TO BE FITTED WITH A SCREEN IN ORDER TO PREVENT DEBRIS ENTERING THE PUBLIC SEWER. THE SCREEN NOT TO BE REMOVED UNTIL IMMEDIATELY PRIOR TO OCCUPATION OF PREMISES TO BE SERVED BY SEWER.

TABLE M1 - INTERNAL DIAMETER OF MANHOLES	
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)
LESS THAN 375	1200
375 - 450	1350
500 - 700	1500
750 - 900	1800
> 900	CONSULT LOCAL AUTHORITY

NOTE :

USE 1050 DIAMETER RINGS FOR PIPES LESS THAN 375mm DIAMETER WHERE DEPTH TO SOFFIT IS 1.35 - 1.5m

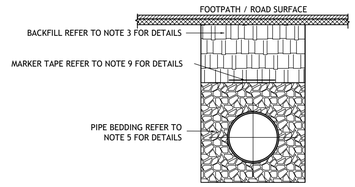
TABLE M2 - ROCKER PIPE LENGTH	
NOMINAL PIPE DIAMETER (mm)	EFFECTIVE LENGTH (M)
150 to 600	0.6
675 to 750	1.0
Over 750	1.2



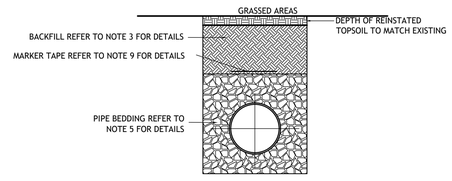
SECTION B-B
SCALE 1:25

- MANHOLE COVER TO BE HINGED AT RIGHT ANGLES TO KERBLINE SO THAT THEY CLOSE IN DIRECTION OF TRAFFIC.
- MANHOLE COVERS ON ROADS SHOULD BE LOCATED IN THE MIDDLE OF TRAFFICKED LANES INSIDE WHEEL TRACKS
- COVER AND FRAME TO BE INSTALLED SO THAT NO PART OF THE UNIT IS RAISED OR SUNKEN IN A WAY THAT COULD CAUSE A HAZARD TO PEDESTRIAN OR VEHICULAR TRAFFIC

BEDDING DETAILS WATERMAINS



CROSS SECTION IN ROADWAYS



CROSS SECTION IN ROADWAYS

TRENCH BACKFILL AND BEDDING

SCALE 1:25

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE
2. THE MINIMUM DEPTH OF COVER FROM THE FINISHED GROUND LEVEL TO THE EXTERNAL CROWN OF THE PIPE SHALL BE 750mm FOR SERVICE CONNECTIONS, 900mm FOR WATER MAINS. GREATER DEPTHS OF COVER AND/OR PIPE STRENGTH AND/OR A HIGHER CLASS OF BEDDING MATERIAL MAY BE REQUIRED WHERE HIGH TRAFFIC LOADING IS ANTICIPATED. THE MAXIMUM COVER SHOULD NOT EXCEED 1,200mm WHERE PRACTICABLE.
3. CLAUSE 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE THE WATER MAIN IS LOCATED IN ROADS, FOOTPATHS OR WHEN THE NEAREST PART OF THE TRENCH IS WITHIN 1m OF THE PAVED EDGE OF THE ROADWAY. CLAUSE 808 IS TO BE COMPACTED AS PER CLAUSE 802 OF THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS.
4. SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN-FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO THE APPROVAL OF IRISH WATER.
5. PIPE BEDDING SHALL COMPLY WITH WIS 4-08-02 AND IGN 4-08-01 GRANULAR MATERIAL SHALL BE 14mm TO 5mm GRADED AGGREGATE OR 10mm SINGLE SIZED AGGREGATE TO IS EN 13242.
6. IN SOFT GROUND CONDITIONS (CBR < 5) THE MATERIAL SHOULD BE EXCAVATED OUT AND DISPOSED OF IN ACCORDANCE WITH THE WASTE MANAGEMENT ACT AND CLAUSE 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS SHALL REPLACE THE EXCAVATED MATERIAL, WRAPPED IN GEO-TEXTILE WRAPPING. ALTERNATIVELY, SPECIAL PIPE SUPPORT ARRANGEMENTS, INCLUDING PILING ETC. MAY BE REQUIRED WHERE THE DEPTH OF SOFT MATERIAL IS EXCESSIVE. SUCH ARRANGEMENTS SHALL BE SUBJECT TO ASSESSMENT BY IRISH WATER BEFORE ADVANCING WITH THE WORK.
7. PIPES SHALL NOT BE SUPPORTED ON STONES OR ROCKS, OR ANY HARD OBJECT AT ANY POINT ALONG THE TRENCH. ROCK SHALL BE EXCAVATED TO A DEPTH OF 150mm BELOW THE ACTUAL DEPTH OF THE TRENCH WITH THE VOID FILLED WITH CLAUSE 804 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL SHALL BE LAID ABOVE THIS VOID BACKFILL MATERIAL.
8. SHOULD MINIMUM COVER NOT BE ACHIEVABLE, CONCRETE GRADE C8/10 SHALL BE USED AS BACKFILL MATERIAL.
9. MARKER TAPE TO BE 400mm WIDE BLUE POLYETHYLENE MATERIAL IN ACCORDANCE WITH EN 12163, PLASTIC PIPES SHALL HAVE WARNING TAPE INCORPORATED A REINFORCED BAND BRACING WIRE. SERVICE PIPES SHALL HAVE 200mm WIDE MESH TAPE. MARKER TAPE TO BE LAID AT TOP OF PIPE BEDDING LAYER.
10. TRENCH WIDTHS FOR PIPE SIZES TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS.

Date Drawn: 2021-01-07
Drawn By: Colin O'Sullivan
Colour Drawing:

bmtrada ISO 9001 CERTIFICATION · bmtrada ISO 14001 CERTIFICATION · bmtrada ISO 45001 CERTIFICATION
BUILDING INFORMATION MODELLING (BIM) I.S. EN ISO 19650-2:2018
NSAI Certified

Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	MOC	30/03/2022

Client: Comhairle Cathrach Chorcaí Cork City Council

Job Title: WESTSIDE SOCIAL HOUSING DEVELOPMENT
Dwg Title: PROPOSED CONSTRUCTION DETAILS SHEET 1
Job No: 194191 | Model Ref: WES-PUNCH-XX-XX-M2-0500 | Drawing Status: A0

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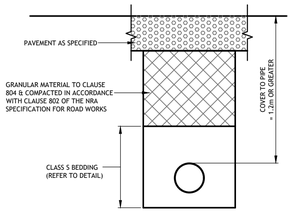
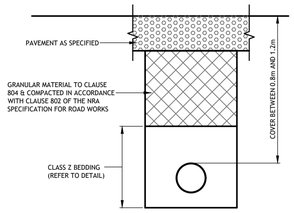
Scale @ A1: 1:25
Technician Check: Colin O'Sullivan
Engineer Check: Mike O'Connor
Approved: David O'Donovan
Document No: WES-PUNCH-XX-XX-DR-0500
Revision No: C01

DETAIL A



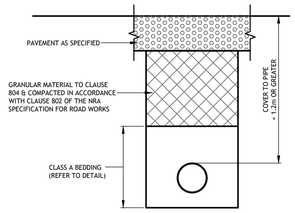
PERMANENT REINSTATEMENT OF LONGITUDINAL TRENCH IN ROADWAYS AND PATHS WITH MINIMUM 1.2m COVER

DETAIL B



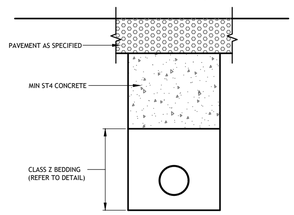
PERMANENT REINSTATEMENT OF LONGITUDINAL TRENCH IN ROADWAYS AND PATHS WITH COVER BETWEEN 0.8m and 1.2m

DETAIL C



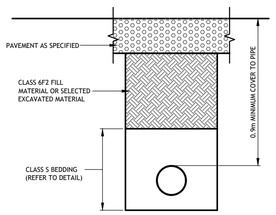
PERMANENT REINSTATEMENT OF LONGITUDINAL TRENCH IN ROADWAYS AND PATHS WITH MINIMUM 1.2m COVER

DETAIL D



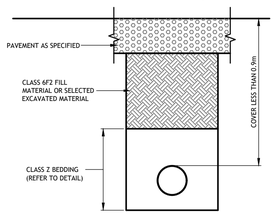
IMMEDIATE PERMANENT REINSTATEMENT OF TRENCH (INCLUDING ALL TRANSVERSE ROAD CROSSINGS)

