Proposed Residential Development at St. Ann's Road, Blarney, Co. Cork

ENGINEERING INFRASTRUCTURE REPORT & DRAINAGE IMPACT ASSESSMENT

Prepared for:	HRP Construction
Prepared by:	MMOS Consulting Engineers
Date:	10.03.2026
Job Number:	23141
Reference:	23141-MMS-XX-XX-RP-C-0001

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Report Title: Engineering Infrastructure Report & Drainage Impact Assessment
Project Title: Proposed Residential Development, St. Anns Road, Blarney, Co. Cork

REVISION CONTROL TABLE

Document reference: 23141-MMS-XX-XX-RP-C-0001

Revision	Date	Issue	Author	Checked
01	30.07.2025	Issued for Planning	KC	PM
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05	10.03.2026	Issued for Planning	SL	PM

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. INTRODUCTION

MMOS Consulting Engineers were requested to undertake this report on behalf of HRP Construction (the Applicant) as part of a Part 8 planning application to Cork City Council for a residential development at St. Ann's Road, Blarney, County Cork. The Applicant is applying for planning permission for the construction of 138 residential units, a civic centre and all ancillary works.

This engineering drainage report is to be read in conjunction with all planning drawings and relevant architect's drawings.

1.1. SITE LOCATION

The site for the proposed development is located on the site of the former Blarney Park Hotel in Blarney Town, north of Blarney Castle and Gardens. It is bounded by agricultural land to the west, wooded land and a local drain to the south, St. Ann's Road to the northeast, and a car park for Blarney Castle & Gardens to the east as shown in Figure 1. The overall site area is approximately 3.70 ha. Currently, the site is overgrown, with a number of hard-standing areas present.

Figure 1 – Site Aerial View

The existing site levels slope from +28.56mOD in the northwestern area of the site to +30.30mOD by the eastern boundary with Ann's Road, to +28.91mOD in the southwestern area.

1.2. PROPOSED DEVELOPMENT

This report accompanies the planning application for the construction of 138 residential units, a civic centre, and all ancillary works.

Please refer to the architects' drawings attached to this application for full site details and block elevations.

1.3. SCOPE OF REPORT

This report describes the civil engineering infrastructure for the proposed development and how it connects to the local public infrastructure. This report has been prepared by reviewing available data from the client, design team, local authority sources, national bodies and through onsite surveys completed to date, and it addresses the following:

- Storm Drainage
- Foul Drainage
- Potable Water Supply

1.4. CONSULTATION

In advance of preparing this report we have consulted with Uisce Éireann, Cork City Council Drainage Department, and the Cork City Development Plan 2022-2028.

The Cork City Development Plan 2022-2028 advises on the discharge of surface water into the public system and the use of Sustainable Urban Drainage (SuDS) systems and Nature Based Solutions (NBS) to be implemented in all future developments.

Uisce Éireann has issued a Confirmation of Feasibility (REF: CDS25004956) stating that both wastewater and water connections are feasible based on the existing Irish Water infrastructure within the vicinity for the proposed 138 units & civic centre.

2. EXISTING SERVICES

A Confirmation of Feasibility, as enclosed in Appendix B, and existing services records were received from Uisce Éireann.

The existing Uisce Éireann services record maps for the water supply infrastructure indicate that a 7" asbestos pipe and 3" cast iron pipe is running underneath St. Ann's Road to the east of the site as shown in Figure 2.

The existing Uisce Éireann services record map for the wastewater sewer network indicates a 375mm diameter foul sewer of unknown material type running through the southern portion of the site as shown in shown in Figure 3. A foul sewer of unknown material and size is also present running underneath St. Ann's Road to the east of the site.

Figure 2 – Watermain record map (Uisce Éireann)

Figure 3 – Wastewater record map (Uisce Éireann)

Previous planning applications for this site indicate that to the west of this site, along it's boundary, there is an existing open drain, which is then piped and discharges to the adjacent existing drainage ditch as shown in Figure 4.

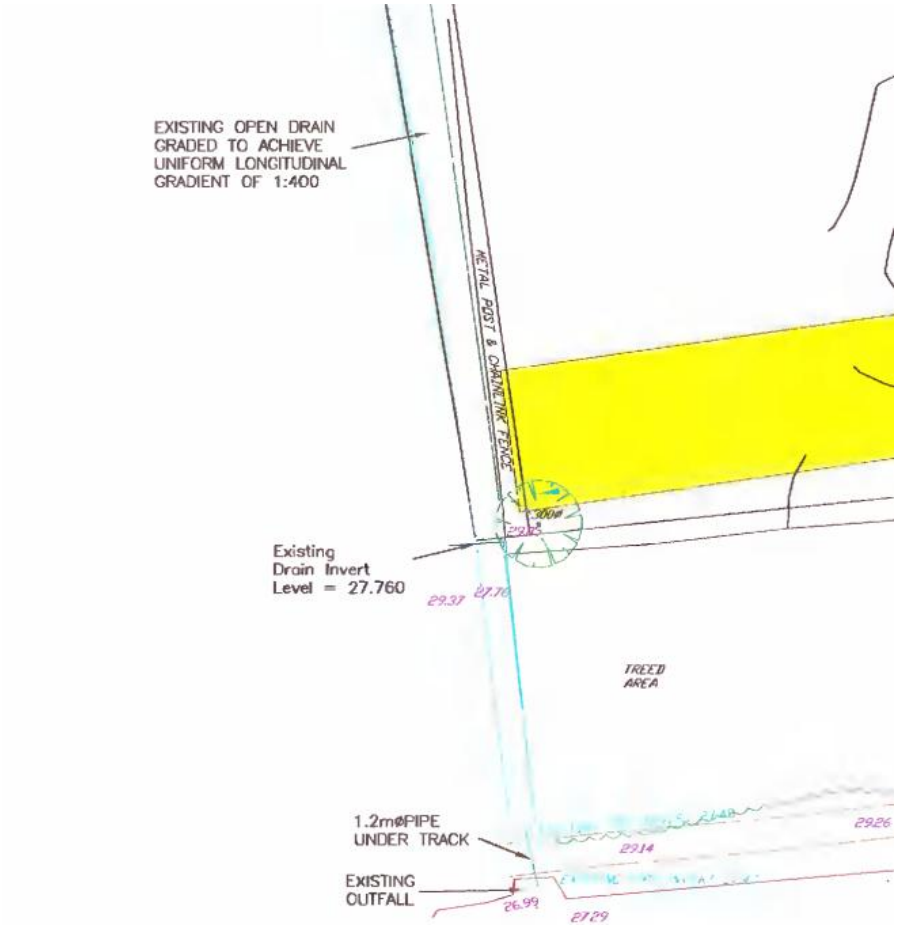

Figure 4 – Surface Water Drainage Previous Planning Ref: 125084 (Cork City Council Planning Enquiry)

3. SURFACE DRAINAGE PROPOSAL

3.1. REQUIREMENTS OF THE DEVELOPMENT PLAN

Objective 9.4 of the Cork City Development Plan 2022-2028 specifies that "all planning applications for new developments incorporate SuDS in so far as possible." Such proposals shall be accompanied by a comprehensive SuDS assessment including run-off quantity, run off quality, and impacts on habitat and water quality.

As such, SuDS implementation is at the core of the proposed surface water drainage strategy for this development to allow for the application of nature-based solutions (NBS) which, whilst providing temporary water retention, will also allow for the integration of biodiversity within this development.

As part of this planning application, we have undertaken a review of all possible SuDS measures which can be incorporated into the scheme including measures such as the introduction of permeable pavements, tree pits, swales, detention basins, constructed wetlands, and soakaways. This review is undertaken with consideration given to the spatial planning of this development and the housing density.

Cork City Council also advises that "In some exceptional cases, and at the discretion of the Council, where it is demonstrated that SuDS devices are not feasible, approval may be given to install underground attenuation tanks or enlarged pipes in conjunction with other devices to achieve the required water quality. Such alternative measures will only be considered as a last resort. Proposals for surface water attenuation systems should include maintenance proposals and procedures".

3.2. SUDS MEASURES ASSESSED

3.2.1. Detention Basins

Detention Basins are proposed for suitable sections within this development.

3.2.2. Tree Pits/Rain Gardens

A Combination of Tree Pits & Rain Gardens are proposed for suitable sections within this development.

3.2.3. Permeable Paving

Permeable paving with is proposed for suitable private car parking areas within this development.

3.2.4. Soakaways

It will not be practical to incorporate soakaways within this development from a space planning perspective.

3.2.5. Wetlands

It will not be practical to incorporate wetlands within this development from a space planning perspective.

3.2.6. Swales

It will not be practical to incorporate swales within this development from a space planning perspective.

3.2.7. Green Roofs

As the development will be of a traditional roof design with tiled or slated pitched roofs, the use of Green Roofs will not be practical.

3.3. SUDS MEASURES ADOPTED

3.3.1. Detention Basins

The provision of detention basins is proposed as part of the surface water management strategy to attenuate runoff generated during rainfall events and to control discharge rates from the development. The basins are designed to temporarily store surface water and release it at a controlled rate via a flow control device, ensuring post-development runoff rates do not exceed greenfield or existing site conditions.

The detention basins will receive surface water from upstream SuDS features and drainage networks, providing resilience during periods of intense or prolonged rainfall. Exceedance routing will be incorporated within the design to manage flows safely during extreme storm events, reducing the risk of on-site and off-site flooding.

In addition to providing hydraulic attenuation, detention basins offer opportunities for water quality improvements through settlement of sediments and associated pollutants prior to discharge. When integrated with landscape design, the basins may also contribute to enhanced visual amenity and biodiversity benefits.

The use of detention basins aligns with the SuDS hierarchical approach promoted by the local authority, providing effective site control measures where infiltration is limited or where additional downstream flow management is required to complement source control features such as tree pits and rain gardens.

3.3.2. Permeable Paving

Permeable paving will be provided in car parking spaces within the site, this will allow for surface water source quality and quantity control in alignment with the SuDS hierarchal selection order.

3.3.3. Tree Pits/Rain Gardens

The installation of tree pits/Rain Gardens along sections of the development is proposed due to the relative sizing of such installations. These will be provided in conjunction with the landscaping design where surface water will be directed to the SuDs features to provide infiltration and surface water cleaning. An overflow pipe back to the main surface water runs will be provided to prevent against flooding in scenarios where the tree pits are overwhelmed during periods of excessive rainfall.

There exists potential for these features to filter out pollutants from runoff, thus reducing the potential pollutant loadings within receiving waters. Further environmental benefits may be experienced through the promotion of biodiverse habitats associated with the introduction of tree pits. This incorporation is in alignment with the SuDS hierarchal selection order proposed by local authorities whereby source control is idealised inclusive of tree pits/rain gardens.

3.3.4. Attenuation Tank

Due to the previously identified constraints limiting the feasibility of certain SuDS measures, with the exception of detention basins, permeable paving and tree pits/rain gardens, a below-ground attenuation tank is proposed to manage surface water runoff from the roofed and paved areas of the development, as discussed further in Section 3.4.

3.4. SURFACE WATER DESIGN

The proposed surface water management strategy has been developed in accordance with Cork City Council requirements and follows the principles of the SuDS hierarchical approach, prioritising nature-based solutions where feasible.

Surface water runoff will be managed through a combination of detention basins, permeable paving, tree pits/rain gardens and below-ground attenuation. These measures provide effective control of runoff rates and volumes while also offering improvements in surface water quality prior to discharge.

Surface water from all roofed areas, roads, terraces and hardstanding areas will be collected via a dedicated surface water drainage network comprising gullies, drainage channels, downpipes and rainwater outlets. Runoff will be conveyed through the proposed SuDS features and attenuation measures prior to controlled discharge from the site. In addition, a petrol interceptor (NSBE010) is proposed prior to discharge to ensure hydrocarbons are removed from surface water flows.

