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CONSULTING ENGINEERS
CIVIL | STRUCTURAL | PROJECT MANAGEMENT

SERVICES REPORT

Including :
Proposed Surface Water Discharge
Proposed Foul Water Discharge
Proposed Water Supply
Preliminary Flood Study

Project Reference: Proposed Housing Project
At Millview Terrace, Dripsey

Client: Cork County Council

Project No.: 585000

Design By: B.A. & G.R.

Date: Oct '24
Rev: 1

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1.Introduction

2. Surface Water Design and Soakaway/Attenuation

3. Foul Water Details

4.Water Supply

5. Preliminary Flood Risk Assessment

6. Proposed Storm Drainage Layout

7. Proposed Foul Drainage Layout

8. Proposed Watermain Layout

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Project				Job Ref.	
Proposed Housing at Millview Terrace, Dripsey				0585-000	
Section				Sheet no./rev	
Introduction					
Calc. By	Date	Chck'd by	Date	App'd by	Date
G.R.	Jul '24	B.A.	Jul '24		

Introduction

The subject lands of the application are located on the south western side of Dripsey Village. The site is a greenfield site. It is proposed to extend the public road serving Millview Terrace into the new site, the new road will have services serving the proposed 8 unit development.

DJF Engineering undertook a Site Assessment of the development for Cork County Council. The assessment included geotechnical investigations by IGSL Geotechnical and a utilities survey by Murphy Surveys.

Millview Terrace runs north from the proposed site. There are water and telecom services in the roadway. There is an overhead ESB line through the site which is proposed to be diverted underground. There is no foul sewer on Millview Terrace, but there is a foul sewer on the main road outside Millview Terrace. It is proposed to install a new foul sewer through Millview Terrace to connect to the sewer in the main road to serve the proposed site.

The geotechnical investigations included 2 infiltrations tests which gave results of 0.0003 & 0.0005m/min. It is proposed to use a soakaway on the southern side of the site to dispose of stormwater from the proposed development.

It is proposed to connect to the existing watermain in Millview Terrace, the public road on the northern side of the site.

SUDS Assessment/Drainage Impact Assessment

The site has been assessed for suitability for applying for SuDS (Sustainable Drainage Systems) measures for the development. The principal outcome of the study found that infiltration measures are suitable for the site.

SuDS measures have been considered as per the table below: -

Measure Considered	Assessment	Adopt
Rainwater Harvesting	Rainwater butts to be installed in the downpipes of the houses	Y
Green Roof	Due to the nature of the site a green roof would not be practical	N
Infiltration Systems	Soakaway proposed at approximately 2m depth	Y
Proprietary Treatment Systems	Not suitable due to Site type and scale	N
Filter Strips	Not suitable due to Site type and scale	N
Filter Drains	Not suitable due to Site type and scale	N
Swales	Not suitable due to Site type and scale	N
Bio-Retention Systems	Not suitable due to Site type and scale	N
Trees	Not extensive due to Site type and scale, some planting will be done on site	Y
Attenuation Storage Tanks	NA- it is not proposed to connect to a storm drain, therefore an attenuated flow is not required	N
Detention Basin	Not suitable due to site type and scale	N
Ponds & Wetlands	Not suitable due to site type and scale	N
Pervious Pavements	Not suitable due to scale of the site and the maintenance required	N

The surface water on the site will discharge to a soakaway via an oil interceptor. The soakaway will have a storage volume suitable for the infiltration test results.

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Project				Job Ref.	
Proposed Housing at Millview Terrace, Dripsey				0585000	
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Surface Water Disposal					
Calc. By	Date	Chck'd by	Date	App'd by	Date
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WM11-10 & Paragraph 11.10.4 of Dev't Plan 2022

The following table is to be attached to a Drainage Impact Assessment for small scale development- less than 10 houses.

TABLE 3
CORK COUNTY COUNCIL SUDS SELECTION HIERARCHY SHEET FOR SMALL-SCALE DEVELOPMENT

SuDS Measures	**Measures to be used on site**	**Rational for selecting / not selecting measure including discharge rate applied with supporting calculations**
Water butt – 150L capacity or more (based water use demand) with means of overflow	YES	Suitable for size and type of development
Permeable paving – consider for all hard paved areas without heavy traffic	NO	Not suitable for maintenance reasons
Bio-retention planter – disconnect downpipe connection into drains and allow roof runoff into planter with means of overflow	NO	Water butt preferred
Green / Blue Roof – requires a minimum substrate depth (growth medium) of at least 80 mm excluding the vegetative map	NO	Not suitable for type and scale of development
Rain garden - disconnect downpipe/RWP into the planted flower bed	NO	Water butt preferred
Soakaway	YES	Ground conditions are suitable for a soakaway on site
Other	Footpaths	Paths around houses will be sloped to drain to green areas

Cork County Council requires a softer engineered or 'nature-based approach' to be used to manage rainfall runoff on the site i.e., to manage and treat surface water above-ground rather than sending rainfall below-ground into drains, pipes, attenuation tanks and other 'hard engineering' solutions. The aim is to maximise the retention and/or infiltration of storm water runoff onsite, minimise discharges to the public drainage system and to limit the discharge rates from the site to greenfield runoff rate or less.