DETAIL E



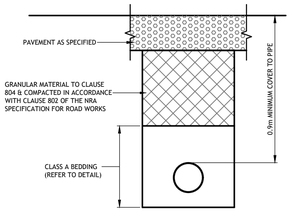
PERMANENT REINSTATEMENT OF TRENCH IN OPEN SPACES & FOOTPATHS NOT ADJACENT TO ROADS WITH MINIMUM 0.9m COVER

DETAIL F



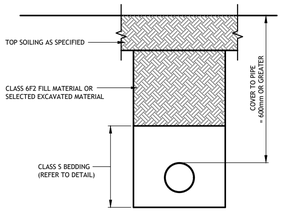
PERMANENT REINSTATEMENT OF TRENCH IN OPEN SPACES & FOOTPATHS NOT ADJACENT TO ROADS WITH LESS THAN 0.9m COVER

DETAIL G



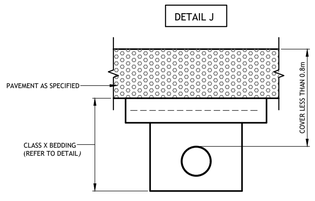
PERMANENT REINSTATEMENT OF TRENCH IN OPEN SPACES & FOOTPATHS NOT ADJACENT TO ROADS WITH MINIMUM 0.9m COVER

DETAIL H



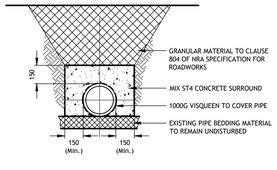
PERMANENT REINSTATEMENT OF TRENCH IN GARDENS OR LANDSCAPED AREAS WITH MINIMUM 0.6m COVER

DETAIL J

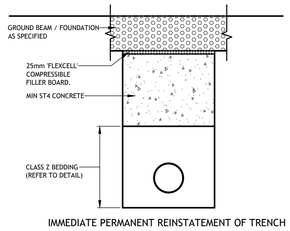


PERMANENT REINSTATEMENT OF LONGITUDINAL TRENCH IN ROADWAYS AND PATHS WITH LESS THAN 0.8m COVER

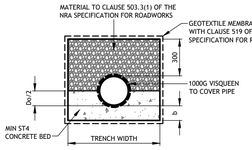
DETAIL K



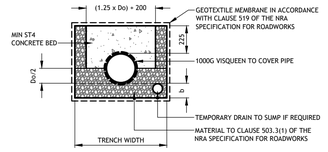
CONCRETE SURROUND PROTECTION TO EXISTING SEWER



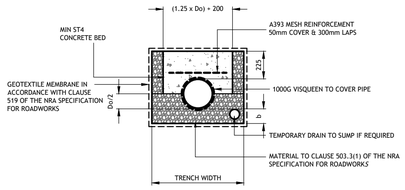
IMMEDIATE PERMANENT REINSTATEMENT OF TRENCH CROSSING UNDER BUILDING FOUNDATION



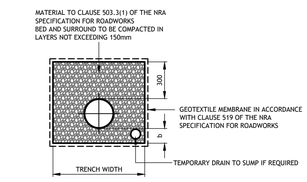
CLASS A BEDDING
(CONCRETE BED AND GRANULAR SURROUND)
SCALE 1:25



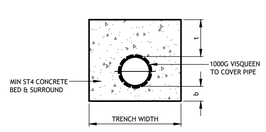
CLASS B BEDDING
(CONCRETE ARCH TO PIPELINES)
SCALE 1:25



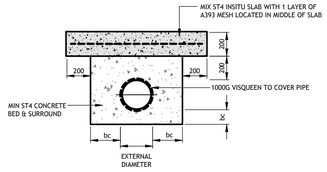
CLASS C BEDDING
(REINFORCED CONCRETE ARCH TO PIPELINES)
SCALE 1:25



CLASS S BEDDING
(GRANULAR BED AND SURROUND)
SCALE 1:25



CLASS Z BEDDING
(CONCRETE BED AND SURROUND)
SCALE 1:25



CLASS X BEDDING
(CONCRETE BED AND SURROUND)
WITH MESH REINFORCING
SCALE 1:25

TRENCH WIDTHS AND DIMENSIONS FOR FOUL AND SURFACE WATER DRAINS

PIPE DIAMETER (mm)	'Do' (mm)	'b' (mm)	'x' (mm)	TRENCH WIDTH (mm)
100	150	150	150	600
150	210	150	150	700
225	300	150	150	750
300	400	150	150	850
375	480	150	150	950
450	560	150	150	1000
525	650	150	150	1100
600	735	150	150	1200
675	850	200	200	1350
750	910	200	200	1450
900	1080	200	200	1650

TABLE 1

DIMENSION-bc

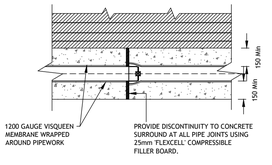
NOMINAL PIPE DIAMETER (mm)	100-450 incl.	525-600 incl.	750	900	1050	1200
bc (mm)	100	150	200	225	250	300

TABLE 2

NOTES (PIPE BEDDING)

1. CLAY PUDDLE SHALL BE INCORPORATED IN THE PIPE BED & SURROUND AND TRENCH BACKFILL MATERIAL IN ACCORDANCE WITH THE SPECIFICATION AT 50m INTERVALS
2. IN ROCK OR MIXED SOILS CONTAINING BOULDERS OR HARD SPOTS INCREASE PIPE BEDDING DEPTH BY 100mm
3. THE EMPLOYER'S REPRESENTATIVE MAY INSTRUCT THAT SPECIFIC PROVISION FOR DRAINAGE ALONG THE PIPE TRENCH BE MADE BY MEANS OF CONCRETE OR OTHER LAND DRAINAGE PIPES WHERE THE WATER TABLE LEVEL SO REQUIRES.
4. FOR DIMENSIONS 'b' , 'Do/2' AND TRENCH WIDTH REFER TO TABLE 1
5. FOR DIMENSIONS 'bc' REFER TO TABLE 2
6. Do = PIPE OUTER DIAMETER

PIPE BEDDING DETAILS



CONCRETE SURROUND TO PIPELINES DETAIL
SCALE 1:25 @ A1

Date Drawn: 2021-01-07
Drawn By: Colin O'Sullivan
Colour Drawing:

BUILDING INFORMATION MODELLING (BIM) I.S. EN ISO 19650-2:2018 NSAI Certified

Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	MOC	30/03/2022

Client: Comhairle Cathrach Chorcaí Cork City Council

Job Title: WESTSIDE SOCIAL HOUSING DEVELOPMENT
Dwg Title: PROPOSED CONSTRUCTION DETAILS SHEET 2
Job No: 194191 Model Ref: WES-PUNCH-XX-XX-M2-0501 Drawing Status: A0