The proposed surface water outfall is to the existing open drain located along the western boundary of the site, as indicated on Drawing No. 23141-MMS-ZZ-ST-DR-C-10002 – Proposed Surface Water Drainage Layout.

3.4.1. Discharge Control & Storage Compliance

In accordance with Cork City Council recommendations, the allowable discharge rate from the site has been restricted to a reduced Qbar value of 2.0 l/s/ha. This corresponds to a total site discharge rate of 7.40 l/s which will be provided by a hydrobrake vortex control device installed on the last manhole prior to discharge offsite.

When allowance is made for a 1 in 100-year storm event plus a 20% climate change allowance, the required on-site attenuation storage volume is 2,090m³. See InfoDrainage calculations provided in Appendix A.

The total attenuation storage provided on site exceeds this requirement, as summarised below.

Attenuation Storage Summary

SuDS Component	Storage Provided (m^3)
Detention Basin No. 1	585
Detention Basin No. 2	720
Below-ground Attenuation Tank	575
Permeable Paving	259
Total Storage Provided	**2,139**
Required Storage (1 in 100 yr + 20% CC)	2,090

Detention Basin 1

Detention Basin 1 is proposed within the central open space of the site. It has a plan area of approximately 950m², a maximum depth of 0.75m, and side slopes of 1:4. The basin is designed to provide temporary storage of surface water during major storm events, remaining dry under normal conditions. It will also integrate with the surrounding landscaping to provide amenity and biodiversity benefits.

Detention Basin 2

Detention Basin 2 is located along the southern boundary of the site, offset from the existing boundary line to allow for safe operation and maintenance. The basin has a plan area of 1350m², a depth of 0.75m, and 1:4 side slopes. Like Basin 1, it will provide temporary above-ground storage of runoff during extreme rainfall events and contribute to water quality improvements.

Attenuation Tank

A below-ground attenuation tank is provided beneath Detention Basin 1 in the central open space. The tank provides approximately 575m³ of storage and has a depth of 0.8m. It is designed to collect and store runoff from roofed and paved areas, releasing flows at a controlled rate to meet Cork City Council discharge requirements.

Permeable Paving

Approximately 1,800m² of permeable paving is proposed across the development. The paving will consist of permeable pavers with a blinding layer on a 450mm sub-base, constructed in accordance with the SuDS detail sheets. The permeable paving provides both infiltration and temporary storage, reducing surface water runoff and contributing to water quality control.

Tree Pits / Rain Gardens

Tree pits and rain gardens are incorporated throughout the site as smaller-scale SuDS features. These elements provide quantity and quality control measures, but the storage capacity will not be used in the calculations. In addition, they offer amenity and biodiversity enhancements and are designed in line with the SuDS hierarchical approach recommended by Cork City Council.

Greenfield runoff calculations, attenuation sizing and discharge control details are included in Appendix A.

All surface water drainage works will be designed and constructed in accordance with Cork City Council requirements and relevant standards.

3.5. SUSTAINABLE DRAINAGE MAINTENANCE

Examples of typical sustainable drainage maintenance needs which may be applicable to this proposed development are outlined in the following sections.

3.5.1. Detention Basin

Table 1 – Detention Basin – Sustainable Drainage Maintenance

REGULAR MAINTENANCE	**FREQUENCY**
Remove litter, debris and excessive vegetation from basin base and side slopes.	Monthly/As required
Inspect basin for standing water outside of design storm events.	Monthly/As required
Inspect inlets and outlets	Inspect monthly/As required
Check for erosion, sediment deposition or localised scour.	Inspect monthly/As required
OCCASIONAL TASKS	**FREQUENCY**
Cut grass and manage vegetation to maintain design levels and visibility.	As required (typically 2–3 times per year)
Remove accumulated silt from basin floor and inlet areas.	Annually / As required
Inspect side slopes for stability and reinstate where necessary.	Annually
Inspect access and safety features (fencing, signage where applicable).	Annually/As required
REMEDIAL WORK	**FREQUENCY**
Repair erosion, damaged lining, headwalls, or flow control structures.	As required
Remove and replace contaminated material where pollutant build-up is identified.	As required
Regrade basin base or side slopes if settlement occurs.	As required
MONITORING	**FREQUENCY**
Monitor sediment accumulation rates to confirm maintenance intervals remain suitable.	Half-yearly
Review basin performance following significant storm events.	After major rainfall events

3.5.2. Tree Pits/Rain Gardens

Table 2 – Tree Pits/Rain Gardens – Sustainable Drainage Maintenance

REGULAR MAINTENANCE	FREQUENCY
Remove litter and debris.	Monthly/As required
Manage other vegetation and remove nuisance plants.	Monthly/As required
Inspect inlets and outlets	Inspect monthly/As required
OCCASIONAL TASKS	**FREQUENCY**
Check tree health and manage tree appropriately.	Annually
Replace mulch as necessary.	As required
Water the tree.	As required
Remove silt build-up from inlets and surface.	Annually/As required
Inspect underdrain system for blockage	As required
REMEDIAL WORK	**FREQUENCY**
Even when a tree is planted in optimal conditions, scenarios like pest infection, disease, and car accidents can cause the premature death of tree being necessary removal and replating of a tree.	As required
MONITORING	**FREQUENCY**
Inspect silt accumulation rates and establish appropriate removal frequencies.	Half-yearly

3.5.3. Permeable Paving

Table 3 – Permeable Paving Maintenance

REGULAR MAINTENANCE	FREQUENCY

Brush regularly and remove sweepings from all hard surfaces. Based on site-specific observations of clogging or manufacturer's recommendations.	Monthly/ After autumn leaf fall
OCCASIONAL TASKS	**FREQUENCY**
Brush and vacuum surface once a year to prevent silt blockage and enhance design life.	Annually
Stabilise and mow contributing and adjacent areas	As required
Removal of weeds or management using direct application of appropriate herbicide	As required – Once per year on less frequently used pavements
REMEDIAL WORK	**FREQUENCY**
Monitor effectiveness of permeable pavement and when water does not infiltrate immediately advise Client of possible need for reinstatement of top layers or specialist cleaning.	As required
Recent experience suggests jet washing and suction cleaning will substantially reinstate pavement to 90% efficiency.	As required
Remediate any landscaping which has been raised to within 50mm of the paving level due to vegetation maintenance or soil slip.	As required
Remedial work to any depressions, rutting, and cracked or broken block which may be considered detrimental to the structural performance or hazardous to users. Lost jointing material should also be replaced.	As required
Rehabilitation of surface and upper substructure by remedial sweeping.	Every 10 to 15 years or as required if infiltration performance is reduced due to significant clogging.
MONITORING	**FREQUENCY**
Initial inspection	Monthly for three months after installation

Inspect for evidence of poor operation and/or weed growth – if required, take remedial action.	Every three months/48hr after large storms during the first six months
Inspect silt accumulation rates and establish appropriate brushing frequencies.	Annually
Monitor inspection chambers	Annually

3.5.4. Attenuation Tank

The proposed attenuation tank will be constructed as a reinforced concrete tank. The tank will be provided with an access chamber, with a sump located within to allow for jet wash cleaning and extraction of silt for maintenance purposes. Maintenance plans and schedules are developed based on the type of tank adopted. These specific maintenance needs should be monitored, and schedules adjusted to suit requirements. The maintenance needs discussed in Table 4 may be appropriate.

Table 4 – Attenuation Tank – Sustainable Drainage Maintenance

REGULAR MAINTENANCE	**FREQUENCY**
Inspect and identify any areas that are not operating correctly.	Monthly for three months then annually
Remove debris from the catchment surface where it may pose a risk to the tank system.	Monthly
Remove sediment from pre-treatment structures and/or internal forebays	Annually/As required
REMEDIAL WORK	**FREQUENCY**
Repair/rehabilitate inlets, outlet, overflows, and vents.	As required
MONITORING	**FREQUENCY**
Inspect inlets/outlets/vents/overflows to ensure they are in good working condition and operating as intended.	Annually
Survey the inside of tank for sediment build-up and remove if necessary	5 Years/As required

4. WASTEWATER DRAINAGE PROPOSAL

The wastewater drainage for the proposed development has been designed as a separate system to the storm with the final discharge to the existing foul sewer traversing the southern portion of the site as detailed previously and indicated on MMOS Drawing *'23141-MMS-ZZ-ST-DR-C-10001 – Proposed Foul Layout Plan'.*

All wastewater drainage stacks from the units are to be collected beneath the ground floor slab and directed to the proposed new wastewater network onsite, which is proposed to then discharge to the existing wastewater sewer traversing the southern portion of the site.

The proposed development is to comprise a total of no. 138 residential unit, a civic centre, and all ancillary works. The proposed wastewater flow for this development has been estimated as 0.779 l/s for the average Dry Weather Flow (DWF), and 4.571 l/s for the peak DWF.

Uisce Éireann has issued a Confirmation of Feasibility (REF: CDS25004956) stating that a wastewater connection is feasible based on the existing Irish Water infrastructure within the vicinity for the proposed 138 units and civic centre.

Details of the proposed wastewater drainage layout are shown indicatively on MMOS Drawing *'23141-MMS-ZZ-ST-DR-C-10001 – Proposed Foul Layout Plan'.*

It should be noted that all wastewater drainage works will be undertaken in accordance with Uisce Éireann standard details and codes of practice for wastewater as required.

5. WATER SUPPLY PROPOSAL

The proposals for the water supply will involve taking a feed from the existing watermain outside the site which is located along St. Ann's Road. Sluice valves will be provided at appropriate locations to facilitate isolation and purging of the system. Details of the proposed watermain and hydrant layout are shown on MMOS Drawing *'23141-MMS-ZZ-ST-DR-C-10003 – Proposed Watermain Layout'*.

The proposed water demand for the entire development has been estimated as 0.859 l/s for the average demand, and 4.294 l/s for the peak demand.

As per Uisce Éireann requirements, the dwelling units will have an onsite water storage tank to satisfy the water demand storage requirement and cater for possible system shutdowns.

Uisce Éireann has issued a Confirmation of Feasibility (REF: CDS25004956) stating that a water connection is feasible based on the existing Irish Water infrastructure within the vicinity for the total of no. 138 residential units and civic centre.

It should be noted that all watermain works will be undertaken in accordance with Uisce Éireann standard details and codes of practice for water as required.