The surface water from roofs will be stored in water butts with overflows. The surface water generated on this development will all be discharged on site, there will be no attenuation tank or discharge to public drainage system. The site has been assessed and is suitable for a soakaway.

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Surface water runoff

Exercise in looking at surface water drainage "effective area" runoff for the site.

Areas to be included in the "effective area" are surface areas of roofs, paths, roads, parking bays, lawns, gardens & green surfaces.

An impermeability factor of 1.0 is used for roofs, 0.9 is used for footpaths and hard standing areas, a factor of 0.2 is used for green areas and back gardens.

420sqm of roofs x 1.0= 420sqm
1050sqm of footpaths and roads x 0.9= 945sqm
2650sqm of green area contributing x 0.2= 530sqm

Overall Effective Runoff = Total Impermeable area = Ap = **1,895 m2**

Proposed to use Infiltration Pluvial Cube system which consists of modular polypropylene units, low flow maintenance and self-cleaning channels.

Note prior to discharge to the soakaway, the rainwater runoff from the proposed overall development is proposed to go through a hydrocarbon interceptor & silt trap.

Sewers carrying domestic surface water from this proposed housing developments shall have a sewer minimum sewer size of 225mm and the gradients are to achieve self cleansing velocities.

The soakaway design in accordance with BRE365 is as follows: -

Infiltration testing in accordance with BRE365 was carried out by IGSL Geotechnical Ltd. The results of the testing were variable. It is recommended to install a soakaway to approximately 2m depth on the southern side of the site. The proposed soakaway is designed for a 10yr storm with 10% allowance for climate change. The proposed plan area of the soakaway is 15m x 5m and minimum required depth of the soakaway is 962mm, **therefore a 1100mm deep system** is selected.

The soil infiltration rate is taken from the site testing in accordance with BRE365 undertaken by IGSL Geotechnical Ltd.

SOAKAWAY DESIGN

In accordance with CIRIA C753 SUDS

Tedds calculation version 2.0.05

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Design rainfall intensity

Location of catchment area; Other

Impermeable area drained to the system; A = **1895.0** m^2

Return period; Period = **10** yr

Ratio 60 min to 2 day rainfall of 5 yr return period; r = **0.360**

5-year return period rainfall of 60 minutes duration; M5_60min = **17.7** mm

Increase of rainfall intensity due to global warming; $p_{climate}$ = **10** %

Soakaway / infiltration trench details

Soakaway type; Rectangular

Width of pit; w = **5000** mm

Length of pit; l =**15000** mm

Percentage free volume; V_{free} = **95** %

Soil infiltration rate; f = **4.30×10^{-6}** m/s

Base area; $A_b = w \times l$ = **75000000** mm^2

Perimeter; $P = 2 \times (w + l)$ = **40000** mm

Coefficient b; $b = P \times f / (A_b \times V_{free})$ = **0.01** hr^{-1}

Table equations (Eq. 25.4)

Rainfall intensity; i = M10 / D

Coefficient a; $a = A_b / P - (A \times i / (P \times f))$

Minimum depth required; $H = a \times (e^{(-bD)} - 1)$

Duration, D (min)	Growth factor Z1	M5 rainfalls (mm)	Growth factor Z2	10 year rainfall, M10 (mm)	Intensity, i (mm/hr)	a (mm)	Min depth req (mm)
5;	0.36;	7.0;	1.18;	8.3;	99.09;	-301365;	218
10;	0.51;	9.9;	1.19;	11.8;	70.88;	-215050;	311
15;	0.62;	12.1;	1.19;	14.4;	57.66;	-174587;	379
30;	0.79;	15.4;	1.20;	18.4;	36.89;	-111028;	481
60;	1.00;	19.5;	1.19;	23.2;	23.19;	-69095;	598
120;	1.22;	23.8;	1.18;	28.1;	14.04;	-41106;	708
240;	1.48;	28.8;	1.18;	34.0;	8.50;	-24140;	825
360;	1.67;	32.5;	1.18;	38.3;	6.38;	-17653;	897
600;	1.90;	37.0;	1.17;	43.4;	4.34;	-11405;	949
1440;	2.42;	47.1;	1.16;	54.8;	2.28;	-5112;	962

Minimum depth of soakaway; H_{max} = **962** mm

Time to empty soakaway to half vol. - Eq.24.6(2); $t_{s50} = V_{free} \times A_b / (f \times P) \times Ln((H_{max} + A_b / P) / (H_{max} / 2 + A_b / P))$ = 21hr 22min 60s

PASS - Soakaway discharge time less than or equal to 24 hours

Design of collection system

The proposed surface water drainage proposal includes a gravity surface water collection system which incorporates an underground drainage pipe network.