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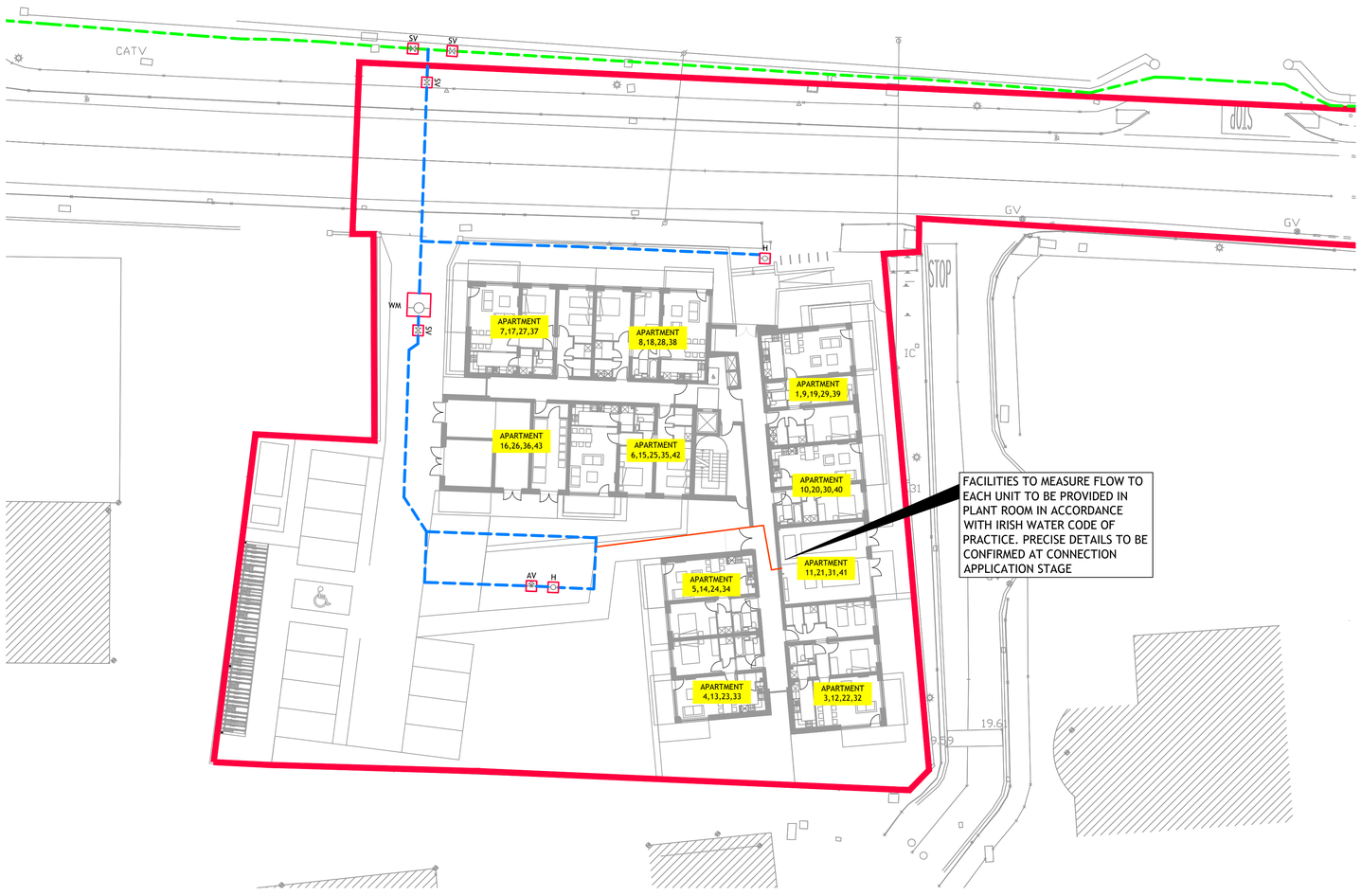
Scale @ A1: 1:25
Technician Check: Colin O'Sullivan
Engineer Check: Mike O'Connor
Approved: David O'Donovan
Document No: WES-PUNCH-XX-XX-DR-0501
Revision No: C01



WATERMAIN:

1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS & MANUFACTURERS DRAWINGS & SPECIFICATIONS.
2. ALL PIPE DIAMETERS ARE NOMINAL.
3. WHERE CONNECTION IS REQUIRED TO AN EXISTING PUBLIC WATERMAIN, THE CONTRACTOR MUST ISSUE DETAILED DOCUMENTATION FOR APPROVAL TO THE RELEVANT LOCAL AUTHORITY AND IRISH WATER. THIS DOCUMENTATION MUST BE ISSUED AT LEAST 40 WORKING DAYS IN ADVANCE OF THE PLANNED WORKS OR AS AGREED WITH THE LOCAL AUTHORITY AND IRISH WATER.
4. ALL THRUST BLOCKS MUST BE CAST AGAINST UNDISTURBED GROUND. FLEXIBLE PIPES SHOULD BE WRAPPED IN ONE LAYER OF 1000 GAUGE POLYTHENE TO AVOID DIRECT CONTACT WITH THE CONCRETE.
   MARKER POSTS AND PLATES TO BE PROVIDED FOR ALL VALVES, METERS AND HYDRANTS.
5. CHLORINATION AND BACTERIOLOGICAL TESTS TO BE UNDERTAKEN BY EXTERNAL TESTER AND TEST CERTIFICATION TO BE SUBMITTED TO ENGINEER.
6. MARKER POSTS AND PLATES TO BE PROVIDED FOR ALL VALVES.
7. IN ADVANCE OF TESTING OF THE WATERMAINS, THE CONTRACTOR MUST PRESENT TO THE ENGINEER A CALIBRATION CERTIFICATE FOR THE APPARATUS TO BE USED IN THE TEST.
8. ALL DETAILS TO BE AGREED WITH LOCAL AUTHORITY
9. ALL EXISTING WATERMAINS TO BE ADEQUATELY PROTECTED. ANY WATERMAINS DAMAGED DURING THE COURSE OF CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR AT THEIR COST.
10. COVERS OF ALL HYDRANT CHAMBERS TO BE PAINTED YELLOW
11. ALL ROCKER PIPES SHALL BE NO MORE THAN 150mm FROM THEIR ASSOCIATED CHAMBER
12. WHERE PIPE RUN IS LOCATED ADJACENT TO FOUNDATION AND IS AT A LEVEL BELOW UNDERSIDE OF THE FOUNDATION, PIPE TRENCH TO BE BACKFILLED TO FORMATION LEVEL WITH CLASS 15/20 CONCRETE.
13. PROVIDE ANCHOR/THRUST BLOCKS ON ALL BENDS EQUAL TO OR IN EXCESS OF 22.5˚, DEAD ENDS AND TEES ON ALL PIPES
14. TRENCHES IN EXISTING SURFACES TO BE SAW CUT.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING OUT WATERMAINS & SLUICE VALVES TO ENSURE NO CLASHES WITH SERVICE DUCTS OR PIPES.

WATERMAIN LEGEND

EXISTING WATERMAIN (DN100 CAST IRON)	
PROPOSED WATERMAIN (110mm OD PE100 SDR11 PIPE)	
PROPOSED WATERMAIN (63mm OD PE100 SDR11 PIPE)	
PROPERTY BOUNDARY BOX	BB
FIRE HYDRANT	H
SLUICE VALVE	SV
AIR VALVE	AV
WATERMETER	WM
EXISTING FIRE HYDRANT	FH
EXISTING SLUICE VALVE	SV
EXISTING WATER METER	WM
SITE BOUNDARY	

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Date Drawn: 2021-01-07
Drawn By: Colin O'Sullivan
Colour Drawing:

BUILDING INFORMATION MODELLING (BIM) I.S. EN ISO 19650-2:2018
NSAI Certified

Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	MOC	30/03/2022
C02	RED LINE BOUNDARY UPDATED	MOC	11/04/2022

Client: Comhairle Cathrach Chorcaí / Cork City Council

Job Title: WESTSIDE SOCIAL HOUSING DEVELOPMENT
Dwg Title: PROPOSED WATERMAIN LAYOUT
Job No: 194191 | Model Ref: WES-PUNCH-XX-XX-M2-0300 | Drawing Status: A0