APPENDIX A

(i) Permeable Paving Design

(ii) Greenfield Runoff Rate Calculation

(iii) Contributing Area Calculation

(iv) Attenuation Tank Calculation

(v) Proposed Petrol Interceptor

i) PERMEABLE PAVING STORAGE CALCULATION

Item	Value
Permeable Paving Area	**1,800 m²**
Sub-Base Thickness	**450 mm**
Sub-Base Porosity	**40%**
Usability Factor	**0.80**
Gross Void Storage	**324.0 m³**
Usable / Design Storage	**259.2 m³**

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Proposed Residential Development at Blarney, Cork

Job No.: 23141
Date: 12/12/2025

Greenfield Runoff Calculation

Site Area	37000.00	m²	
SAAR (Met Eireann)	1114.5	mm	
Soil Type	3		
SPR	0.37		
Q rural	247.51	l/s	
Qbar	18.32	l/s	

Notes:	**Soil Type**	**Classification**	**SPR**
	1	Highly permeable sandy soil	0.1
Assumed	2	Fine sand / silts / sandy clay	0.3
Assumed	3	Clay deposits / silty clay	0.37
	4	Heavy clay / fine clay	0.47
	5	Exposed bedrock	0.53

If Qbar < 2L/s/ha, then use 2L/s/ha

2L/s/ha	7.40	l/s

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Job No.: 23141
Date: 12/12/2025

Contributing Area Calculation

Description	Area		Impermeability Factor	PIMP Area	Notes & SuDS Type:
Road	3279.74	m²	95%	3115.753	Attenuation
Concrete Path	9850.00	m²	90%	8865.000	Attenuation
Permeable Paving	1801.13	m²	35%	630.396	Permeable
Roof	8873.93	m²	95%	8430.230	Attenuation
Landscaping	13195.20	m²	30%	3958.560	Landscaping
Total Site Area	37000.00	m²			
Total Net Area	24999.94	m²			

Blarney Housing Development:	Date: 09/12/2025		
	Designed by: SLeonard	Checked by:	Approved By:
Report Details: Type: Inflows Storm Phase: Phase	MMOS Engineers:		

CONC. PATH

Type : Catchment Area

Area (km²)	0.00877

Preliminary Sizing

Volumetric Runoff Coefficient	0.750
Percentage Impervious (%)	90
Time of Concentration (mins)	5

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	90

ROOF

Type : Catchment Area

Area (km²)	0.00843

Preliminary Sizing

Volumetric Runoff Coefficient	0.750
Percentage Impervious (%)	95
Time of Concentration (mins)	5

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	95

LANDSCAPE

Type : Catchment Area

Area (km²)	0.00389

Preliminary Sizing

Volumetric Runoff Coefficient	0.750
Percentage Impervious (%)	30
Time of Concentration (mins)	5

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	30

Blarney Housing Development:	Date: 09/12/2025		
	Designed by: SLeonard	Checked by:	Approved By:
Report Details: Type: Inflows Storm Phase: Phase	MMOS Engineers:		

P. PAVING

Type : Catchment Area

Area (km²)	0.00063

Preliminary Sizing

Volumetric Runoff Coefficient	0.750
Percentage Impervious (%)	35
Time of Concentration (mins)	5

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	35

ROAD

Type : Catchment Area

Area (km²)	0.00321

Preliminary Sizing

Volumetric Runoff Coefficient	0.750
Percentage Impervious (%)	95
Time of Concentration (mins)	5

Dynamic Sizing

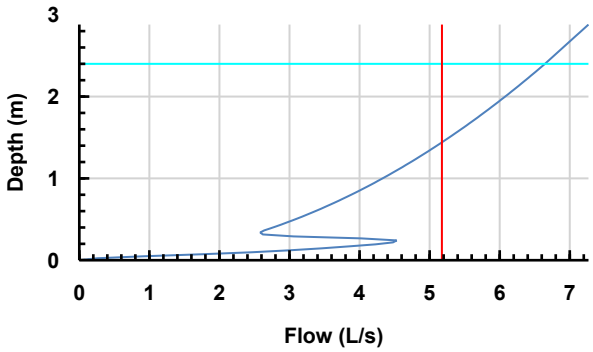
Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	95

Blarney Housing Development:	Date: 09/12/2025		
	Designed by: SLeonard	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: Phase	MMOS Engineers:		

Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
Manhole	Outlet	Pipe	Free Discharge
Manhole (1)	Outlet	Pipe (3)	Hydro-Brake®

Invert Elevation (m)	27.932
Design Depth (m)	2.400
Design Flow (L/s)	7.35
Objective	Minimize Upstream Storage Requirements
Application	Surface Water Only
Sump Available	☐
Flush Flow (L/s)	5.176
Unit Reference	CFF-0095-7350-2400-5176



Manhole (2)	Outlet	Pipe (1)	Free Discharge

Site Storage (Tank & Detention Basin)

Type : Tank

Dimensions

Exceedance Elevation (m)	30.221
Depth (m)	2.289
Base Elevation (m)	27.932
Freeboard (mm)	300
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:x)	0.00
Total Volume (m³)	2088.450

Depth (m)	Area (m²)	Volume (m³)
0.000	1050.00	0.000
2.000	1050.00	2100.000

Advanced

Perimeter	Circular
Length (m)	17.000

Blarney Housing Development:	Date: 09/12/2025		
	Designed by: SLeonard	Checked by:	Approved By:
Report Title: Rainfall Analysis Criteria	MMOS Engineers:		

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform First Flush Analysis	☐

Blarney Housing Development:	Date: 09/12/2025		
	Designed by: SLeonard	Checked by:	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	MMOS Engineers:		

Site Storage (Tank & Detention Basin)
Critical Storm: FSR: 100 years: Increase Rainfall (%): +20: 2880 mins: Winter

Type : Tank

Tables

Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Outlet(L/s)	Total Outflow (L/s)
0	0.0	0.000	0.000	0.000	0.0	0.0
5	0.1	0.000	0.005	0.000	0.0	0.0
10	0.4	0.000	0.065	0.000	0.0	0.0
15	0.5	0.000	0.193	0.000	0.0	0.0
20	0.5	0.000	0.344	0.000	0.0	0.0
25	0.5	0.000	0.500	0.000	0.0	0.0
30	0.6	0.001	0.663	0.000	0.0	0.0
35	1.2	0.001	0.912	0.000	0.0	0.0
40	1.9	0.001	1.398	0.000	0.0	0.0
45	2.0	0.002	1.993	0.000	0.0	0.0
50	2.0	0.003	2.597	0.000	0.0	0.0
55	2.0	0.003	3.203	0.000	0.0	0.0
60	2.3	0.004	3.830	0.000	0.0	0.0
65	2.9	0.004	4.596	0.000	0.0	0.0
70	3.3	0.005	5.531	0.000	0.0	0.0
75	3.3	0.006	6.509	0.000	0.0	0.0
80	3.3	0.007	7.489	0.000	0.0	0.0
85	3.3	0.008	8.468	0.000	0.0	0.0
90	3.6	0.009	9.477	0.000	0.0	0.0
95	4.1	0.010	10.638	0.000	0.0	0.0
100	4.3	0.011	11.895	0.000	0.0	0.0
105	4.3	0.013	13.168	0.000	0.0	0.0
110	4.3	0.014	14.438	0.000	0.1	0.1
115	4.3	0.015	15.704	0.000	0.1	0.1
120	4.7	0.016	17.001	0.000	0.1	0.1
125	5.0	0.018	18.449	0.000	0.1	0.1
130	5.1	0.019	19.939	0.000	0.1	0.1
135	5.1	0.020	21.427	0.000	0.1	0.1
140	5.1	0.022	22.910	0.000	0.1	0.1
145	5.1	0.023	24.397	0.000	0.1	0.1
150	5.5	0.025	25.933	0.000	0.2	0.2
155	5.7	0.026	27.572	0.000	0.2	0.2
160	5.7	0.028	29.231	0.000	0.2	0.2
165	5.7	0.029	30.886	0.000	0.2	0.2
170	5.7	0.031	32.536	0.000	0.2	0.2
175	5.8	0.033	34.192	0.000	0.2	0.2
180	6.1	0.034	35.898	0.000	0.2	0.2
185	6.2	0.036	37.661	0.000	0.3	0.3
190	6.2	0.038	39.431	0.000	0.3	0.3
195	6.2	0.039	41.196	0.000	0.3	0.3
200	6.2	0.041	42.954	0.000	0.3	0.3
205	6.3	0.043	44.715	0.000	0.4	0.4
210	6.5	0.044	46.521	0.000	0.4	0.4
215	6.5	0.046	48.351	0.000	0.4	0.4
220	6.5	0.048	50.175	0.000	0.4	0.4
225	6.5	0.050	51.991	0.000	0.5	0.5
230	6.5	0.051	53.794	0.000	0.5	0.5
235	6.6	0.053	55.599	0.000	0.5	0.5
240	6.7	0.055	57.440	0.000	0.6	0.6
245	6.7	0.057	59.284	0.000	0.6	0.6

Blarney Housing Development:	Date: 09/12/2025		
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Report Details: Type: Stormwater Control Results Storm Phase: Phase	MMOS Engineers:		

Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Outlet(L/s)	Total Outflow (L/s)
250	6.7	0.058	61.118	0.000	0.6	0.6
255	6.7	0.060	62.942	0.000	0.7	0.7
260	6.7	0.062	64.757	0.000	0.7	0.7
265	6.8	0.063	66.574	0.000	0.7	0.7
270	6.9	0.065	68.405	0.000	0.8	0.8
275	6.9	0.067	70.231	0.000	0.8	0.8
280	6.9	0.069	72.047	0.000	0.8	0.8
285	6.9	0.070	73.852	0.000	0.9	0.9
290	6.9	0.072	75.650	0.000	0.9	0.9
295	6.9	0.074	77.449	0.000	0.9	0.9
300	7.0	0.076	79.247	0.000	1.0	1.0
305	7.0	0.077	81.035	0.000	1.0	1.0
310	7.0	0.079	82.811	0.000	1.1	1.1
315	7.0	0.081	84.576	0.000	1.1	1.1
320	7.0	0.082	86.330	0.000	1.1	1.1
325	7.0	0.084	88.078	0.000	1.2	1.2
330	7.0	0.086	89.815	0.000	1.2	1.2
335	7.0	0.087	91.540	0.000	1.3	1.3
340	7.0	0.089	93.254	0.000	1.3	1.3
345	7.0	0.091	94.955	0.000	1.3	1.3
350	7.0	0.092	96.644	0.000	1.4	1.4
355	7.0	0.094	98.322	0.000	1.4	1.4
360	7.0	0.095	99.988	0.000	1.5	1.5
365	7.0	0.097	101.641	0.000	1.5	1.5
370	7.0	0.098	103.283	0.000	1.5	1.5
375	7.0	0.100	104.912	0.000	1.6	1.6
380	7.0	0.102	106.530	0.000	1.6	1.6
385	7.0	0.103	108.137	0.000	1.7	1.7
390	7.0	0.105	109.731	0.000	1.7	1.7
395	7.0	0.106	111.314	0.000	1.7	1.7
400	7.0	0.108	112.885	0.000	1.8	1.8
405	7.0	0.109	114.446	0.000	1.8	1.8
410	7.0	0.111	115.994	0.000	1.8	1.8
415	7.0	0.112	117.527	0.000	1.9	1.9
420	7.0	0.113	119.049	0.000	1.9	1.9
425	7.0	0.115	120.560	0.000	1.9	1.9
430	7.0	0.116	122.062	0.000	2.0	2.0
435	7.0	0.118	123.555	0.000	2.0	2.0
440	7.0	0.119	125.045	0.000	2.0	2.0
445	7.0	0.121	126.525	0.000	2.1	2.1
450	7.0	0.122	127.996	0.000	2.1	2.1
455	7.0	0.123	129.456	0.000	2.1	2.1
460	7.0	0.125	130.907	0.000	2.2	2.2
465	7.0	0.126	132.349	0.000	2.2	2.2
470	7.0	0.127	133.785	0.000	2.2	2.2
475	7.0	0.129	135.213	0.000	2.3	2.3
480	7.0	0.130	136.630	0.000	2.3	2.3
485	7.0	0.132	138.038	0.000	2.3	2.3
490	7.0	0.133	139.437	0.000	2.4	2.4
495	7.1	0.134	140.830	0.000	2.4	2.4
500	7.1	0.136	142.231	0.000	2.4	2.4
505	7.1	0.137	143.624	0.000	2.5	2.5
510	7.1	0.138	145.008	0.000	2.5	2.5
515	7.1	0.139	146.384	0.000	2.5	2.5
520	7.1	0.141	147.755	0.000	2.5	2.5
525	7.2	0.142	149.132	0.000	2.6	2.6
530	7.2	0.143	150.518	0.000	2.6	2.6
535	7.2	0.145	151.900	0.000	2.6	2.6