All proposed drainage works is designed to comply with and be carried out in accordance with the current edition of the *Recommendations for site development works for Housing Areas* published by the *Department of Environment and Local Government.*
Drainage works also shall comply with Irish Water/Local Authority requirements.

C1/SfB (29)

NSAI Agrément

IRISH AGRÉMENT BOARD
CERTIFICATE NO. 18/0401

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Rochdale, OL11 4EZ
Tel: +44(0)1706 374416 Fax: 01706376785
Email: info@alderburgh.com

Pluvial Cube Attenuation and Infiltration Systems

Stürmen Sie Wasser Leitung System

NSAI Agrément (Irish Agrément Board) is designated by Government to carry out European Technical Approvals.

NSAI Agrément Certificates establish proof that the certified products are **'proper materials'** suitable for their intended use under Irish site conditions and in accordance with the **Building Regulations 1997 to 2017.**

PRODUCT DESCRIPTION:
This Certificate relates to the Pluvial Cube attenuation and infiltration system which comprises of modular polypropylene units which, in conjunction with a satisfactory civil engineering design, will act as either an attenuation or infiltration vessel as part of a sustainable drainage system.

The Pluvial Cube system consists of modular polypropylene units, low flow maintenance and self-cleaning channels.

USE:
The product is used as a subsurface stormwater management system, used for sub-surface water storage or as a soakaway to manage rain water run-off from impermeable surfaces. Subject to site conditions and restraints, the Pluvial Cube system modules can be built up to create the volumetric capacity required for

- Attenuation system
- Infiltration system.
- Or a combined attenuation/infiltration system.

MANUFACTURE AND MARKETING:
The product is manufactured and marketed by:

Alderburgh Ltd.
Solution House,
Dane Street,
Rochdale,
OL11 4EZ.
Tel: +44(0)1706 374416 Fax: 01706376785
Email:info@alderburgh.com

NSAI Agrément

Part One / Certification 1

1.1 ASSESSMENT

In the opinion of NSAI Agrément, the Pluvial Cube system, if used in accordance with this Certificate, meets the requirements of the Building Regulations 1997 - 2017 as indicated in Section 1.2 of this Certificate.

1.2 BUILDING REGULATIONS 1997 to 2017

REQUIREMENT:

Part A – Structure

A1 - The Pluvial Cube system, as certified in this Certificate, can be designed to ensure that the combined dead and imposed loads are sustained and transmitted to the ground in compliance with CIRIA C737 *Structural and geotechnical design of modular geocellular drainage systems.*

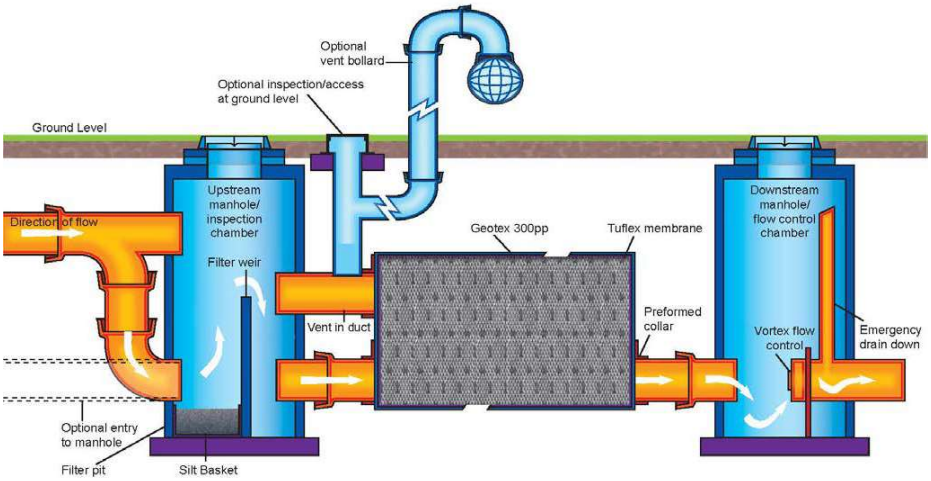
Part D - Materials & Workmanship

D3 – The Pluvial Cube system, as certified in this Certificate, is comprised of proper materials fit for their intended use (See Part 4 of this Certificate).

D1 – The Pluvial Cube system, as certified in this Certificate, meets the requirements of the building regulations for workmanship.

Part H – Drainage and waste water disposal.

H1 - The Pluvial Cube system, as certified in this Certificate, meets the requirements of the building regulations for the adequate disposal of surface water from the building.



Proposed Foul Wastewater discharge

The new site proposal includes 8 dwellings. IW records and the Murphy surveys utility survey show a 300mm foul sewer on the main public road on the northern end of Millview Terrace- it is proposed to build a new sewer for approximately 70m through the exsiting road serving Millview Terrace. It is proposed to build a new manhole on the 300mm existing sewer at the proposed connection point.

Sewers carrying domestic wastewater from this proposed housing development should be designed to carry a minimum wastewater volume of six times dry weather flows (6DWF).

Dry weather flows (DWF) is taken as 900 litres per dwelling (four persons per house and a per capita wastewater flow of 225 litres per head per day).