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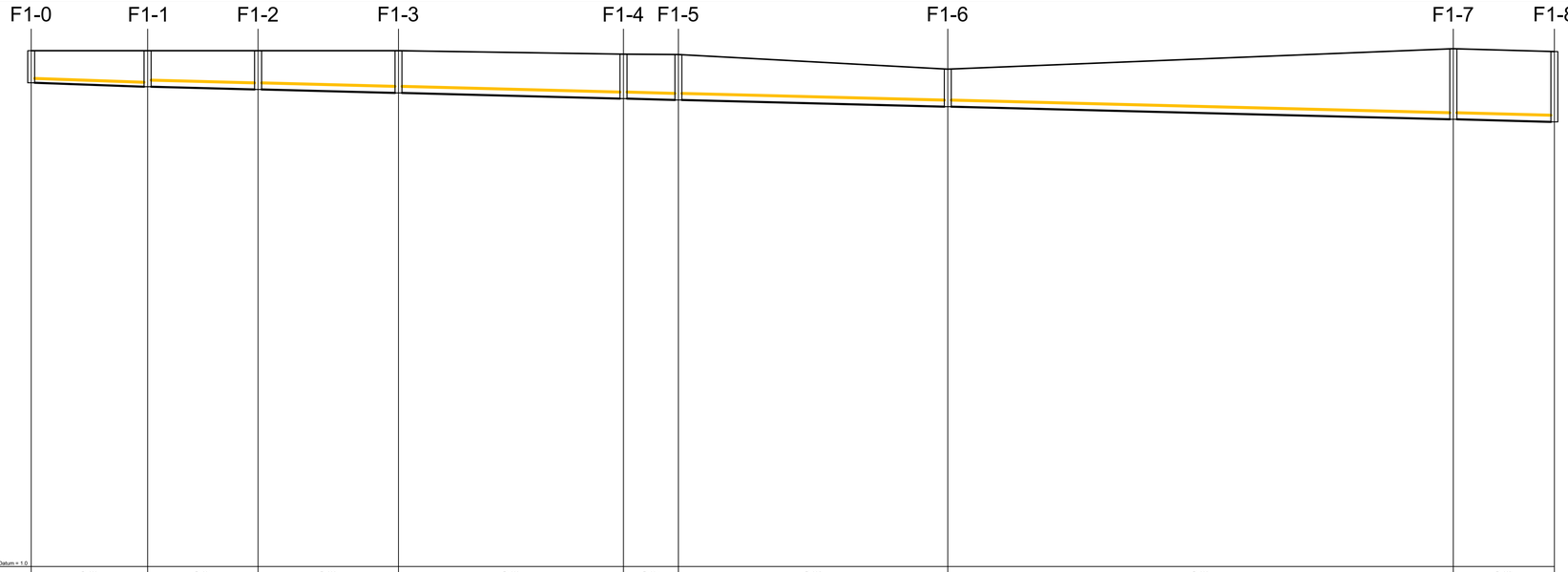
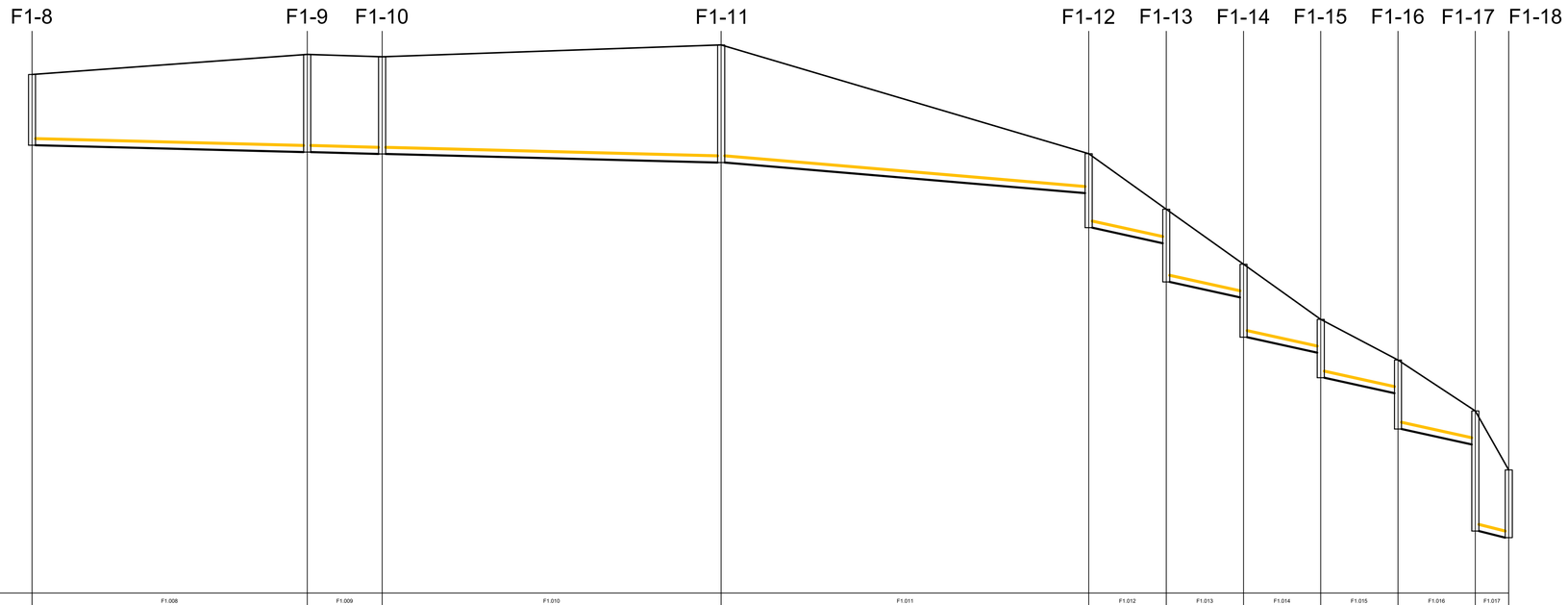


Vert exaggeration = 5.0 Datum = 1.0

Link Name	F1.000	F1.001	F1.002	F1.003	F1.004	F1.005	F1.006	F1.007
Section Type	150mm	225mm	225mm	225mm	225mm	225mm	225mm	225mm
Slope	1:150.0	1:200.0	1:200.0	1:200.0	1:200.0	1:200.0	1:200.0	1:200.0
Cover Level	18.630	18.630	18.630	18.630	18.510	18.500	18.000	18.700 / 18.000
Invert Level	17.532	17.399 / 17.399	17.205 / 17.205	17.185 / 17.185	16.993 / 16.993	16.946 / 16.946	16.716 / 16.716	16.284 / 16.284 / 16.108 / 16.108
Length	19.906	18.896	24.018	38.483	9.396	46.073	86.475	17.284

PIPERUN 1 - LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500 VERTICAL 1:100

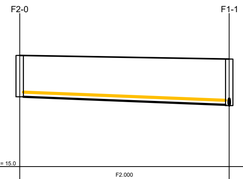


Vert exaggeration = 5.0

Link Name	F1.008	F1.009	F1.010	F1.011	F1.012	F1.013	F1.014	F1.015	F1.016	F1.017
Section Type	225mm	225mm	225mm	225mm	225mm	225mm	225mm	225mm	225mm	225mm
Slope	1:200.0	1:200.0	1:200.0	1:60.0	1:25.0	1:25.0	1:25.0	1:25.0	1:25.0	1:25.0
Cover Level	18.600	19.260	19.200	19.600	15.810	14.624	12.162	10.308	8.970	7.180 / 5.106
Invert Level	16.198 / 16.198	15.960 / 15.960	15.000 / 15.000	15.612 / 15.612	13.270 / 13.270	12.873 / 11.558	11.033 / 9.883	8.169 / 6.809	7.784 / 6.424	6.065 / 3.107 / 2.880
Length	46.729	12.719	57.567	62.404	13.173	13.118	13.109	13.118	13.126	5.675

PIPERUN 1 CONTD. - LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500 VERTICAL 1:100



Vert exaggeration = 5.0 Datum = 15.0

Link Name		F2.000	
Section Type		150mm	
Slope		1:130.0	
Cover Level	18.650		18.510
Invert Level	17.250		17.017
Length		34.201	

PIPERUN 2 - LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500 VERTICAL 1:100

Date Drawn: 2021-01-07

Drawn By: Colin O'Sullivan

Colour Drawing: ☒

BUILDING INFORMATION MODELLING (BIM) I.S. EN ISO 19650-2:2018 NSAI Certified

Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	MOC	30/03/2022

Client: Comhairle Cathrach Chorcaí / Cork City Council

Job Title: WESTSIDE SOCIAL HOUSING DEVELOPMENT
Dwg Title: FOUL LONGSECTIONS
Job No: 194191 | Model Ref: WES-PUNCH-XX-XX-M2-0175 | Drawing Status: A0