Blarney Housing Development:	Date: 09/12/2025		
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Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Outlet(L/s)	Total Outflow (L/s)
540	7.2	0.146	153.275	0.000	2.6	2.6
545	7.2	0.147	154.642	0.000	2.7	2.7
550	7.3	0.149	156.008	0.000	2.7	2.7
555	7.4	0.150	157.393	0.000	2.7	2.7
560	7.4	0.151	158.788	0.000	2.7	2.7
565	7.4	0.153	160.179	0.000	2.8	2.8
570	7.4	0.154	161.562	0.000	2.8	2.8
575	7.4	0.155	162.937	0.000	2.8	2.8
580	7.5	0.157	164.317	0.000	2.8	2.8
585	7.6	0.158	165.736	0.000	2.9	2.9
590	7.6	0.159	167.163	0.000	2.9	2.9
595	7.6	0.161	168.585	0.000	2.9	2.9
600	7.6	0.162	169.999	0.000	3.0	3.0
605	7.7	0.163	171.406	0.000	3.0	3.0
610	7.9	0.165	172.827	0.000	3.0	3.0
615	8.0	0.166	174.308	0.000	3.0	3.0
620	8.0	0.167	175.792	0.000	3.1	3.1
625	8.0	0.169	177.269	0.000	3.1	3.1
630	8.0	0.170	178.739	0.000	3.1	3.1
635	8.1	0.172	180.208	0.000	3.1	3.1
640	8.3	0.173	181.709	0.000	3.2	3.2
645	8.4	0.175	183.270	0.000	3.2	3.2
650	8.4	0.176	184.833	0.000	3.2	3.2
655	8.4	0.178	186.389	0.000	3.2	3.2
660	8.4	0.179	187.937	0.000	3.3	3.3
665	8.6	0.181	189.494	0.000	3.3	3.3
670	8.8	0.182	191.111	0.000	3.3	3.3
675	8.9	0.184	192.774	0.000	3.3	3.3
680	8.9	0.185	194.438	0.000	3.4	3.4
685	8.9	0.187	196.093	0.000	3.4	3.4
690	8.9	0.188	197.741	0.000	3.4	3.4
695	9.2	0.190	199.408	0.000	3.4	3.4
700	9.4	0.192	201.170	0.000	3.5	3.5
705	9.5	0.193	202.961	0.000	3.5	3.5
710	9.5	0.195	204.749	0.000	3.5	3.5
715	9.5	0.197	206.530	0.000	3.5	3.5
720	9.5	0.198	208.304	0.000	3.6	3.6
725	9.9	0.200	210.112	0.000	3.6	3.6
730	10.2	0.202	212.055	0.000	3.6	3.6
735	10.2	0.204	214.012	0.000	3.7	3.7
740	10.2	0.206	215.960	0.000	3.7	3.7
745	10.2	0.208	217.900	0.000	3.7	3.7
750	10.3	0.209	219.844	0.000	3.7	3.7
755	10.7	0.211	221.857	0.000	3.8	3.8
760	11.0	0.213	223.991	0.000	3.8	3.8
765	11.0	0.215	226.133	0.000	3.8	3.8
770	11.0	0.217	228.267	0.000	3.9	3.9
775	11.0	0.219	230.392	0.000	3.9	3.9
780	11.2	0.222	232.533	0.000	3.9	3.9
785	11.7	0.224	234.779	0.000	3.9	3.9
790	11.8	0.226	237.123	0.000	4.0	4.0
795	11.8	0.228	239.468	0.000	4.0	4.0
800	11.8	0.230	241.805	0.000	4.0	4.0
805	11.8	0.233	244.131	0.000	4.1	4.1
810	12.3	0.235	246.495	0.000	4.1	4.1
815	12.7	0.237	249.010	0.000	4.1	4.1
820	12.8	0.240	251.588	0.000	4.2	4.2
825	12.8	0.242	254.162	0.000	4.2	4.2

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830	12.8	0.245	256.725	0.000	4.2	4.2
835	12.8	0.247	259.278	0.000	4.3	4.3
840	13.5	0.250	261.892	0.000	4.3	4.3
845	13.8	0.252	264.710	0.000	4.3	4.3
850	13.8	0.255	267.549	0.000	4.4	4.4
855	13.8	0.258	270.382	0.000	4.4	4.4
860	13.8	0.260	273.206	0.000	4.4	4.4
865	14.0	0.263	276.039	0.000	4.4	4.4
870	14.7	0.266	278.976	0.000	4.5	4.5
875	15.0	0.269	282.096	0.000	4.5	4.5
880	14.9	0.272	285.228	0.000	4.5	4.5
885	14.9	0.275	288.353	0.000	4.5	4.5
890	14.9	0.278	291.477	0.000	4.5	4.5
895	15.2	0.281	294.611	0.000	4.6	4.6
900	15.8	0.284	297.887	0.000	4.6	4.6
905	16.0	0.287	301.300	0.000	4.6	4.6
910	15.9	0.290	304.714	0.000	4.6	4.6
915	15.9	0.294	308.125	0.000	4.6	4.6
920	15.9	0.297	311.532	0.000	4.6	4.6
925	16.6	0.300	315.027	0.000	4.5	4.5
930	17.1	0.304	318.753	0.000	4.4	4.4
935	17.2	0.307	322.591	0.000	4.3	4.3
940	17.2	0.311	326.454	0.000	4.3	4.3
945	17.2	0.315	330.341	0.000	4.2	4.2
950	17.2	0.318	334.252	0.000	4.1	4.1
955	18.1	0.322	338.316	0.000	3.9	3.9
960	18.4	0.326	342.693	0.000	3.7	3.7
965	18.4	0.331	347.163	0.000	3.4	3.4
970	18.4	0.335	351.701	0.000	3.2	3.2
975	18.4	0.339	356.295	0.000	3.1	3.1
980	18.6	0.344	360.940	0.000	3.0	3.0
985	19.6	0.348	365.771	0.000	2.9	2.9
990	19.8	0.353	370.859	0.000	2.8	2.8
995	19.8	0.358	375.979	0.000	2.7	2.7
1000	19.8	0.363	381.106	0.000	2.7	2.7
1005	19.8	0.368	386.099	0.000	2.7	2.7
1010	20.2	0.373	391.279	0.000	2.7	2.7
1015	21.0	0.378	396.654	0.000	2.7	2.7
1020	21.2	0.383	402.208	0.000	2.7	2.7
1025	21.2	0.389	407.763	0.000	2.7	2.7
1030	21.2	0.394	413.313	0.000	2.7	2.7
1035	21.2	0.399	418.858	0.000	2.7	2.7
1040	21.9	0.405	424.484	0.000	2.7	2.7
1045	22.5	0.410	430.333	0.000	2.5	2.5
1050	22.6	0.416	436.299	0.000	3.3	3.3
1055	22.6	0.421	442.218	0.000	2.8	2.8
1060	22.6	0.427	448.157	0.000	2.5	2.5
1065	22.6	0.433	454.081	0.000	3.0	3.0
1070	23.7	0.439	460.124	0.000	2.4	2.4
1075	24.1	0.445	466.471	0.000	2.8	2.8
1080	24.1	0.451	472.853	0.000	2.8	2.8
1085	24.1	0.457	479.230	0.000	2.8	2.8
1090	24.1	0.463	485.601	0.000	2.9	2.9
1095	24.2	0.469	491.979	0.000	2.9	2.9
1100	25.4	0.475	498.508	0.000	2.9	2.9
1105	25.6	0.482	505.299	0.000	2.9	2.9
1110	25.6	0.488	512.090	0.000	2.9	2.9
1115	25.6	0.494	518.875	0.000	3.0	3.0

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1120	25.6	0.501	525.654	0.000	3.0	3.0
1125	26.0	0.507	532.477	0.000	3.0	3.0
1130	26.9	0.514	539.493	0.000	3.0	3.0
1135	27.1	0.521	546.700	0.000	3.1	3.1
1140	27.1	0.528	553.906	0.000	3.1	3.1
1145	27.1	0.535	561.104	0.000	3.1	3.1
1150	27.1	0.542	568.297	0.000	3.1	3.1
1155	27.3	0.548	575.544	0.000	3.1	3.1
1160	28.1	0.556	582.947	0.000	3.2	3.2
1165	28.2	0.563	590.461	0.000	3.2	3.2
1170	28.2	0.570	597.964	0.000	3.2	3.2
1175	28.2	0.577	605.456	0.000	3.2	3.2
1180	28.1	0.584	612.938	0.000	3.2	3.2
1185	29.2	0.591	620.544	0.000	3.3	3.3
1190	29.6	0.599	628.393	0.000	3.3	3.3
1195	29.6	0.606	636.280	0.000	3.3	3.3
1200	29.5	0.614	644.155	0.000	3.3	3.3
1205	29.5	0.621	652.021	0.000	3.3	3.3
1210	29.6	0.629	659.892	0.000	3.4	3.4
1215	30.8	0.636	667.922	0.000	3.4	3.4
1220	30.9	0.644	676.180	0.000	3.4	3.4
1225	30.9	0.652	684.431	0.000	3.4	3.4
1230	30.9	0.660	692.672	0.000	3.4	3.4
1235	30.9	0.668	700.908	0.000	3.5	3.5
1240	31.3	0.676	709.189	0.000	3.5	3.5
1245	32.2	0.684	717.650	0.000	3.5	3.5
1250	32.2	0.692	726.268	0.000	3.5	3.5
1255	32.2	0.700	734.876	0.000	3.5	3.5
1260	32.2	0.708	743.479	0.000	3.6	3.6
1265	32.2	0.717	752.077	0.000	3.6	3.6
1270	32.9	0.725	760.755	0.000	3.6	3.6
1275	33.5	0.733	769.624	0.000	3.3	3.3
1280	33.5	0.742	778.588	0.000	3.8	3.8
1285	33.5	0.750	787.539	0.000	3.8	3.8
1290	33.5	0.759	796.490	0.000	3.6	3.6
1295	33.5	0.767	805.449	0.000	3.8	3.8
1300	34.4	0.776	814.514	0.000	3.4	3.4
1305	34.7	0.785	823.773	0.000	3.3	3.3
1310	34.7	0.794	833.060	0.000	4.7	4.7
1315	34.7	0.802	842.338	0.000	3.8	3.8
1320	34.7	0.811	851.619	0.000	3.9	3.9
1325	34.8	0.820	860.913	0.000	4.0	4.0
1330	35.8	0.829	870.347	0.000	3.9	3.9
1335	35.8	0.838	879.961	0.000	3.9	3.9
1340	35.9	0.847	889.590	0.000	3.9	3.9
1345	35.9	0.857	898.870	0.000	4.3	4.3
1350	35.9	0.866	908.546	0.000	4.2	4.2
1355	36.2	0.875	918.048	0.000	4.0	4.0
1360	36.9	0.884	928.115	0.000	4.0	4.0
1365	37.3	0.893	937.984	0.000	1.0	1.0
1370	37.0	0.903	947.502	0.000	4.2	4.2
1375	37.0	0.912	957.311	0.000	3.6	3.6
1380	37.0	0.922	967.646	0.000	1.4	1.4
1385	37.4	0.931	977.378	0.000	4.4	4.4
1390	37.8	0.941	987.042	0.000	4.3	4.3
1395	37.9	0.950	997.215	0.000	4.3	4.3
1400	37.9	0.960	1007.229	0.000	4.3	4.3
1405	38.0	0.969	1017.337	0.000	1.6	1.6