Total Dry weather flow (DWF) = 8 x 900/24/60/60 = 0.083l/s

Foul Pipe Network is designed to carry a minimum wastewater volume of six times dry weather flows (6DWF).

6 DWF = 6 x 0.083 = 0.5 l/s

Typical Organic Loading :

TABLE 1: INFLOW WASTEWATER CHARACTERISTICS* FROM EPA STUDY (DOMESTIC SOURCES)

Parameter	Mean	Standard Deviation
SS	163	136
BOD_5	168	127
COD	389	310
$O\text{-}PO_4$	7.1	4.2
Total-N	40.6	19.0
NH_3-N	31.5	15.6
NO_3-N	0.25	0.41
NO_2-N	0.04	0.06
pH	7.5	0.5
Total-coli	1×10^8	2×10^8
E-coli	4×10^7	5×10^7

* all results in mg/l, except bacterial counts which are expressed in colony forming units, CFU per 100 ml

TABLE 2.2 TYPICAL CHARACTERISTICS OF URBAN WASTE WATER

Parameter	Concentration mg/l
BOD	100 - 300
COD	250 - 800
Suspended solids	100 - 350
Total nitrogen (as N)	20 - 85
Ammonia (NH_3 as N)	10 - 30
Organic phosphorus (as P)	1 - 2
Inorganic phosphorus (as P)	3 - 10
Oils, fats and grease	50 - 100
Total inorganic constituents (Na, Cl, Mg, S, Ca, K, Si, Fe)	100
Heavy metals (Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn)	<1mg/l each

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Proposed Housing at Millview Terrace, Dripsey				0585000	
Section				Sheet no./rev	
Water Supply				1	
Calc. By	Date	Chck'd by	Date	App'd by	Date
G.R.	Jul '24	B.A.	Jul '24		

Proposed Water Supply.

The new site proposal includes 8 dwellings. It is proposed to connect to existing watermains in Millview Terrace, the public road on the northern boundary of the site.
Please refer to proposed watermain layout.

The water demand includes: Average domestic daily demand in the development is established based on daily per-capita consumption, house occupancy, number of properties. For design purposes the average daily domestic demand is be based on a per-capita consumption of 225 l/person/day and an average occupancy ratio of 4 persons per dwelling.

8 dwellings :8x225x4

Total average daily demand = 7,200 litres

The average day/peak week demand should be taken a 1.25 times the average daily domestic demand.
Total average day/peak demand = 7,200 x 1.25 = 9,000 litres

The peak demand for sizing of the pipe network will normally be 2.1 times the average day, peak week demand.
Total average day/peak demand = 9,000 x 2.1 = 18,900 l/day or 0.219 l/sec