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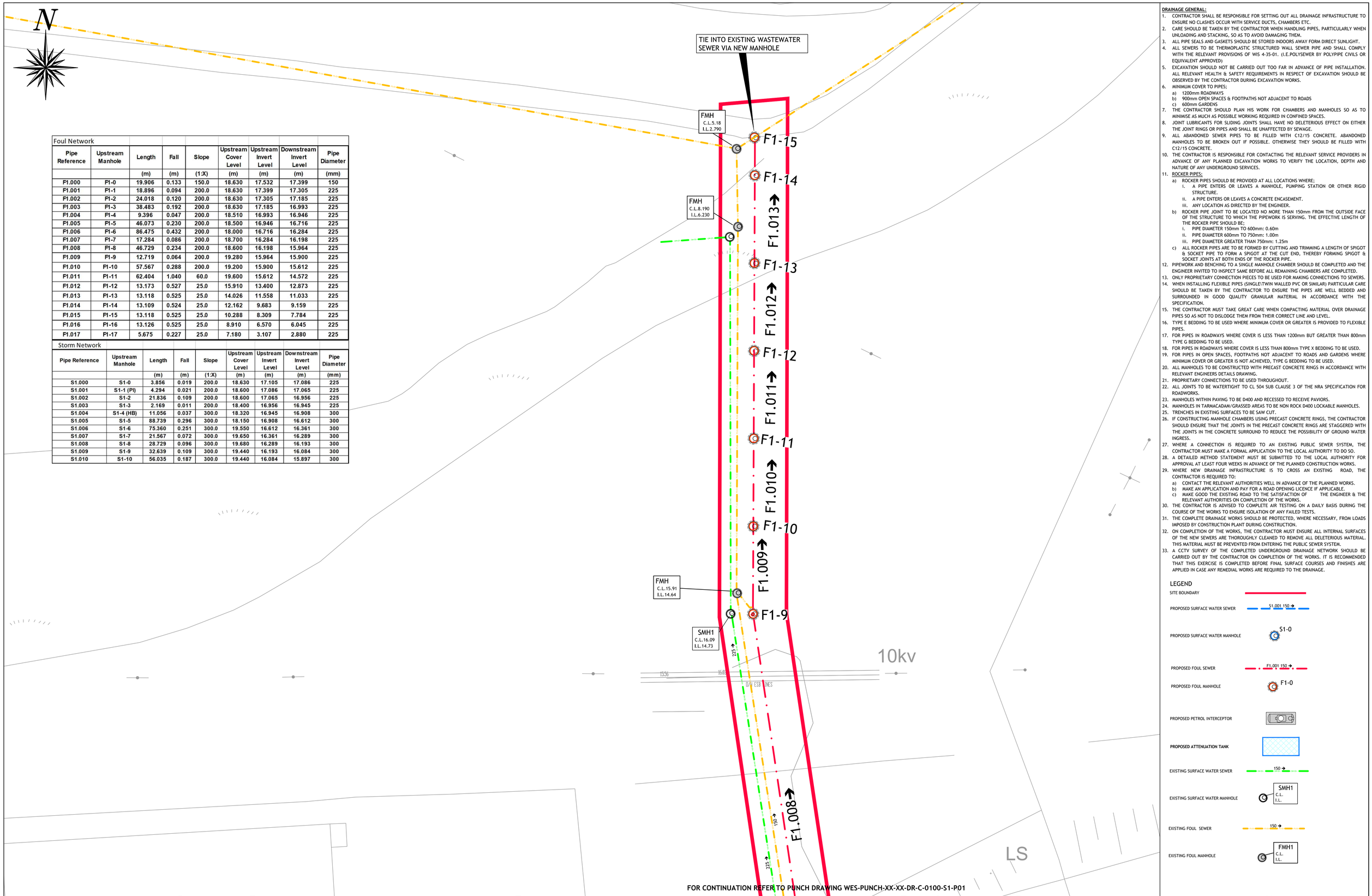

Foul Network

Pipe Reference	Upstream Manhole	Length	Fall	Slope	Upstream Cover Level	Upstream Invert Level	Downstream Invert Level	Pipe Diameter
		(m)	(m)	(1:X)	(m)	(m)	(m)	(mm)
F1.000	F1-0	19.906	0.133	150.0	18.630	17.532	17.399	150
F1.001	F1-1	18.896	0.094	200.0	18.630	17.399	17.305	225
F1.002	F1-2	24.018	0.120	200.0	18.630	17.305	17.185	225
F1.003	F1-3	38.483	0.192	200.0	18.630	17.185	16.993	225
F1.004	F1-4	9.396	0.047	200.0	18.510	16.993	16.946	225
F1.005	F1-5	46.073	0.230	200.0	18.500	16.946	16.716	225
F1.006	F1-6	86.475	0.432	200.0	18.000	16.716	16.284	225
F1.007	F1-7	17.284	0.086	200.0	18.700	16.284	16.198	225
F1.008	F1-8	46.729	0.234	200.0	18.600	16.198	15.964	225
F1.009	F1-9	12.719	0.064	200.0	19.280	15.964	15.900	225
F1.010	F1-10	57.567	0.288	200.0	19.200	15.900	15.612	225
F1.011	F1-11	62.404	1.040	60.0	19.600	15.612	14.572	225
F1.012	F1-12	13.173	0.527	25.0	15.910	13.400	12.873	225
F1.013	F1-13	13.118	0.525	25.0	14.026	11.558	11.033	225
F1.014	F1-14	13.109	0.524	25.0	12.162	9.683	9.159	225
F1.015	F1-15	13.118	0.525	25.0	10.288	8.309	7.784	225
F1.016	F1-16	13.126	0.525	25.0	8.910	6.570	6.045	225
F1.017	F1-17	5.675	0.227	25.0	7.180	3.107	2.880	225

Storm Network

Pipe Reference	Upstream Manhole	Length	Fall	Slope	Upstream Cover Level	Upstream Invert Level	Downstream Invert Level	Pipe Diameter
		(m)	(m)	(1:X)	(m)	(m)	(m)	(mm)
S1.000	S1-0	3.856	0.019	200.0	18.630	17.105	17.086	225
S1.001	S1-1 (PI)	4.294	0.021	200.0	18.600	17.086	17.065	225
S1.002	S1-2	21.836	0.109	200.0	18.600	17.065	16.956	225
S1.003	S1-3	2.169	0.011	200.0	18.400	16.956	16.945	225
S1.004	S1-4 (HB)	11.056	0.037	300.0	18.320	16.945	16.908	300
S1.005	S1-5	88.739	0.296	300.0	18.150	16.908	16.612	300
S1.006	S1-6	75.360	0.251	300.0	19.550	16.612	16.361	300
S1.007	S1-7	21.567	0.072	300.0	19.650	16.361	16.289	300
S1.008	S1-8	28.729	0.096	300.0	19.680	16.289	16.193	300
S1.009	S1-9	32.639	0.109	300.0	19.440	16.193	16.084	300
S1.010	S1-10	56.035	0.187	300.0	19.440	16.084	15.897	300