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1410	38.0	0.979	1027.492	0.000	8.4	8.4
1415	38.4	0.989	1037.744	0.000	4.4	4.4
1420	38.6	0.998	1047.852	0.000	4.5	4.5
1425	38.7	1.008	1058.156	0.000	1.9	1.9
1430	38.6	1.018	1068.870	0.000	6.5	6.5
1435	38.7	1.028	1078.889	0.000	4.1	4.1
1440	38.7	1.038	1089.228	0.000	4.5	4.5
1445	38.8	1.048	1099.574	0.000	4.4	4.4
1450	38.8	1.057	1109.938	0.000	4.4	4.4
1455	38.9	1.067	1120.314	0.000	4.4	4.4
1460	39.0	1.077	1130.713	0.000	4.4	4.4
1465	39.0	1.087	1140.905	0.000	4.4	4.4
1470	39.0	1.097	1151.286	0.000	1.4	1.4
1475	38.6	1.107	1161.643	0.000	4.6	4.6
1480	38.5	1.116	1171.785	0.000	4.6	4.6
1485	38.5	1.126	1182.381	0.000	4.0	4.0
1490	38.6	1.136	1192.037	0.000	4.8	4.8
1495	38.6	1.145	1202.149	0.000	4.7	4.7
1500	38.3	1.155	1212.584	0.000	5.3	5.3
1505	37.9	1.164	1222.208	0.000	4.7	4.7
1510	37.9	1.174	1232.150	0.000	4.8	4.8
1515	38.0	1.183	1242.424	0.000	7.0	7.0
1520	38.0	1.193	1251.935	0.000	4.9	4.9
1525	37.9	1.202	1262.119	0.000	4.9	4.9
1530	38.7	1.212	1271.686	0.000	4.9	4.9
1535	37.0	1.221	1281.380	0.000	4.9	4.9
1540	37.1	1.230	1291.099	0.000	4.9	4.9
1545	37.1	1.239	1300.919	0.000	5.8	5.8
1550	37.4	1.248	1310.659	0.000	4.7	4.7
1555	37.6	1.257	1320.156	0.000	1.1	1.1
1560	36.3	1.267	1329.521	0.000	5.0	5.0
1565	36.2	1.275	1338.939	0.000	5.8	5.8
1570	36.1	1.284	1348.271	0.000	4.9	4.9
1575	36.2	1.293	1357.283	0.000	5.0	5.0
1580	35.7	1.302	1366.534	0.000	5.0	5.0
1585	36.8	1.311	1376.060	0.000	-0.4	-0.4
1590	34.6	1.319	1385.036	0.000	5.4	5.4
1595	35.1	1.328	1394.004	0.000	5.2	5.2
1600	34.8	1.336	1402.846	0.000	5.9	5.9
1605	27.2	1.344	1411.695	0.000	11.9	11.9
1610	12.4	1.353	1420.965	0.000	5.0	5.0
1615	6.0	1.362	1429.566	0.000	4.8	4.8
1620	33.6	1.370	1438.544	0.000	4.9	4.9
1625	8.6	1.378	1446.821	0.000	5.0	5.0
1630	25.5	1.386	1454.906	0.000	4.0	4.0
1635	18.4	1.394	1463.666	0.000	5.3	5.3
1640	29.8	1.402	1471.889	0.000	5.0	5.0
1645	44.1	1.409	1479.661	0.000	5.2	5.2
1650	22.0	1.417	1487.800	0.000	5.0	5.0
1655	38.3	1.424	1494.839	0.000	5.2	5.2
1660	15.9	1.431	1502.738	0.000	5.3	5.3
1665	25.6	1.439	1510.500	0.000	5.1	5.1
1670	28.3	1.446	1518.151	0.000	5.3	5.3
1675	28.9	1.453	1525.577	0.000	5.1	5.1
1680	0.1	1.460	1532.472	0.000	4.9	4.9
1685	26.4	1.468	1541.066	0.000	5.3	5.3
1690	34.5	1.475	1548.172	0.000	5.1	5.1
1695	28.0	1.482	1556.365	0.000	5.1	5.1

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Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Outlet(L/s)	Total Outflow (L/s)
1700	39.4	1.490	1564.624	0.000	5.1	5.1
1705	98.2	1.498	1572.658	0.000	4.9	4.9
1710	44.5	1.505	1579.966	0.000	5.0	5.0
1715	26.9	1.512	1586.998	0.000	5.2	5.2
1720	9.8	1.518	1593.705	0.000	5.3	5.3
1725	28.2	1.524	1600.120	0.000	5.2	5.2
1730	22.3	1.530	1606.449	0.000	5.2	5.2
1735	12.1	1.536	1612.779	0.000	5.0	5.0
1740	28.6	1.543	1619.823	0.000	5.8	5.8
1745	56.0	1.549	1626.254	0.000	5.2	5.2
1750	0.0	1.555	1633.016	0.000	5.3	5.3
1755	41.0	1.561	1638.557	0.000	5.3	5.3
1760	8.2	1.566	1644.068	0.000	5.1	5.1
1765	12.2	1.572	1650.816	0.000	5.5	5.5
1770	18.3	1.577	1655.370	0.000	5.4	5.4
1775	52.5	1.581	1660.097	0.000	5.3	5.3
1780	17.7	1.587	1666.810	0.000	5.3	5.3
1785	27.7	1.593	1672.994	0.000	5.4	5.4
1790	21.2	1.599	1679.138	0.000	5.3	5.3
1795	11.8	1.605	1685.426	0.000	5.4	5.4
1800	25.0	1.611	1691.308	0.000	5.3	5.3
1805	4.7	1.617	1697.740	0.000	5.5	5.5
1810	18.7	1.623	1703.600	0.000	5.4	5.4
1815	6.4	1.628	1709.063	0.000	5.6	5.6
1820	25.5	1.633	1714.811	0.000	5.4	5.4
1825	0.0	1.639	1720.731	0.000	5.4	5.4
1830	22.0	1.644	1725.633	0.000	5.4	5.4
1835	28.4	1.649	1731.129	0.000	5.5	5.5
1840	27.1	1.654	1736.872	0.000	5.5	5.5
1845	55.7	1.660	1743.340	0.000	5.3	5.3
1850	6.1	1.665	1748.381	0.000	5.5	5.5
1855	26.0	1.670	1753.229	0.000	5.5	5.5
1860	8.4	1.674	1757.586	0.000	5.7	5.7
1865	6.7	1.678	1762.263	0.000	5.4	5.4
1870	24.9	1.684	1767.684	0.000	5.4	5.4
1875	37.3	1.688	1772.034	0.000	5.5	5.5
1880	6.8	1.692	1776.814	0.000	5.6	5.6
1885	54.8	1.697	1781.293	0.000	5.5	5.5
1890	28.9	1.701	1785.868	0.000	5.5	5.5
1895	19.2	1.705	1790.534	0.000	5.5	5.5
1900	0.0	1.710	1795.531	0.000	5.2	5.2
1905	7.0	1.714	1799.242	0.000	5.6	5.6
1910	17.0	1.719	1804.461	0.000	5.6	5.6
1915	0.0	1.723	1808.901	0.000	5.7	5.7
1920	24.3	1.726	1812.242	0.000	5.5	5.5
1925	19.1	1.731	1817.337	0.000	5.6	5.6
1930	7.9	1.735	1822.043	0.000	5.5	5.5
1935	12.6	1.739	1825.995	0.000	5.6	5.6
1940	10.3	1.743	1830.038	0.000	5.7	5.7
1945	30.0	1.747	1834.012	0.000	5.6	5.6
1950	10.3	1.751	1838.295	0.000	5.6	5.6
1955	11.7	1.755	1842.587	0.000	5.6	5.6
1960	0.3	1.758	1846.364	0.000	5.6	5.6
1965	44.3	1.762	1849.985	0.000	5.8	5.8
1970	16.2	1.764	1852.674	0.000	5.6	5.6
1975	4.5	1.767	1855.368	0.000	5.4	5.4
1980	44.4	1.770	1858.418	0.000	5.6	5.6
1985	49.1	1.773	1861.416	0.000	5.7	5.7

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1990	29.2	1.776	1865.015	0.000	5.6	5.6
1995	13.1	1.779	1868.282	0.000	5.7	5.7
2000	13.3	1.782	1870.954	0.000	5.7	5.7
2005	10.8	1.785	1873.858	0.000	5.7	5.7
2010	7.1	1.787	1876.744	0.000	5.7	5.7
2015	18.1	1.791	1880.161	0.000	5.6	5.6
2020	35.5	1.793	1882.771	0.000	5.5	5.5
2025	46.9	1.796	1885.433	0.000	5.6	5.6
2030	3.1	1.798	1888.013	0.000	5.8	5.8
2035	12.6	1.801	1890.911	0.000	5.7	5.7
2040	12.0	1.804	1894.089	0.000	5.7	5.7
2045	16.2	1.806	1896.673	0.000	5.5	5.5
2050	24.0	1.804	1894.066	0.000	5.8	5.8
2055	16.4	1.803	1893.086	0.000	5.7	5.7
2060	42.5	1.801	1890.674	0.000	5.7	5.7
2065	13.7	1.799	1889.162	0.000	5.6	5.6
2070	62.4	1.797	1887.153	0.000	5.7	5.7
2075	15.0	1.795	1885.177	0.000	5.5	5.5
2080	20.7	1.796	1885.390	0.000	5.7	5.7
2085	23.7	1.798	1887.401	0.000	5.8	5.8
2090	5.7	1.800	1889.466	0.000	5.8	5.8
2095	18.1	1.801	1890.721	0.000	5.8	5.8
2100	14.0	1.803	1892.772	0.000	5.7	5.7
2105	9.5	1.804	1894.619	0.000	5.7	5.7
2110	1.8	1.806	1896.196	0.000	5.8	5.8
2115	9.7	1.807	1897.681	0.000	5.8	5.8
2120	9.9	1.809	1899.021	0.000	5.7	5.7
2125	19.1	1.810	1900.450	0.000	5.6	5.6
2130	3.0	1.811	1901.829	0.000	5.6	5.6
2135	11.1	1.813	1903.244	0.000	5.7	5.7
2140	2.0	1.814	1904.630	0.000	5.9	5.9
2145	9.3	1.815	1906.081	0.000	5.7	5.7
2150	0.0	1.817	1907.963	0.000	5.9	5.9
2155	5.8	1.819	1909.849	0.000	5.7	5.7
2160	20.0	1.820	1911.381	0.000	5.7	5.7
2165	4.0	1.822	1912.690	0.000	5.7	5.7
2170	18.9	1.823	1914.142	0.000	5.7	5.7
2175	1.5	1.824	1915.231	0.000	5.7	5.7
2180	11.3	1.825	1916.382	0.000	5.7	5.7
2185	13.7	1.826	1917.169	0.000	5.8	5.8
2190	0.8	1.827	1918.264	0.000	5.7	5.7
2195	1.1	1.828	1919.300	0.000	5.5	5.5
2200	9.0	1.829	1920.574	0.000	5.5	5.5
2205	13.5	1.830	1921.435	0.000	5.6	5.6
2210	0.5	1.831	1922.823	0.000	5.7	5.7
2215	7.2	1.832	1923.556	0.000	5.7	5.7
2220	10.1	1.833	1924.367	0.000	5.7	5.7
2225	37.3	1.834	1925.128	0.000	5.9	5.9
2230	6.2	1.834	1925.980	0.000	5.7	5.7
2235	10.4	1.835	1926.517	0.000	6.5	6.5
2240	0.0	1.834	1926.095	0.000	5.8	5.8
2245	12.6	1.835	1927.109	0.000	5.7	5.7
2250	14.1	1.836	1927.895	0.000	5.7	5.7
2255	13.0	1.837	1928.503	0.000	5.7	5.7
2260	9.2	1.837	1929.207	0.000	5.8	5.8
2265	1.7	1.838	1930.167	0.000	5.7	5.7
2270	4.6	1.838	1930.410	0.000	5.7	5.7
2275	2.2	1.839	1930.881	0.000	5.8	5.8