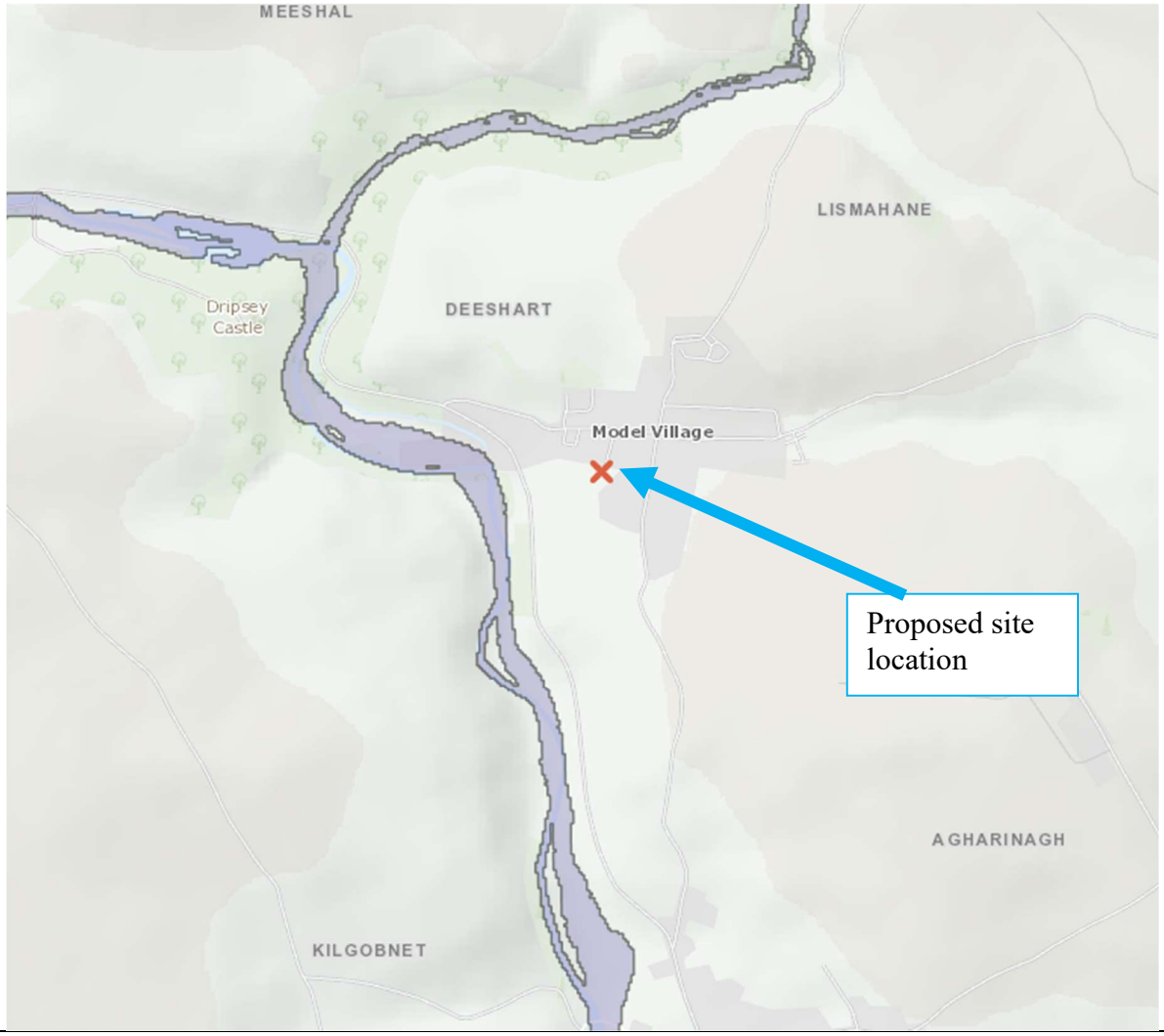
Preliminary Flood Risk Assessment

The site is not at risk from flooding.

The proposed development is approximately 30km from the sea and the site elevation is approximately 90m OD, hence tidal flooding is not a risk at this site.

The site is locally elevated within its environs, it approximately 20m higher than the public road about 150m to the west of the site, therefore pluvial flooding is not deemed a risk.

Fluvial flooding is not a risk at the site. There is a river approximately 200m to the west of the site which has a floodplain, this is approximately 30m lower than the proposed site. See the following excerpt from floodinfo.ie which indicates the extent of possible fluvial floodings approximately 450m from the site.



Original Drawing Size A1

Notes

1. DO NOT SCALE DRAWING. USE FIGURED DIMENSIONS ONLY.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL, MECHANICAL/ELECTRICAL AND ENGINEERING DRAWINGS.
3. FOR ALL SETTING OUT, REFER TO ARCHITECTS DETAILS.
4. ALL WORKS CARRIED OUT MUST COMPLY WITH THE RELEVANT PARTS OF THE CURRENT BUILDING REGULATIONS AND TECHNICAL GUIDANCEDOCUMENTS, ENSURING THE WORKS ARE CARRIED OUT USING 'PROPER MATERIALS WHICH ARE FIT FOR USE FOR WHICH THEY ARE INTENDED AND FOR THE CONDITIONS IN WHICH THEY ARE USED'.
5. ALL MATERIALS USED SHALL BE 'CE' MARKED IN ACCORDANCE WITH THE EU CONSTRUCTION PRODUCT REGULATIONS (CPR) (No.305/2011). REFER TO ANNEX IV OF THE REGULATIONS FOR THE LIST OF APPLICABLE PRODUCTS.
6. THIS DRAWING TO BE READ IN CONJUNCTION WITH RKA GENERAL CIVIL & STRUCTURAL SPECIFICATION.
7. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES IMMEDIATELY.
8. POSITIONS OF EXISTING MAIN SHOWN ON THIS DRAWING ARE INDICATIVE ONLY. ACTUAL POSITIONS OF PIPEWORK MUST BE ESTABLISHED ON SITE BY THE CONTRACTOR BY HAND DUG TRIAL HOLES.
9. RKA CONSULTING ENGINEERS WILL NOT ACCEPT ANY RESPONSIBILITY FOR THE POSITIONAL ACCURACY OF THE PLANT SHOWN ON THIS DRAWING NOR ANY OMMISSION FROM SAME OF SERVICE PIPES WHICH ARE NOT SHOWN ON THE PLAN.
10. CONTRACTOR TO ALLOW FOR LOCATING ALL EXISTING MAINS AS REQUIRED TO ACCOMMODATE DIVERSION AND/OR REPLACEMENT OF EXISTING SERVICES AS SHOWN ON THIS DRAWING.
11. CONTRACTOR TO ENSURE THAT WATER SUPPLIES ARE MAINTAINED TO ALL EXISTING USERS AT ALL TIMES DURING THE CONTRACT.
12. CONTRACTOR TO ALLOW FOR HAND DIGGING TO LOCATE EXISTING SERVICES AS REQUIRED.
13. CONTRACTOR TO KEEP FULL RECORDS OF POSITIONS OF ALL PIPEWORK AND CONNECTIONS AND ON COMPLETION, FULL AS-BUILT DRAWINGS TO BE PRODUCED BY THE CONTRACTOR.
14. LOCATION OF PROPOSED PIPEWORK ARE INDICATIVE ONLY. ALL WORKS TO BE AGREED WITH UISCE EIREANN AND EMPLOYERS REPRESENTATIVE.
15. DETAILS OF THE TREATMENT OF ALL EXISTING WATER SERVICES TO THE SITE SHALL BE AGREED WITH UISCE EIREANN/ CORK COUNTY COUNCIL WATER DEPT.
16. ALL ROAD AND FOOTWAY FITTING COVERS, SHALL BE MARKED TO INDICATE WHAT IS UNDERNEATH.
17. ALL WATERMAINS TO BE LAID TO CURRENT IRISH WATE STANDARDS. PLEASE REFER TO UISCE EIREANN CONNECTION AND DEVELOPER SERVICES WATER INFRASTRUCTURE STANDARD DETAILS DOCUMENT NUMBER IW-CDS-5020-01 & CODE OF PRACTICE FOR WATER INFRASTRUCTURE DOCUMENT NUMBER IW-CDS-5020-03.
18. WORKS TO BE CARRIED OUT IN ACCORDANCE WITH RECOMMENDATIONS FOR SITE DEVELOPMENT WORKS FOR HOUSING AREAS NOVEMBER 1998 AND IN ACCORDANCE WITH LATEST UISCE EIREANN SPECIFICATIONS AND SPECIFICATIONS OF ALL UTILITY PROVIDERS.
19. SETTING OUT TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
20. SPOT LEVELS RELATE TO UNITS IN METRES.
21. DIMENSIONS ARE IN MILLIMETRES.