DRAINAGE GENERAL:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING OUT ALL DRAINAGE INFRASTRUCTURE TO ENSURE NO CLASHES OCCUR WITH SERVICE DUCTS, CHAMBERS ETC.
2. CARE SHOULD BE TAKEN BY THE CONTRACTOR WHEN HANDLING PIPES, PARTICULARLY WHEN UNLOADING AND STACKING, SO AS TO AVOID DAMAGING THEM.
3. ALL PIPE SEALS AND GASKETS SHOULD BE STORED INDOORS AWAY FORM DIRECT SUNLIGHT.
4. ALL SEWERS TO BE THERMOPLASTIC STRUCTURED WALL SEWER PIPE AND SHALL COMPLY WITH THE RELEVANT PROVISIONS OF WIS 4-35-01. (I.E.POLYSEWER BY POLYPIPE CIVILS OR EQUIVALENT APPROVED)
5. EXCAVATION SHOULD NOT BE CARRIED OUT TOO FAR IN ADVANCE OF PIPE INSTALLATION. ALL RELEVANT HEALTH & SAFETY REQUIREMENTS IN RESPECT OF EXCAVATION SHOULD BE OBSERVED BY THE CONTRACTOR DURING EXCAVATION WORKS.
6. MINIMUM COVER TO PIPES;
   a) 1200mm ROADWAYS
   b) 900mm OPEN SPACES & FOOTPATHS NOT ADJACENT TO ROADS
   c) 600mm GARDENS
7. THE CONTRACTOR SHOULD PLAN HIS WORK FOR CHAMBERS AND MANHOLES SO AS TO MINIMISE AS MUCH AS POSSIBLE WORKING REQUIRED IN CONFINED SPACES.
8. JOINT LUBRICANTS FOR SLIDING JOINTS SHALL HAVE NO DELETERIOUS EFFECT ON EITHER THE JOINT RINGS OR PIPES AND SHALL BE UNAFFECTED BY SEWAGE.
9. ALL ABANDONED SEWER PIPES TO BE FILLED WITH C12/15 CONCRETE. ABANDONED MANHOLES TO BE BROKEN OUT IF POSSIBLE. OTHERWISE THEY SHOULD BE FILLED WITH C12/15 CONCRETE.
10. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE RELEVANT SERVICE PROVIDERS IN ADVANCE OF ANY PLANNED EXCAVATION WORKS TO VERIFY THE LOCATION, DEPTH AND NATURE OF ANY UNDERGROUND SERVICES.
11. ROCKER PIPES;
    a) ROCKER PIPES SHOULD BE PROVIDED AT ALL LOCATIONS WHERE;
       i. A PIPE ENTERS OR LEAVES A MANHOLE, PUMPING STATION OR OTHER RIGID STRUCTURE.
       ii. A PIPE ENTERS OR LEAVES A CONCRETE ENCASEMENT.
       iii. ANY LOCATION AS DIRECTED BY THE ENGINEER.
    b) ROCKER PIPE JOINT TO BE LOCATED NO MORE THAN 150mm FROM THE OUTSIDE FACE OF THE STRUCTURE TO WHICH THE PIPEWORK IS SERVING. THE EFFECTIVE LENGTH OF THE ROCKER PIPE SHOULD BE;
       i. PIPE DIAMETER 150mm TO 600mm: 0.60m
       ii. PIPE DIAMETER 600mm TO 750mm: 1.00m
       iii. PIPE DIAMETER GREATER THAN 750mm: 1.25m
    c) ALL ROCKER PIPES ARE TO BE FORMED BY CUTTING AND TRIMMING A LENGTH OF SPIGOT & SOCKET PIPE TO FORM A SPIGOT AT THE CUT END, THEREBY FORMING SPIGOT & SOCKET JOINTS AT BOTH ENDS OF THE ROCKER PIPE.
12. PIPEWORK AND BENCHING TO A SINGLE MANHOLE CHAMBER SHOULD BE COMPLETED AND THE ENGINEER INVITED TO INSPECT SAME BEFORE ALL REMAINING CHAMBERS ARE COMPLETED.
13. ONLY PROPRIETARY CONNECTION PIECES TO BE USED FOR MAKING CONNECTIONS TO SEWERS.
14. WHEN INSTALLING FLEXIBLE PIPES (SINGLE\TWIN WALLED PVC OR SIMILAR) PARTICULAR CARE SHOULD BE TAKEN BY THE CONTRACTOR TO ENSURE THE PIPES ARE WELL BEDDED AND SURROUNDED IN GOOD QUALITY GRANULAR MATERIAL IN ACCORDANCE WITH THE SPECIFICATION.
15. THE CONTRACTOR MUST TAKE GREAT CARE WHEN COMPACTING MATERIAL OVER DRAINAGE PIPES SO AS NOT TO DISLODGE THEM FROM THEIR CORRECT LINE AND LEVEL.
16. TYPE E BEDDING TO BE USED WHERE MINIMUM COVER OR GREATER IS PROVIDED TO FLEXIBLE PIPES.
17. FOR PIPES IN ROADWAYS WHERE COVER IS LESS THAN 1200mm BUT GREATER THAN 800mm TYPE G BEDDING TO BE USED.
18. FOR PIPES IN ROADWAYS WHERE COVER IS LESS THAN 800mm TYPE X BEDDING TO BE USED.
19. FOR PIPES IN OPEN SPACES, FOOTPATHS NOT ADJACENT TO ROADS AND GARDENS WHERE MINIMUM COVER OR GREATER IS NOT ACHIEVED, TYPE G BEDDING TO BE USED.
20. ALL MANHOLES TO BE CONSTRUCTED WITH PRECAST CONCRETE RINGS IN ACCORDANCE WITH RELEVANT ENGINEERS DETAILS DRAWING.
21. PROPRIETARY CONNECTIONS TO BE USED THROUGHOUT.
22. ALL JOINTS TO BE WATERTIGHT TO CL 504 SUB CLAUSE 3 OF THE NRA SPECIFICATION FOR ROADWORKS.
23. MANHOLES WITHIN PAVING TO BE D400 AND RECESSED TO RECEIVE PAVIORS.
24. MANHOLES IN TARMACADAM/GRASSED AREAS TO BE NON ROCK D400 LOCKABLE MANHOLES.
25. TRENCHES IN EXISTING SURFACES TO BE SAW CUT.
26. IF CONSTRUCTING MANHOLE CHAMBERS USING PRECAST CONCRETE RINGS, THE CONTRACTOR SHOULD ENSURE THAT THE JOINTS IN THE PRECAST CONCRETE RINGS ARE STAGGERED WITH THE JOINTS IN THE CONCRETE SURROUND TO REDUCE THE POSSIBILITY OF GROUND WATER INGRESS.
27. WHERE A CONNECTION IS REQUIRED TO AN EXISTING PUBLIC SEWER SYSTEM, THE CONTRACTOR MUST MAKE A FORMAL APPLICATION TO THE LOCAL AUTHORITY TO DO SO.
28. A DETAILED METHOD STATEMENT MUST BE SUBMITTED TO THE LOCAL AUTHORITY FOR APPROVAL AT LEAST FOUR WEEKS IN ADVANCE OF THE PLANNED CONSTRUCTION WORKS.
29. WHERE NEW DRAINAGE INFRASTRUCTURE IS TO CROSS AN EXISTING ROAD, THE CONTRACTOR IS REQUIRED TO:
    a) CONTACT THE RELEVANT AUTHORITIES WELL IN ADVANCE OF THE PLANNED WORKS.
    b) MAKE AN APPLICATION AND PAY FOR A ROAD OPENING LICENCE IF APPLICABLE.
    c) MAKE GOOD THE EXISTING ROAD TO THE SATISFACTION OF THE ENGINEER & THE RELEVANT AUTHORITIES ON COMPLETION OF THE WORKS.
30. THE CONTRACTOR IS ADVISED TO COMPLETE AIR TESTING ON A DAILY BASIS DURING THE COURSE OF THE WORKS TO ENSURE ISOLATION OF ANY FAILED TESTS.
31. THE COMPLETE DRAINAGE WORKS SHOULD BE PROTECTED, WHERE NECESSARY, FROM LOADS IMPOSED BY CONSTRUCTION PLANT DURING CONSTRUCTION.
32. ON COMPLETION OF THE WORKS, THE CONTRACTOR MUST ENSURE ALL INTERNAL SURFACES OF THE NEW SEWERS ARE THOROUGHLY CLEANED TO REMOVE ALL DELETERIOUS MATERIAL. THIS MATERIAL MUST BE PREVENTED FROM ENTERING THE PUBLIC SEWER SYSTEM.
33. A CCTV SURVEY OF THE COMPLETED UNDERGROUND DRAINAGE NETWORK SHOULD BE CARRIED OUT BY THE CONTRACTOR ON COMPLETION OF THE WORKS. IT IS RECOMMENDED THAT THIS EXERCISE IS COMPLETED BEFORE FINAL SURFACE COURSES AND FINISHES ARE APPLIED IN CASE ANY REMEDIAL WORKS ARE REQUIRED TO THE DRAINAGE.

LEGEND

SITE BOUNDARY

PROPOSED SURFACE WATER SEWER — S1.001 150

PROPOSED SURFACE WATER MANHOLE — S1-0

PROPOSED FOUL SEWER — F1.001 150

PROPOSED FOUL MANHOLE — F1-0

PROPOSED PETROL INTERCEPTOR

PROPOSED ATTENUATION TANK

EXISTING SURFACE WATER SEWER — 150

EXISTING SURFACE WATER MANHOLE — SMH1 C.L. I.L.

EXISTING FOUL SEWER — 150

EXISTING FOUL MANHOLE — FMH1 C.L. I.L.

FOR CONTINUATION REFER TO PUNCH DRAWING WES-PUNCH-XX-XX-DR-C-0100-S1-P01

Date Drawn: 2021-01-07

Drawn By: Colin O'Sullivan

Colour Drawing:

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Rev	Amendment	By	Date
P02	INITIAL IRISH WATER COMMENTS INCORPORATED INTO DRAWING	MOC	29/03/2021
C01	ISSUED FOR PLANNING	MOC	30/03/2022
C02	RED LINE BOUNDARY UPDATED	MOC	11/04/2022

Client:

Job Title: WESTSIDE SOCIAL HOUSING DEVELOPMENT
Dwg Title: PROPOSED DRAINAGE LAYOUT SHEET 2
Job No: 194191 | Model Ref: WES-PUNCH-XX-XX-M2-0100 | Drawing Status: A0