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2280	2.3	1.838	1930.072	0.000	5.6	5.6
2285	0.0	1.839	1930.966	0.000	6.1	6.1
2290	7.4	1.839	1931.415	0.000	5.7	5.7
2295	2.1	1.840	1932.132	0.000	5.7	5.7
2300	0.0	1.841	1932.574	0.000	5.6	5.6
2305	1.2	1.841	1933.358	0.000	5.7	5.7
2310	6.6	1.842	1934.076	0.000	5.7	5.7
2315	5.1	1.842	1934.543	0.000	5.7	5.7
2320	5.3	1.843	1935.327	0.000	5.8	5.8
2325	9.3	1.844	1935.981	0.000	5.7	5.7
2330	7.9	1.845	1936.798	0.000	5.7	5.7
2335	7.4	1.845	1937.470	0.000	5.7	5.7
2340	8.3	1.846	1938.069	0.000	5.8	5.8
2345	7.5	1.846	1938.707	0.000	5.7	5.7
2350	9.9	1.847	1939.393	0.000	5.8	5.8
2355	0.0	1.847	1939.876	0.000	6.1	6.1
2360	11.9	1.848	1940.375	0.000	5.8	5.8
2365	0.0	1.849	1940.949	0.000	5.8	5.8
2370	0.3	1.849	1941.396	0.000	5.6	5.6
2375	0.3	1.849	1941.811	0.000	5.8	5.8
2380	15.7	1.850	1942.024	0.000	5.7	5.7
2385	7.2	1.850	1942.558	0.000	5.8	5.8
2390	0.6	1.851	1943.197	0.000	5.8	5.8
2395	3.9	1.851	1943.533	0.000	5.7	5.7
2400	4.2	1.852	1944.253	0.000	5.7	5.7
2405	7.9	1.852	1944.629	0.000	5.8	5.8
2410	28.9	1.853	1945.329	0.000	6.0	6.0
2415	1.7	1.852	1944.682	0.000	5.7	5.7
2420	3.3	1.853	1945.205	0.000	5.8	5.8
2425	3.3	1.853	1945.562	0.000	5.8	5.8
2430	58.7	1.853	1945.863	0.000	6.0	6.0
2435	3.1	1.853	1946.032	0.000	5.9	5.9
2440	13.6	1.854	1946.211	0.000	5.8	5.8
2445	8.2	1.854	1946.468	0.000	5.8	5.8
2450	7.7	1.854	1946.577	0.000	5.7	5.7
2455	2.2	1.854	1946.717	0.000	5.8	5.8
2460	21.1	1.854	1946.913	0.000	5.7	5.7
2465	24.8	1.855	1947.417	0.000	5.7	5.7
2470	0.0	1.855	1947.414	0.000	5.6	5.6
2475	3.9	1.855	1947.444	0.000	5.8	5.8
2480	0.4	1.855	1947.713	0.000	5.8	5.8
2485	5.3	1.855	1948.211	0.000	5.8	5.8
2490	13.6	1.856	1948.509	0.000	5.8	5.8
2495	3.6	1.856	1948.861	0.000	5.9	5.9
2500	16.0	1.856	1948.920	0.000	5.6	5.6
2505	1.4	1.857	1949.587	0.000	5.9	5.9
2510	0.0	1.857	1950.320	0.000	5.9	5.9
2515	1.8	1.857	1949.779	0.000	5.8	5.8
2520	3.3	1.858	1950.427	0.000	5.8	5.8
2525	0.6	1.858	1950.795	0.000	5.8	5.8
2530	0.0	1.858	1951.435	0.000	5.8	5.8
2535	17.7	1.858	1951.221	0.000	5.7	5.7
2540	6.0	1.859	1951.628	0.000	5.7	5.7
2545	8.9	1.859	1952.125	0.000	5.8	5.8
2550	7.1	1.860	1952.580	0.000	5.8	5.8
2555	9.3	1.860	1952.890	0.000	5.7	5.7
2560	7.9	1.860	1953.342	0.000	5.8	5.8
2565	9.3	1.861	1953.626	0.000	5.8	5.8

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2570	8.0	1.861	1954.097	0.000	5.8	5.8
2575	9.0	1.861	1954.377	0.000	5.8	5.8
2580	6.7	1.862	1954.841	0.000	5.7	5.7
2585	5.9	1.862	1955.120	0.000	5.9	5.9
2590	4.1	1.862	1955.592	0.000	5.7	5.7
2595	3.1	1.863	1955.862	0.000	5.9	5.9
2600	2.7	1.863	1956.307	0.000	5.7	5.7
2605	2.9	1.863	1956.560	0.000	5.8	5.8
2610	7.8	1.864	1956.911	0.000	5.7	5.7
2615	8.3	1.864	1957.637	0.000	5.8	5.8
2620	4.0	1.864	1956.932	0.000	5.8	5.8
2625	2.7	1.864	1957.182	0.000	5.8	5.8
2630	0.5	1.864	1957.342	0.000	5.8	5.8
2635	7.4	1.864	1957.534	0.000	5.8	5.8
2640	6.4	1.864	1957.172	0.000	5.8	5.8
2645	7.0	1.863	1956.662	0.000	5.8	5.8
2650	19.4	1.864	1957.074	0.000	5.8	5.8
2655	6.2	1.864	1957.239	0.000	5.8	5.8
2660	5.5	1.864	1957.429	0.000	5.8	5.8
2665	0.0	1.864	1957.591	0.000	5.8	5.8
2670	0.9	1.865	1957.808	0.000	5.6	5.6
2675	0.0	1.864	1957.614	0.000	5.2	5.2
2680	0.0	1.864	1957.325	0.000	6.2	6.2
2685	9.8	1.864	1957.269	0.000	5.7	5.7
2690	7.5	1.863	1956.360	0.000	5.8	5.8
2695	0.9	1.863	1956.476	0.000	5.8	5.8
2700	12.4	1.861	1954.496	0.000	5.9	5.9
2705	7.7	1.861	1954.534	0.000	5.7	5.7
2710	14.5	1.863	1956.590	0.000	5.7	5.7
2715	12.0	1.863	1956.451	0.000	5.7	5.7
2720	4.3	1.863	1956.495	0.000	5.8	5.8
2725	7.2	1.863	1956.540	0.000	5.8	5.8
2730	6.6	1.863	1956.645	0.000	5.8	5.8
2735	1.9	1.864	1956.815	0.000	5.7	5.7
2740	4.7	1.864	1956.783	0.000	5.8	5.8
2745	4.7	1.863	1956.506	0.000	5.8	5.8
2750	1.6	1.863	1956.409	0.000	5.8	5.8
2755	6.9	1.863	1956.109	0.000	5.8	5.8
2760	6.0	1.863	1955.944	0.000	5.8	5.8
2765	16.3	1.863	1955.671	0.000	5.8	5.8
2770	3.6	1.862	1955.499	0.000	5.8	5.8
2775	0.3	1.862	1955.188	0.000	5.8	5.8
2780	5.4	1.861	1954.537	0.000	5.8	5.8
2785	4.7	1.861	1954.027	0.000	5.8	5.8
2790	3.4	1.860	1953.438	0.000	5.8	5.8
2795	3.3	1.860	1952.935	0.000	5.9	5.9
2800	1.0	1.859	1952.452	0.000	5.8	5.8
2805	4.2	1.859	1951.718	0.000	5.7	5.7
2810	0.5	1.858	1951.025	0.000	5.7	5.7
2815	4.3	1.857	1950.195	0.000	5.8	5.8
2820	3.6	1.857	1949.483	0.000	5.8	5.8
2825	0.0	1.856	1948.625	0.000	5.7	5.7
2830	2.9	1.855	1947.579	0.000	5.8	5.8
2835	2.4	1.854	1946.474	0.000	5.7	5.7
2840	2.3	1.853	1945.425	0.000	5.8	5.8
2845	1.4	1.852	1944.264	0.000	5.8	5.8
2850	0.2	1.851	1943.112	0.000	5.7	5.7
2855	0.0	1.849	1941.768	0.000	5.8	5.8

Blarney Housing Development:	Date: 09/12/2025		
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Report Details: Type: Stormwater Control Results Storm Phase: Phase	MMOS Engineers:		

Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Outlet(L/s)	Total Outflow (L/s)
2860	0.8	1.848	1940.318	0.000	5.8	5.8
2865	0.0	1.846	1938.734	0.000	5.8	5.8
2870	0.1	1.845	1936.803	0.000	5.7	5.7
2875	1.9	1.843	1935.261	0.000	5.7	5.7
2880	22.1	1.840	1932.245	0.000	5.8	5.8
2885	0.2	1.839	1930.812	0.000	5.7	5.7
2890	0.0	1.837	1929.071	0.000	5.7	5.7
2895	0.1	1.836	1927.370	0.000	5.7	5.7
2900	0.1	1.834	1925.633	0.000	5.7	5.7
2905	0.0	1.832	1923.896	0.000	5.7	5.7
2910	0.1	1.831	1922.198	0.000	5.7	5.7
2915	0.0	1.829	1920.462	0.000	5.7	5.7
2920	0.0	1.827	1918.762	0.000	5.7	5.7
2925	0.1	1.826	1917.030	0.000	5.7	5.7
2930	0.0	1.824	1915.296	0.000	5.7	5.7
2935	0.1	1.822	1913.599	0.000	5.7	5.7
2940	0.1	1.821	1911.867	0.000	5.7	5.7
2945	0.0	1.819	1910.136	0.000	5.7	5.7
2950	0.1	1.818	1908.441	0.000	5.7	5.7
2955	0.0	1.816	1906.709	0.000	5.7	5.7
2960	0.0	1.814	1905.016	0.000	5.7	5.7
2965	0.2	1.813	1903.286	0.000	5.7	5.7
2970	0.0	1.811	1901.556	0.000	5.7	5.7
2975	0.0	1.809	1899.864	0.000	5.7	5.7
2980	0.1	1.808	1898.135	0.000	5.7	5.7
2985	0.0	1.806	1896.445	0.000	5.7	5.7
2990	0.0	1.804	1894.731	0.000	5.7	5.7
2995	0.0	1.803	1893.042	0.000	5.7	5.7
3000	0.0	1.801	1891.312	0.000	5.7	5.7
3005	0.0	1.800	1889.619	0.000	5.7	5.7
3010	0.0	1.798	1887.927	0.000	5.7	5.7
3015	0.0	1.796	1886.218	0.000	5.7	5.7
3020	0.0	1.795	1884.527	0.000	5.7	5.7
3025	0.0	1.793	1882.838	0.000	5.7	5.7
3030	0.0	1.792	1881.149	0.000	5.7	5.7
3035	0.0	1.790	1879.442	0.000	5.7	5.7
3040	0.0	1.788	1877.755	0.000	5.7	5.7
3045	0.0	1.787	1876.069	0.000	5.7	5.7
3050	0.0	1.785	1874.383	0.000	5.6	5.6
3055	0.0	1.783	1872.680	0.000	5.6	5.6
3060	0.0	1.782	1870.996	0.000	5.6	5.6
3065	0.0	1.780	1869.313	0.000	5.6	5.6
3070	0.0	1.779	1867.630	0.000	5.6	5.6
3075	0.0	1.777	1865.930	0.000	5.6	5.6
3080	0.0	1.775	1864.250	0.000	5.6	5.6
3085	0.0	1.774	1862.569	0.000	5.6	5.6
3090	0.0	1.772	1860.890	0.000	5.6	5.6
3095	0.0	1.771	1859.193	0.000	5.6	5.6
3100	0.0	1.769	1857.516	0.000	5.6	5.6
3105	0.0	1.767	1855.839	0.000	5.6	5.6
3110	0.0	1.766	1854.163	0.000	5.6	5.6
3115	0.0	1.764	1852.452	0.000	5.6	5.6
3120	0.0	1.763	1850.795	0.000	5.6	5.6
3125	0.0	1.761	1849.121	0.000	5.6	5.6
3130	0.0	1.759	1847.448	0.000	5.6	5.6
3135	0.0	1.758	1845.740	0.000	5.6	5.6
3140	0.0	1.756	1844.086	0.000	5.6	5.6
3145	0.0	1.755	1842.416	0.000	5.6	5.6