LEGEND:

- GY — Proposed Gully (To be Connected with 150mm Pipe to Surface Water Drain)
- Proposed Storm Sewer
- SMH 01 — Proposed Storm Manhole
- Proposed Bypass Seperator (See Note 'A')

NOTES:

All Works Outside Site Boundary In Public Area To Be Carried Out By Main Contractor.

All Works Within Site Boundary To Be Carried Out By Main Contractor.

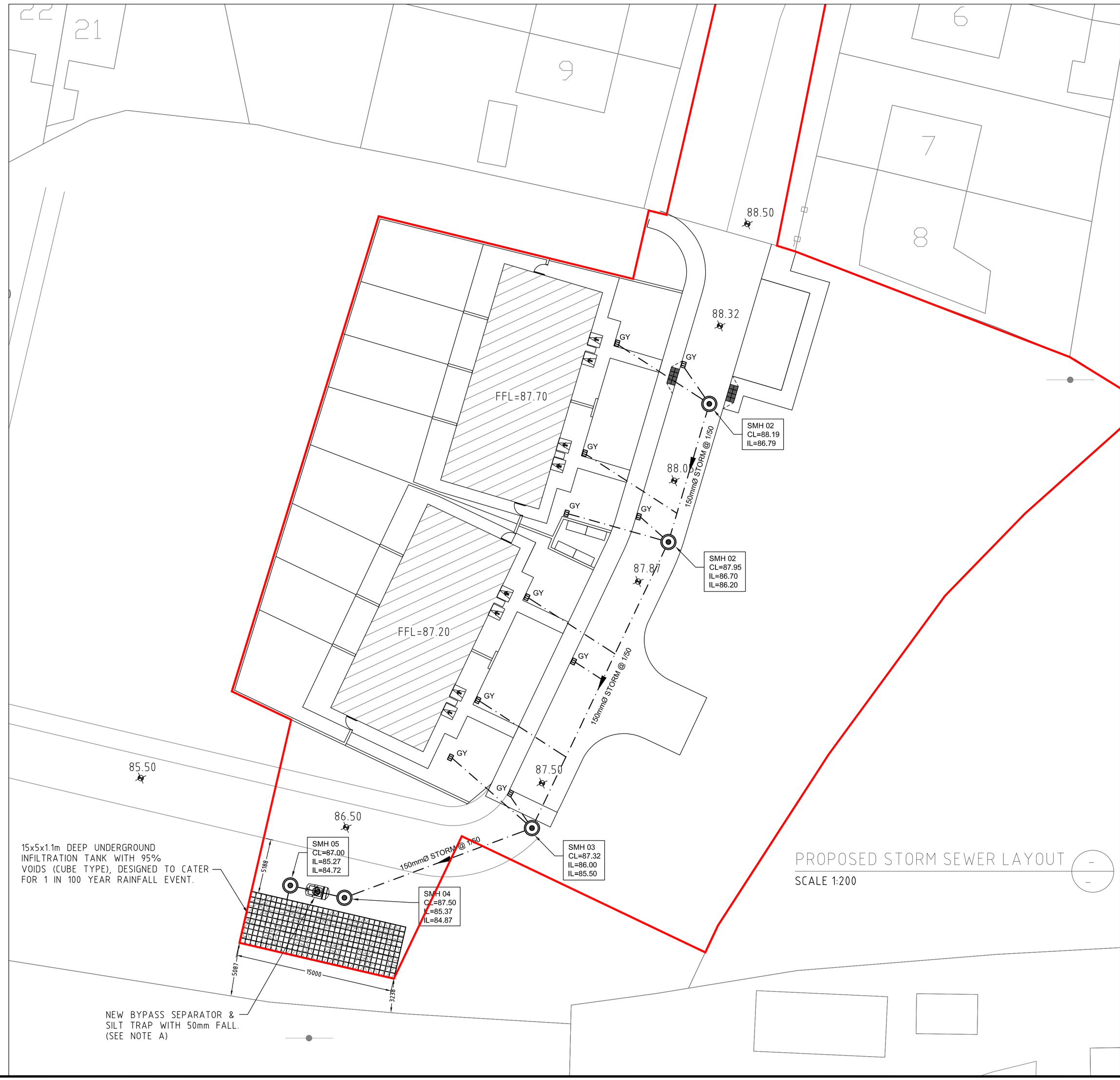
New Storm Sewer To Be Encased In 150mm Concrete, Until Cover Is 1200mm.