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Scale @ A1: 1:500
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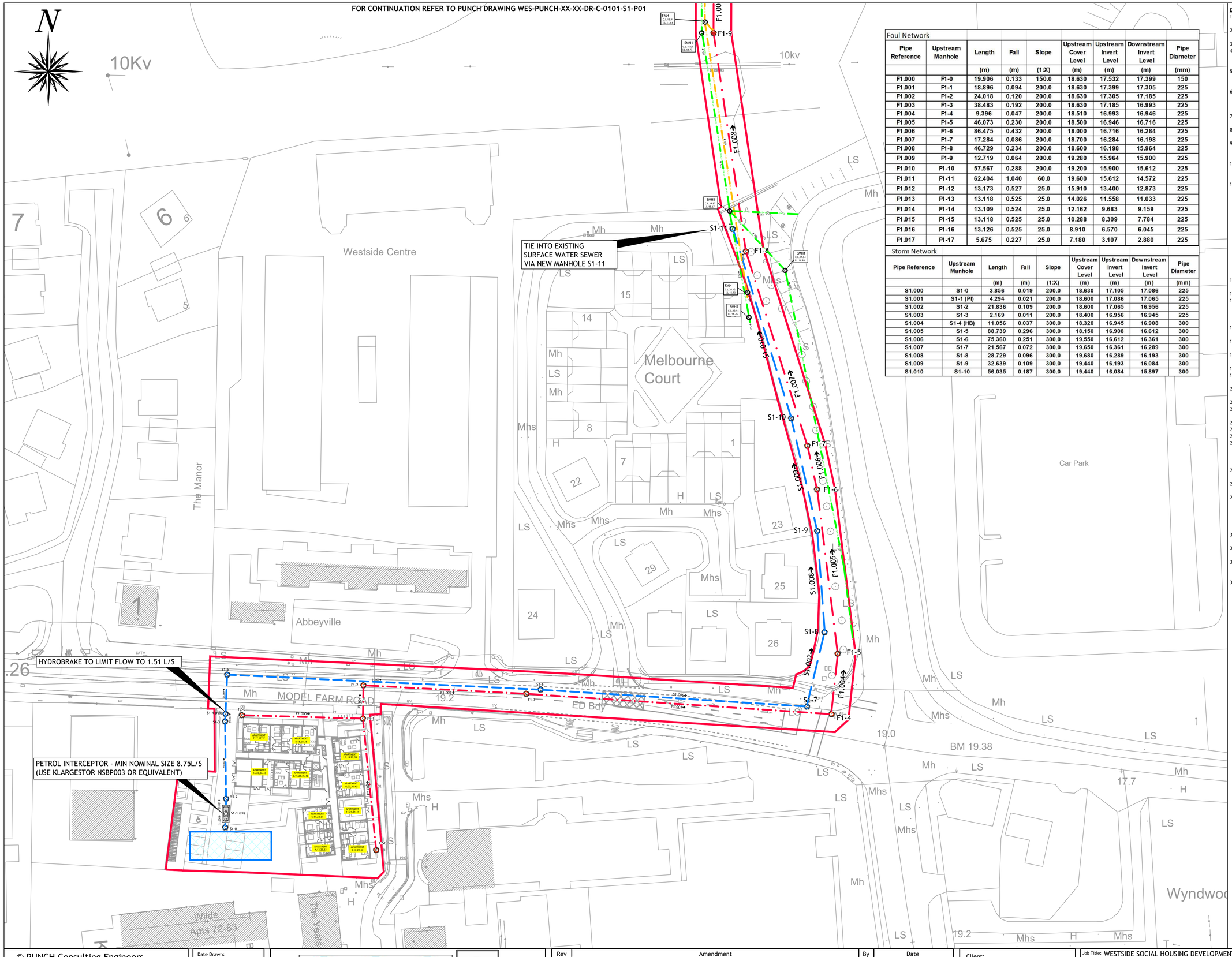
FOR CONTINUATION REFER TO PUNCH DRAWING WES-PUNCH-XX-XX-DR-C-0101-S1-P01



Foul Network

Pipe Reference	Upstream Manhole	Length	Fall	Slope	Upstream Cover Level	Upstream Invert Level	Downstream Invert Level	Pipe Diameter
		(m)	(m)	(1:X)	(m)	(m)	(m)	(mm)
F1.000	F1-0	19.906	0.133	150.0	18.630	17.532	17.399	150
F1.001	F1-1	18.896	0.094	200.0	18.630	17.399	17.305	225
F1.002	F1-2	24.018	0.120	200.0	18.630	17.305	17.185	225
F1.003	F1-3	38.483	0.192	200.0	18.630	17.185	16.993	225
F1.004	F1-4	9.396	0.047	200.0	18.510	16.993	16.946	225
F1.005	F1-5	46.073	0.230	200.0	18.500	16.946	16.716	225
F1.006	F1-6	86.475	0.432	200.0	18.000	16.716	16.284	225
F1.007	F1-7	17.284	0.086	200.0	18.700	16.284	16.198	225
F1.008	F1-8	46.729	0.234	200.0	18.600	16.198	15.964	225
F1.009	F1-9	12.719	0.064	200.0	19.280	15.964	15.900	225
F1.010	F1-10	57.567	0.288	200.0	19.200	15.900	15.612	225
F1.011	F1-11	62.404	1.040	60.0	19.600	15.612	14.572	225
F1.012	F1-12	13.173	0.527	25.0	15.910	13.400	12.873	225
F1.013	F1-13	13.118	0.525	25.0	14.026	11.558	11.033	225
F1.014	F1-14	13.109	0.524	25.0	12.162	9.683	9.159	225
F1.015	F1-15	13.118	0.525	25.0	10.288	8.309	7.784	225
F1.016	F1-16	13.126	0.525	25.0	8.910	6.570	6.045	225
F1.017	F1-17	5.675	0.227	25.0	7.180	3.107	2.880	225

Storm Network

Pipe Reference	Upstream Manhole	Length	Fall	Slope	Upstream Cover Level	Upstream Invert Level	Downstream Invert Level	Pipe Diameter
		(m)	(m)	(1:X)	(m)	(m)	(m)	(mm)
S1.000	S1-0	3.856	0.019	200.0	18.630	17.105	17.086	225
S1.001	S1-1 (PI)	4.294	0.021	200.0	18.600	17.086	17.065	225
S1.002	S1-2	21.836	0.109	200.0	18.600	17.065	16.956	225
S1.003	S1-3	2.169	0.011	200.0	18.400	16.956	16.945	225
S1.004	S1-4 (HB)	11.056	0.037	300.0	18.320	16.945	16.908	300
S1.005	S1-5	88.739	0.296	300.0	18.150	16.908	16.612	300
S1.006	S1-6	75.360	0.251	300.0	19.550	16.612	16.361	300
S1.007	S1-7	21.567	0.072	300.0	19.650	16.361	16.289	300
S1.008	S1-8	28.729	0.096	300.0	19.680	16.289	16.193	300
S1.009	S1-9	32.639	0.109	300.0	19.440	16.193	16.084	300
S1.010	S1-10	56.035	0.187	300.0	19.440	16.084	15.897	300