Blarney Housing Development:	Date: 09/12/2025		
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3150	0.0	1.753	1840.710	0.000	5.6	5.6
3155	0.0	1.751	1839.041	0.000	5.6	5.6
3160	0.0	1.750	1837.390	0.000	5.6	5.6
3165	0.0	1.748	1835.723	0.000	5.6	5.6
3170	0.0	1.747	1834.021	0.000	5.6	5.6
3175	0.0	1.745	1832.355	0.000	5.6	5.6
3180	0.0	1.743	1830.707	0.000	5.6	5.6
3185	0.0	1.742	1829.008	0.000	5.6	5.6
3190	0.0	1.740	1827.344	0.000	5.6	5.6
3195	0.0	1.739	1825.681	0.000	5.6	5.6
3200	0.0	1.737	1824.001	0.000	5.6	5.6
3205	0.0	1.736	1822.340	0.000	5.6	5.6
3210	0.0	1.734	1820.680	0.000	5.6	5.6
3215	0.0	1.732	1819.020	0.000	5.6	5.6
3220	0.0	1.731	1817.343	0.000	5.6	5.6
3225	0.0	1.729	1815.685	0.000	5.6	5.6
3230	0.0	1.728	1814.028	0.000	5.6	5.6
3235	0.0	1.726	1812.371	0.000	5.6	5.6
3240	0.0	1.724	1810.698	0.000	5.6	5.6
3245	0.0	1.723	1809.042	0.000	5.5	5.5
3250	0.0	1.721	1807.388	0.000	5.5	5.5
3255	0.0	1.720	1805.734	0.000	5.5	5.5
3260	0.0	1.718	1804.064	0.000	5.5	5.5
3265	0.0	1.717	1802.412	0.000	5.5	5.5
3270	0.0	1.715	1800.760	0.000	5.5	5.5
3275	0.0	1.713	1799.110	0.000	5.5	5.5
3280	0.0	1.712	1797.442	0.000	5.5	5.5
3285	0.0	1.710	1795.793	0.000	5.5	5.5
3290	0.0	1.709	1794.145	0.000	5.5	5.5
3295	0.0	1.707	1792.497	0.000	5.5	5.5
3300	0.0	1.706	1790.815	0.000	5.5	5.5
3305	0.0	1.704	1789.186	0.000	5.5	5.5
3310	0.0	1.702	1787.541	0.000	5.5	5.5
3315	0.0	1.701	1785.896	0.000	5.5	5.5
3320	0.0	1.699	1784.218	0.000	5.5	5.5
3325	0.0	1.698	1782.592	0.000	5.5	5.5
3330	0.0	1.696	1780.950	0.000	5.5	5.5
3335	0.0	1.695	1779.273	0.000	5.5	5.5
3340	0.0	1.693	1777.633	0.000	5.5	5.5
3345	0.0	1.691	1776.010	0.000	5.5	5.5
3350	0.0	1.690	1774.371	0.000	5.5	5.5
3355	0.0	1.688	1772.698	0.000	5.5	5.5
3360	0.0	1.687	1771.060	0.000	5.5	5.5
3365	0.0	1.685	1769.441	0.000	5.5	5.5
3370	0.0	1.684	1767.770	0.000	5.5	5.5
3375	0.0	1.682	1766.135	0.000	5.5	5.5
3380	0.0	1.680	1764.500	0.000	5.5	5.5
3385	0.0	1.679	1762.849	0.000	5.5	5.5
3390	0.0	1.677	1761.216	0.000	5.5	5.5
3395	0.0	1.676	1759.584	0.000	5.5	5.5
3400	0.0	1.674	1757.952	0.000	5.5	5.5
3405	0.0	1.673	1756.304	0.000	5.5	5.5
3410	0.0	1.671	1754.674	0.000	5.5	5.5
3415	0.0	1.670	1753.045	0.000	5.5	5.5
3420	0.0	1.668	1751.417	0.000	5.5	5.5
3425	0.0	1.666	1749.772	0.000	5.5	5.5
3430	0.0	1.665	1748.145	0.000	5.5	5.5
3435	0.0	1.663	1746.563	0.000	5.5	5.5

Blarney Housing Development:	Date: 09/12/2025		
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3440	0.0	1.662	1744.900	0.000	5.4	5.4
3445	0.0	1.660	1743.257	0.000	5.4	5.4
3450	0.0	1.659	1741.638	0.000	5.4	5.4
3455	0.0	1.657	1740.013	0.000	5.4	5.4
3460	0.0	1.656	1738.365	0.000	5.4	5.4
3465	0.0	1.654	1736.751	0.000	5.4	5.4
3470	0.0	1.652	1735.141	0.000	5.4	5.4
3475	0.0	1.651	1733.495	0.000	5.4	5.4
3480	0.0	1.649	1731.862	0.000	5.4	5.4
3485	0.0	1.648	1730.255	0.000	5.4	5.4
3490	0.0	1.646	1728.628	0.000	5.4	5.4
3495	0.1	1.645	1727.043	0.000	5.4	5.4
3500	0.0	1.643	1725.422	0.000	5.4	5.4
3505	0.2	1.642	1723.802	0.000	5.4	5.4
3510	0.0	1.640	1722.217	0.000	5.4	5.4
3515	0.1	1.639	1720.598	0.000	5.4	5.4
3520	0.1	1.637	1719.015	0.000	5.4	5.4
3525	0.0	1.636	1717.401	0.000	5.4	5.4
3530	0.1	1.634	1715.784	0.000	5.4	5.4
3535	0.1	1.633	1714.205	0.000	5.4	5.4
3540	0.0	1.631	1712.590	0.000	5.4	5.4
3545	0.1	1.630	1710.977	0.000	5.4	5.4
3550	0.1	1.628	1709.398	0.000	5.4	5.4
3555	0.1	1.626	1707.787	0.000	5.4	5.4
3560	0.1	1.625	1706.208	0.000	5.4	5.4
3565	0.0	1.623	1704.599	0.000	5.4	5.4
3570	0.3	1.622	1702.993	0.000	5.4	5.4
3575	0.1	1.620	1701.418	0.000	5.4	5.4
3580	0.0	1.619	1699.810	0.000	5.4	5.4
3585	0.3	1.617	1698.235	0.000	5.4	5.4
3590	0.1	1.616	1696.632	0.000	5.4	5.4
3595	0.0	1.614	1695.027	0.000	5.4	5.4
3600	0.1	1.613	1693.457	0.000	5.4	5.4
3605	0.0	1.611	1691.853	0.000	5.4	5.4
3610	0.1	1.610	1690.250	0.000	5.4	5.4
3615	0.1	1.608	1688.681	0.000	5.4	5.4
3620	0.0	1.607	1687.079	0.000	5.4	5.4
3625	0.1	1.605	1685.515	0.000	5.4	5.4
3630	0.0	1.604	1683.916	0.000	5.4	5.4
3635	0.1	1.602	1682.316	0.000	5.4	5.4
3640	0.2	1.601	1680.752	0.000	5.3	5.3
3645	0.0	1.599	1679.154	0.000	5.3	5.3
3650	0.1	1.598	1677.557	0.000	5.3	5.3
3655	0.1	1.596	1675.995	0.000	5.3	5.3
3660	0.0	1.595	1674.399	0.000	5.3	5.3
3665	0.4	1.593	1672.839	0.000	5.3	5.3
3670	0.0	1.592	1671.245	0.000	5.3	5.3
3675	0.2	1.590	1669.654	0.000	5.3	5.3
3680	0.1	1.589	1668.093	0.000	5.3	5.3
3685	0.0	1.587	1666.503	0.000	5.3	5.3
3690	0.1	1.586	1664.912	0.000	5.3	5.3
3695	0.1	1.584	1663.356	0.000	5.3	5.3
3700	0.1	1.583	1661.768	0.000	5.3	5.3
3705	0.1	1.581	1660.215	0.000	5.3	5.3
3710	0.0	1.580	1658.627	0.000	5.3	5.3
3715	0.1	1.578	1657.041	0.000	5.3	5.3
3720	0.1	1.577	1655.489	0.000	5.3	5.3
3725	0.0	1.575	1653.906	0.000	5.3	5.3

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3730	0.2	1.574	1652.322	0.000	5.3	5.3
3735	0.1	1.572	1650.773	0.000	5.3	5.3
3740	0.0	1.571	1649.193	0.000	5.3	5.3
3745	0.1	1.569	1647.646	0.000	5.3	5.3
3750	0.0	1.568	1646.068	0.000	5.3	5.3
3755	0.2	1.566	1644.488	0.000	5.3	5.3
3760	0.1	1.565	1642.944	0.000	5.3	5.3
3765	0.0	1.563	1641.370	0.000	5.3	5.3
3770	0.2	1.562	1639.792	0.000	5.3	5.3
3775	0.0	1.560	1638.254	0.000	5.3	5.3
3780	0.1	1.559	1636.678	0.000	5.3	5.3
3785	0.3	1.557	1635.139	0.000	5.3	5.3
3790	0.0	1.556	1633.566	0.000	5.3	5.3
3795	0.2	1.554	1631.994	0.000	5.3	5.3
3800	0.2	1.553	1630.458	0.000	5.3	5.3
3805	0.1	1.551	1628.891	0.000	5.3	5.3
3810	0.0	1.550	1627.358	0.000	5.3	5.3
3815	0.0	1.548	1625.735	0.000	5.3	5.3
3820	0.0	1.547	1624.137	0.000	5.2	5.2
3825	7.3	1.545	1622.559	0.000	5.5	5.5
3830	5.9	1.544	1620.735	0.000	5.1	5.1
3835	0.0	1.542	1619.130	0.000	5.3	5.3
3840	4.7	1.540	1617.332	0.000	5.2	5.2
3845	7.8	1.539	1615.630	0.000	5.1	5.1
3850	5.7	1.537	1613.867	0.000	5.2	5.2
3855	12.2	1.535	1612.147	0.000	5.3	5.3
3860	0.0	1.534	1610.649	0.000	5.3	5.3
3865	0.0	1.532	1608.946	0.000	5.2	5.2
3870	0.0	1.531	1607.392	0.000	5.2	5.2
3875	0.0	1.529	1605.809	0.000	5.2	5.2
3880	0.0	1.528	1604.258	0.000	5.2	5.2
3885	0.0	1.526	1602.699	0.000	5.2	5.2
3890	0.0	1.525	1601.127	0.000	5.2	5.2
3895	0.1	1.523	1599.579	0.000	5.2	5.2
3900	0.1	1.522	1598.024	0.000	5.2	5.2
3905	0.0	1.520	1596.464	0.000	5.2	5.2
3910	0.0	1.519	1594.900	0.000	5.2	5.2
3915	0.0	1.517	1593.375	0.000	5.2	5.2
3920	0.0	1.516	1591.785	0.000	5.2	5.2
3925	0.0	1.515	1590.243	0.000	5.2	5.2
3930	0.1	1.513	1588.685	0.000	5.2	5.2
3935	0.0	1.512	1587.134	0.000	5.2	5.2
3940	0.0	1.510	1585.603	0.000	5.2	5.2
3945	0.0	1.509	1584.050	0.000	5.2	5.2
3950	0.0	1.507	1582.475	0.000	5.2	5.2
3955	0.0	1.506	1580.956	0.000	5.2	5.2
3960	0.0	1.504	1579.380	0.000	5.2	5.2
3965	0.1	1.503	1577.843	0.000	5.2	5.2
3970	0.0	1.501	1576.292	0.000	5.2	5.2
3975	0.0	1.500	1574.737	0.000	5.2	5.2
3980	0.0	1.498	1573.196	0.000	5.2	5.2
3985	0.0	1.497	1571.673	0.000	5.2	5.2
3990	0.0	1.495	1570.105	0.000	5.2	5.2
3995	0.0	1.494	1568.590	0.000	5.2	5.2
4000	0.0	1.492	1567.019	0.000	5.2	5.2
4005	0.0	1.491	1565.488	0.000	5.2	5.2
4010	0.0	1.489	1563.932	0.000	5.2	5.2
4015	0.2	1.488	1562.422	0.000	5.2	5.2