Allow For Crossing Existing Foul & Storm Sewer Connections.

Allow For Crossing Existing Utility Services.

NOTE 'A' - The Bypass Seperator Chosen Is To Be In Accordance With ISEN 858-1 & It's Design Is To Include The Necessary Volume Requirements For:

-Oil Seperation Capacity
-Silt Storage Capacity
-Oil Storage Volume
-Coalescer
The Bypass Seperator Chosen, Which Is To Be Agreed With The Clients Representative, Is To Be Of Roto-Moulded Chamber Construction & Is To Cater For An Impermeable Area Up To 2,700 sq.m².



PROPOSED STORM SEWER LAYOUT

SCALE 1:200

Rev	Date	Drawn	Description	Ch'k'd
PL1	Nov. '24	GR	Re-Issued for Planning	BA
PL	July '24	GR	Issued for Planning	BA

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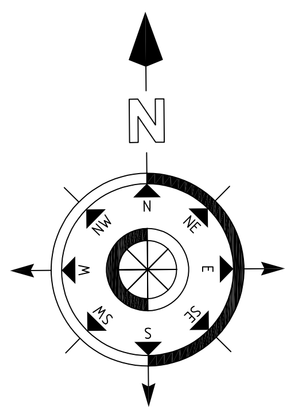
CIVIL | STRUCTURAL | PROJECT MANAGEMENT

Client:
CORK COUNTY COUNCIL

Project :
Proposed Residential Development
at Model Village, Dripsey,
Co. Cork.

Drawing Title :
Proposed Storm Sewer Layout

Designed:	BA	Drawn:	GR	Date:	July '24
Eng Chk:	BA	Dwg. Chk:	BA	Scale:	1:200 @ A1
Project. No:	585				
Drawing No:	502			Status: Planning	Rev: PL1



LEGEND:

- Existing Public Sewer
- Proposed Foul Sewer (Self Lay) Works Outside Red Boundary By Uisce Eireann
- FMH 01 — Proposed Storm Manhole
- IC — Proposed Inspection Chamber (Refer to IW Detail STD-WW-13)

NOTES:

All Works & Fittings To Be Carried Out In Accordance With Uisce Eireann Standards.

All Works Outside Site Boundary In Public Area To Be Carried Out By Uisce Eireann.

All Works Within Site Boundary To Be Carried Out By Main Contractor.

New Foul Sewer To Be Encased In 150mm Concrete, Until Cover Is 1200mm.

Allow For Crossing Existing Foul & Storm Sewer Connections.

Allow For Crossing Existing Utility Services.