DRAINAGE GENERAL:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING OUT ALL DRAINAGE INFRASTRUCTURE TO ENSURE NO CLASHES OCCUR WITH SERVICE DUCTS, CHAMBERS ETC.
2. CARE SHOULD BE TAKEN BY THE CONTRACTOR WHEN HANDLING PIPES, PARTICULARLY WHEN UNLOADING AND STACKING, SO AS TO AVOID DAMAGING THEM.
3. ALL PIPE SEALS AND GASKETS SHOULD BE STORED INDOORS AWAY FORM DIRECT SUNLIGHT.
4. ALL SEWERS TO BE THERMOPLASTIC STRUCTURED WALL SEWER PIPE AND SHALL COMPLY WITH THE RELEVANT PROVISIONS OF WIS 4-35-01. (I.E.POLYSEWER BY POLYPIPE CIVILS OR EQUIVALENT APPROVED)
5. EXCAVATION SHOULD NOT BE CARRIED OUT TOO FAR IN ADVANCE OF PIPE INSTALLATION. ALL RELEVANT HEALTH & SAFETY REQUIREMENTS IN RESPECT OF EXCAVATION SHOULD BE OBSERVED BY THE CONTRACTOR DURING EXCAVATION WORKS.
6. MINIMUM COVER TO PIPES;
   a) 1200mm ROADWAYS
   b) 900mm OPEN SPACES & FOOTPATHS NOT ADJACENT TO ROADS
   c) 600mm GARDENS
7. THE CONTRACTOR SHOULD PLAN HIS WORK FOR CHAMBERS AND MANHOLES SO AS TO MINIMISE AS MUCH AS POSSIBLE WORKING REQUIRED IN CONFINED SPACES.
8. JOINT LUBRICANTS FOR SLIDING JOINTS SHALL HAVE NO DELETERIOUS EFFECT ON EITHER THE JOINT RINGS OR PIPES AND SHALL BE UNAFFECTED BY SEWAGE.
9. ALL ABANDONED SEWER PIPES TO BE FILLED WITH C12/15 CONCRETE. ABANDONED MANHOLES TO BE BROKEN OUT IF POSSIBLE. OTHERWISE THEY SHOULD BE FILLED WITH C12/15 CONCRETE.
10. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE RELEVANT SERVICE PROVIDERS IN ADVANCE OF ANY PLANNED EXCAVATION WORKS TO VERIFY THE LOCATION, DEPTH AND NATURE OF ANY UNDERGROUND SERVICES.
11. ROCKER PIPES;
    a) ROCKER PIPES SHOULD BE PROVIDED AT ALL LOCATIONS WHERE;
       i. A PIPE ENTERS OR LEAVES A MANHOLE, PUMPING STATION OR OTHER RIGID STRUCTURE.
       ii. A PIPE ENTERS OR LEAVES A CONCRETE ENCASEMENT.
       iii. ANY LOCATION AS DIRECTED BY THE ENGINEER.
    b) ROCKER PIPE JOINT TO BE LOCATED NO MORE THAN 150mm FROM THE OUTSIDE FACE OF THE STRUCTURE TO WHICH THE PIPEWORK IS SERVING. THE EFFECTIVE LENGTH OF THE ROCKER PIPE SHOULD BE;
       i. PIPE DIAMETER 150mm TO 600mm: 0.60m
       ii. PIPE DIAMETER 600mm TO 750mm: 1.00m
       iii. PIPE DIAMETER GREATER THAN 750mm: 1.25m
    c) ALL ROCKER PIPES ARE TO BE FORMED BY CUTTING AND TRIMMING A LENGTH OF SPIGOT & SOCKET PIPE TO FORM A SPIGOT AT THE CUT END, THEREBY FORMING SPIGOT & SOCKET JOINTS AT BOTH ENDS OF THE ROCKER PIPE.
12. PIPEWORK AND BENCHING TO A SINGLE MANHOLE CHAMBER SHOULD BE COMPLETED AND THE ENGINEER INVITED TO INSPECT SAME BEFORE ALL REMAINING CHAMBERS ARE COMPLETED.
13. ONLY PROPRIETARY CONNECTION PIECES TO BE USED FOR MAKING CONNECTIONS TO SEWERS.
14. WHEN INSTALLING FLEXIBLE PIPES (SINGLE\TWIN WALLED PVC OR SIMILAR) PARTICULAR CARE SHOULD BE TAKEN BY THE CONTRACTOR TO ENSURE THE PIPES ARE WELL BEDDED AND SURROUNDED IN GOOD QUALITY GRANULAR MATERIAL IN ACCORDANCE WITH THE SPECIFICATION.
15. THE CONTRACTOR MUST TAKE GREAT CARE WHEN COMPACTING MATERIAL OVER DRAINAGE PIPES SO AS NOT TO DISLODGE THEM FROM THEIR CORRECT LINE AND LEVEL.
16. TYPE E BEDDING TO BE USED WHERE MINIMUM COVER OR GREATER IS PROVIDED TO FLEXIBLE PIPES.
17. FOR PIPES IN ROADWAYS WHERE COVER IS LESS THAN 1200mm BUT GREATER THAN 800mm TYPE G BEDDING TO BE USED.
18. FOR PIPES IN ROADWAYS WHERE COVER IS LESS THAN 800mm TYPE X BEDDING TO BE USED.
19. FOR PIPES IN OPEN SPACES, FOOTPATHS NOT ADJACENT TO ROADS AND GARDENS WHERE MINIMUM COVER OR GREATER IS NOT ACHIEVED, TYPE G BEDDING TO BE USED.
20. ALL MANHOLES TO BE CONSTRUCTED WITH PRECAST CONCRETE RINGS IN ACCORDANCE WITH RELEVANT ENGINEERS DETAILS DRAWING.
21. PROPRIETARY CONNECTIONS TO BE USED THROUGHOUT.
22. ALL JOINTS TO BE WATERTIGHT TO CL 504 SUB CLAUSE 3 OF THE NRA SPECIFICATION FOR ROADWORKS.
23. MANHOLES WITHIN PAVING TO BE D400 AND RECESSED TO RECEIVE PAVIORS.
24. MANHOLES IN TARMACADAM/GRASSED AREAS TO BE NON ROCK D400 LOCKABLE MANHOLES.
25. TRENCHES IN EXISTING SURFACES TO BE SAW CUT.
26. IF CONSTRUCTING MANHOLE CHAMBERS USING PRECAST CONCRETE RINGS, THE CONTRACTOR SHOULD ENSURE THAT THE JOINTS IN THE PRECAST CONCRETE RINGS ARE STAGGERED WITH THE JOINTS IN THE CONCRETE SURROUND TO REDUCE THE POSSIBILITY OF GROUND WATER INGRESS.
27. WHERE A CONNECTION IS REQUIRED TO AN EXISTING PUBLIC SEWER SYSTEM, THE CONTRACTOR MUST MAKE A FORMAL APPLICATION TO THE LOCAL AUTHORITY TO DO SO.
28. A DETAILED METHOD STATEMENT MUST BE SUBMITTED TO THE LOCAL AUTHORITY FOR APPROVAL AT LEAST FOUR WEEKS IN ADVANCE OF THE PLANNED CONSTRUCTION WORKS.
29. WHERE NEW DRAINAGE INFRASTRUCTURE IS TO CROSS AN EXISTING ROAD, THE CONTRACTOR IS REQUIRED TO:
    a) CONTACT THE RELEVANT AUTHORITIES WELL IN ADVANCE OF THE PLANNED WORKS.
    b) MAKE AN APPLICATION AND PAY FOR A ROAD OPENING LICENCE IF APPLICABLE.
    c) MAKE GOOD THE EXISTING ROAD TO THE SATISFACTION OF THE ENGINEER & THE RELEVANT AUTHORITIES ON COMPLETION OF THE WORKS.
30. THE CONTRACTOR IS ADVISED TO COMPLETE AIR TESTING ON A DAILY BASIS DURING THE COURSE OF THE WORKS TO ENSURE ISOLATION OF ANY FAILED TESTS.
31. THE COMPLETE DRAINAGE WORKS SHOULD BE PROTECTED, WHERE NECESSARY, FROM LOADS IMPOSED BY CONSTRUCTION PLANT DURING CONSTRUCTION.
32. ON COMPLETION OF THE WORKS, THE CONTRACTOR MUST ENSURE ALL INTERNAL SURFACES OF THE NEW SEWERS ARE THOROUGHLY CLEANED TO REMOVE ALL DELETERIOUS MATERIAL. THIS MATERIAL MUST BE PREVENTED FROM ENTERING THE PUBLIC SEWER SYSTEM.
33. A CCTV SURVEY OF THE COMPLETED UNDERGROUND DRAINAGE NETWORK SHOULD BE CARRIED OUT BY THE CONTRACTOR ON COMPLETION OF THE WORKS. IT IS RECOMMENDED THAT THIS EXERCISE IS COMPLETED BEFORE FINAL SURFACE COURSES AND FINISHES ARE APPLIED IN CASE ANY REMEDIAL WORKS ARE REQUIRED TO THE DRAINAGE.

LEGEND

SITE BOUNDARY

PROPOSED SURFACE WATER SEWER — S1.001 150 →

PROPOSED SURFACE WATER MANHOLE — S1-0

PROPOSED FOUL SEWER — F1.001 150 →

PROPOSED FOUL MANHOLE — F1-0

PROPOSED PETROL INTERCEPTOR

PROPOSED ATTENUATION TANK

EXISTING SURFACE WATER SEWER — 150 →

EXISTING SURFACE WATER MANHOLE — SMH1 C.L. I.L.

EXISTING FOUL SEWER — 150 →

EXISTING FOUL MANHOLE — FMH1 C.L. I.L.

Date Drawn: 2021-01-07
Drawn By: Colin O'Sullivan
Colour Drawing:

BUILDING INFORMATION MODELLING (BIM) I.S. EN ISO 19650-2:2018 NSAI Certified

Rev	Amendment	By	Date
P02	INITIAL IRISH WATER COMMENTS INCORPORATED INTO DRAWING	MOC	29/03/2021
C01	ISSUED FOR PLANNING	MOC	30/03/2022
C02	RED LINE BOUNDARY UPDATED	MOC	11/04/2022

Client:

Job Title: WESTSIDE SOCIAL HOUSING DEVELOPMENT
Dwg Title: PROPOSED DRAINAGE LAYOUT SHEET 1
Job No: 194191 | Model Ref: WES-PUNCH-XX-XX-M2-0100 | Drawing Status: A0

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