Original Drawing Size A1

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7. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES IMMEDIATELY.
8. POSITIONS OF EXISTING MAIN SHOWN ON THIS DRAWING ARE INDICATIVE ONLY. ACTUAL POSITIONS OF PIPEWORK MUST BE ESTABLISHED ON SITE BY THE CONTRACTOR BY HAND DUG TRIAL HOLES.
9. RKA CONSULTING ENGINEERS WILL NOT ACCEPT ANY RESPONSIBILITY FOR THE POSITIONAL ACCURACY OF THE PLANT SHOWN ON THIS DRAWING NOR ANY OMMISSION FROM SAME OF SERVICE PIPES WHICH ARE NOT SHOWN ON THE PLAN.
10. CONTRACTOR TO ALLOW FOR LOCATING ALL EXISTING MAINS AS REQUIRED TO ACCOMMODATE DIVERSION AND/OR REPLACEMENT OF EXISTING SERVICES AS SHOWN ON THIS DRAWING.
11. CONTRACTOR TO ENSURE THAT WATER SUPPLIES ARE MAINTAINED TO ALL EXISTING USERS AT ALL TIMES DURING THE CONTRACT.
12. CONTRACTOR TO ALLOW FOR HAND DIGGING TO LOCATE EXISTING SERVICES AS REQUIRED.
13. CONTRACTOR TO KEEP FULL RECORDS OF POSITIONS OF ALL PIPEWORK AND CONNECTIONS AND ON COMPLETION, FULL AS-BUILT DRAWINGS TO BE PRODUCED BY THE CONTRACTOR.
14. LOCATION OF PROPOSED PIPEWORK ARE INDICATIVE ONLY. ALL WORKS TO BE AGREED WITH UISCE EIREANN AND EMPLOYERS REPRESENTATIVE.
15. DETAILS OF THE TREATMENT OF ALL EXISTING WATER SERVICES TO THE SITE SHALL BE AGREED WITH UISCE EIREANN/ CORK COUNTY COUNCIL WATER DEPT.
16. ALL ROAD AND FOOTWAY FITTING COVERS, SHALL BE MARKED TO INDICATE WHAT IS UNDERNEATH.
17. ALL WATERMAINS TO BE LAID TO CURRENT IRISH WATE STANDARDS. PLEASE REFER TO UISCE EIREANN CONNECTION AND DEVELOPER SERVICES WATER INFRASTRUCTURE STANDARD DETAILS DOCUMENT NUMBER IW-CDS-5020-01 & CODE OF PRACTICE FOR WATER INFRASTRUCTURE DOCUMENT NUMBER IW-CDS-5020-03.
18. WORKS TO BE CARRIED OUT IN ACCORDANCE WITH RECOMMENDATIONS FOR SITE DEVELOPMENT WORKS FOR HOUSING AREAS NOVEMBER 1998 AND IN ACCORDANCE WITH LATEST UISCE EIREANN SPECIFICATIONS AND SPECIFICATIONS OF ALL UTILITY PROVIDERS.
19. SETTING OUT TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
20. SPOT LEVELS RELATE TO UNITS IN METRES.
21. DIMENSIONS ARE IN MILLIMETRES.

Rev	Date	Drawn	Description	Ch'k'd
PL1	Nov. '24	GR	Re-Issued for Planning	BA
PL	July '24	GR	Issued for Planning	BA

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CONSULTING ENGINEERS
CIVIL | STRUCTURAL | PROJECT MANAGEMENT

Client:
CORK COUNTY COUNCIL

Project:
Proposed Residential Development
at Model Village, Dripsey,
Co. Cork.

Drawing Title:
Proposed Foul Sewer Layout

Designed:	BA	Drawn:	GR	Date:	July '24
Eng Chk:	BA	Dwg. Chk:	BA	Scale:	1:250 @ A1
Project. No:	585				
Drawing No:	501			Status: Planning	Rev: PL1

Original Drawing Size A1

Notes

1. DO NOT SCALE DRAWING. USE FIGURED DIMENSIONS ONLY.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL, MECHANICAL/ELECTRICAL AND ENGINEERING DRAWINGS.
3. FOR ALL SETTING OUT, REFER TO ARCHITECTS DETAILS.
4. ALL WORKS CARRIED OUT MUST COMPLY WITH THE RELEVANT PARTS OF THE CURRENT BUILDING REGULATIONS AND TECHNICAL GUIDANCEDOCUMENTS, ENSURING THE WORKS ARE CARRIED OUT USING 'PROPER MATERIALS WHICH ARE FIT FOR USE FOR WHICH THEY ARE INTENDED AND FOR THE CONDITIONS IN WHICH THEY ARE USED'.
5. ALL MATERIALS USED SHALL BE 'CE' MARKED IN ACCORDANCE WITH THE EU CONSTRUCTION PRODUCT REGULATIONS (CPR) (No.305/2011). REFER TO ANNEX IV OF THE REGULATIONS FOR THE LIST OF APPLICABLE PRODUCTS.
6. THIS DRAWING TO BE READ IN CONJUNCTION WITH RKA GENERAL CIVIL & STRUCTURAL SPECIFICATION.
7. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES IMMEDIATELY.
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LEGEND:

- Existing Uisce Eireann Main
- Proposed 100mmØ HDPE Watermain (Self Lay)
- Works Outside Red Boundary By Uisce Eireann
- BB — 25mm Connection Feed & Boundary Watermeter Box
- SV — Proposed Sluice Valve
- ScV — Proposed Scour Valve
- FH — Proposed Fire Hydrant
- WM — Proposed Water Meter

NOTES:

All Works & Fittings To Be Carried Out In Accordance With Uisce Eireann Standards.

All Works Outside Site Boundary In Public Area To Be Carried Out By Uisce Eireann.

All Works Within Site Boundary To Be Carried Out By Main Contractor.

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PL	July '24	GR	Issued for Planning	BA

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CONSULTING ENGINEERS
CIVIL | STRUCTURAL | PROJECT MANAGEMENT

Client:
CORK COUNTY COUNCIL

Project:
Proposed Residential Development
at Model Village, Dripsey,
Co. Cork.

Drawing Title:
Proposed Watermain Layout

Designed:	BA	Drawn:	GR	Date:	July '24
Eng Chk:	BA	Dwg. Chk:	BA	Scale:	1:200 @ A1
Project. No:	585				
Drawing No:	500			Status:	Planning
				Rev:	PL1