Blarney Housing Development:	Date: 09/12/2025		
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4020	0.0	1.487	1560.841	0.000	5.2	5.2
4025	0.7	1.485	1559.297	0.000	5.1	5.1
4030	0.1	1.484	1557.768	0.000	5.1	5.1
4035	0.0	1.482	1556.202	0.000	5.1	5.1
4040	0.1	1.481	1554.661	0.000	5.1	5.1
4045	0.0	1.479	1553.133	0.000	5.1	5.1
4050	0.0	1.478	1551.644	0.000	5.1	5.1
4055	0.0	1.476	1550.067	0.000	5.1	5.1
4060	0.0	1.475	1548.539	0.000	5.1	5.1
4065	0.0	1.473	1546.998	0.000	5.1	5.1
4070	0.0	1.472	1545.463	0.000	5.1	5.1
4075	0.0	1.470	1543.954	0.000	5.1	5.1
4080	0.0	1.469	1542.414	0.000	5.1	5.1
4085	0.0	1.468	1540.939	0.000	5.1	5.1
4090	0.0	1.466	1539.400	0.000	5.1	5.1
4095	0.0	1.465	1537.862	0.000	5.1	5.1
4100	0.0	1.463	1536.325	0.000	5.1	5.1
4105	0.0	1.462	1534.789	0.000	5.1	5.1
4110	0.0	1.460	1533.286	0.000	5.1	5.1
4115	0.0	1.459	1531.751	0.000	5.1	5.1
4120	0.0	1.457	1530.250	0.000	5.1	5.1
4125	0.0	1.456	1528.708	0.000	5.1	5.1
4130	0.3	1.454	1527.225	0.000	4.9	4.9
4135	1.5	1.453	1525.686	0.000	5.0	5.0
4140	0.0	1.452	1524.205	0.000	5.1	5.1
4145	0.0	1.450	1522.660	0.000	5.1	5.1
4150	0.0	1.449	1521.130	0.000	5.1	5.1
4155	0.0	1.447	1519.615	0.000	5.1	5.1
4160	0.0	1.446	1518.081	0.000	5.1	5.1
4165	0.0	1.444	1516.586	0.000	5.1	5.1
4170	0.0	1.443	1515.059	0.000	5.1	5.1
4175	0.0	1.441	1513.566	0.000	5.1	5.1
4180	0.0	1.440	1512.041	0.000	5.1	5.1
4185	0.0	1.439	1510.580	0.000	5.1	5.1
4190	0.0	1.437	1509.056	0.000	5.1	5.1
4195	0.0	1.436	1507.533	0.000	5.1	5.1
4200	0.0	1.434	1506.011	0.000	5.1	5.1
4205	0.0	1.433	1504.489	0.000	5.1	5.1
4210	0.0	1.431	1503.000	0.000	5.1	5.1
4215	0.0	1.430	1501.480	0.000	5.0	5.0
4220	0.0	1.429	1499.993	0.000	5.0	5.0
4225	0.0	1.427	1498.474	0.000	5.0	5.0
4230	0.0	1.426	1496.957	0.000	5.0	5.0
4235	0.0	1.424	1495.503	0.000	5.0	5.0
4240	0.0	1.423	1493.987	0.000	5.0	5.0
4245	0.0	1.421	1492.503	0.000	5.0	5.0
4250	0.0	1.420	1490.970	0.000	5.0	5.0
4255	0.0	1.419	1489.441	0.000	5.0	5.0
4260	0.0	1.417	1487.944	0.000	5.0	5.0
4265	0.0	1.416	1486.495	0.000	5.0	5.0
4270	0.0	1.414	1484.945	0.000	5.0	5.0
4275	0.0	1.413	1483.443	0.000	5.0	5.0
4280	0.0	1.411	1481.988	0.000	5.0	5.0
4285	0.0	1.410	1480.475	0.000	5.0	5.0
4290	0.0	1.409	1478.963	0.000	5.0	5.0
4295	0.0	1.407	1477.452	0.000	5.0	5.0
4300	0.0	1.406	1475.973	0.000	5.0	5.0
4305	0.0	1.404	1474.463	0.000	5.0	5.0

Blarney Housing Development:	Date: 09/12/2025		
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Report Details: Type: Stormwater Control Results Storm Phase: Phase	MMOS Engineers:		

Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Outlet(L/s)	Total Outflow (L/s)
4310	0.0	1.403	1472.987	0.000	5.0	5.0
4315	0.0	1.401	1471.479	0.000	5.0	5.0
4320	0.0	1.400	1469.972	0.000	5.0	5.0
4325	0.0	1.399	1468.530	0.000	5.0	5.0
4330	0.0	1.397	1467.025	0.000	5.0	5.0
4335	0.0	1.396	1465.521	0.000	5.0	5.0
4340	0.0	1.394	1464.018	0.000	5.0	5.0
4345	0.0	1.393	1462.547	0.000	5.0	5.0
4350	0.0	1.391	1461.046	0.000	5.0	5.0
4355	0.0	1.390	1459.563	0.000	5.0	5.0
4360	0.0	1.389	1458.123	0.000	5.0	5.0
4365	0.0	1.387	1456.592	0.000	5.0	5.0
4370	0.0	1.386	1455.095	0.000	5.0	5.0
4375	0.0	1.384	1453.629	0.000	5.0	5.0
4380	0.0	1.383	1452.165	0.000	5.0	5.0
4385	0.0	1.382	1450.658	0.000	5.0	5.0
4390	0.0	1.380	1449.176	0.000	5.0	5.0
4395	0.0	1.379	1447.692	0.000	5.0	5.0
4400	0.0	1.377	1446.225	0.000	5.0	5.0
4405	0.1	1.376	1444.737	0.000	5.0	5.0
4410	0.0	1.375	1443.271	0.000	4.9	4.9
4415	0.0	1.373	1441.832	0.000	4.9	4.9
4420	0.0	1.372	1440.323	0.000	4.9	4.9
4425	0.0	1.370	1438.870	0.000	4.9	4.9
4430	0.0	1.369	1437.365	0.000	4.9	4.9
4435	0.0	1.368	1435.923	0.000	4.9	4.9
4440	0.0	1.366	1434.422	0.000	4.9	4.9
4445	0.1	1.365	1432.977	0.000	4.9	4.9
4450	0.0	1.363	1431.479	0.000	4.9	4.9
4455	0.0	1.362	1430.052	0.000	4.9	4.9
4460	0.0	1.360	1428.532	0.000	4.9	4.9
4465	0.0	1.359	1427.061	0.000	4.9	4.9
4470	0.0	1.358	1425.587	0.000	4.9	4.9
4475	0.0	1.356	1424.132	0.000	4.9	4.9
4480	0.0	1.355	1422.651	0.000	4.9	4.9
4485	0.0	1.354	1421.218	0.000	4.9	4.9
4490	0.0	1.352	1419.770	0.000	4.9	4.9
4495	0.0	1.351	1418.281	0.000	4.9	4.9
4500	0.0	1.349	1416.857	0.000	4.9	4.9
4505	0.0	1.348	1415.362	0.000	4.9	4.9
4510	0.0	1.347	1413.924	0.000	4.9	4.9
4515	0.0	1.345	1412.416	0.000	4.9	4.9
4520	0.0	1.344	1411.022	0.000	4.9	4.9
4525	0.0	1.342	1409.515	0.000	4.9	4.9
4530	0.0	1.341	1408.059	0.000	4.9	4.9
4535	0.1	1.340	1406.591	0.000	4.9	4.9
4540	0.0	1.338	1405.192	0.000	4.9	4.9
4545	0.1	1.337	1403.712	0.000	4.9	4.9
4550	0.0	1.335	1402.280	0.000	4.9	4.9
4555	0.0	1.334	1400.794	0.000	4.9	4.9
4560	0.0	1.333	1399.376	0.000	4.9	4.9
4565	0.0	1.331	1397.925	0.000	4.9	4.9
4570	0.0	1.330	1396.403	0.000	4.9	4.9
4575	0.0	1.329	1394.971	0.000	4.9	4.9
4580	0.0	1.327	1393.506	0.000	4.9	4.9
4585	0.0	1.326	1392.104	0.000	4.9	4.9
4590	0.0	1.324	1390.641	0.000	4.9	4.9
4595	0.0	1.323	1389.179	0.000	4.9	4.9

Blarney Housing Development:	Date: 09/12/2025		
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Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Outlet(L/s)	Total Outflow (L/s)
4600	0.0	1.322	1387.718	0.000	4.9	4.9
4605	0.0	1.320	1386.288	0.000	4.8	4.8
4610	0.0	1.319	1384.828	0.000	4.8	4.8
4615	0.0	1.317	1383.369	0.000	4.8	4.8
4620	0.0	1.316	1381.972	0.000	4.8	4.8
4625	0.0	1.315	1380.514	0.000	4.8	4.8
4630	0.0	1.313	1379.057	0.000	4.8	4.8
4635	0.0	1.312	1377.602	0.000	4.8	4.8
4640	0.0	1.311	1376.177	0.000	4.8	4.8
4645	0.0	1.309	1374.723	0.000	4.8	4.8
4650	0.0	1.308	1373.270	0.000	4.8	4.8
4655	0.0	1.307	1371.879	0.000	4.8	4.8
4660	0.0	1.305	1370.427	0.000	4.8	4.8
4665	0.0	1.304	1368.977	0.000	4.8	4.8
4670	0.0	1.302	1367.527	0.000	4.8	4.8
4675	0.0	1.301	1366.109	0.000	4.8	4.8
4680	0.0	1.300	1364.661	0.000	4.8	4.8
4685	0.0	1.298	1363.275	0.000	4.8	4.8
4690	0.0	1.297	1361.828	0.000	4.8	4.8
4695	0.0	1.296	1360.383	0.000	4.8	4.8
4700	0.0	1.294	1358.938	0.000	4.8	4.8
4705	0.0	1.293	1357.495	0.000	4.8	4.8
4710	0.0	1.291	1356.082	0.000	4.8	4.8
4715	0.0	1.290	1354.640	0.000	4.8	4.8
4720	0.0	1.289	1353.260	0.000	4.8	4.8
4725	0.0	1.287	1351.819	0.000	4.8	4.8
4730	0.0	1.286	1350.379	0.000	4.8	4.8
4735	0.0	1.285	1348.940	0.000	4.8	4.8
4740	0.0	1.283	1347.502	0.000	4.8	4.8
4745	0.0	1.282	1346.094	0.000	4.8	4.8
4750	0.0	1.281	1344.657	0.000	4.8	4.8
4755	0.0	1.279	1343.282	0.000	4.8	4.8
4760	0.0	1.278	1341.846	0.000	4.8	4.8
4765	0.0	1.277	1340.411	0.000	4.8	4.8
4770	0.0	1.275	1338.977	0.000	4.8	4.8
4775	0.0	1.274	1337.544	0.000	4.8	4.8
4780	0.0	1.272	1336.171	0.000	4.8	4.8
4785	0.0	1.271	1334.739	0.000	4.8	4.8
4790	0.0	1.270	1333.307	0.000	4.8	4.8
4795	0.0	1.268	1331.875	0.000	4.8	4.8
4800	0.0	1.267	1330.505	0.000	4.8	4.8
4805	0.0	1.266	1329.076	0.000	4.8	4.8
4810	0.0	1.264	1327.647	0.000	4.7	4.7
4815	0.0	1.263	1326.219	0.000	4.7	4.7
4820	0.0	1.262	1324.852	0.000	4.7	4.7
4825	0.0	1.260	1323.426	0.000	4.7	4.7
4830	0.0	1.259	1322.001	0.000	4.7	4.7
4835	0.0	1.258	1320.577	0.000	4.7	4.7
4840	0.0	1.256	1319.213	0.000	4.7	4.7
4845	0.0	1.255	1317.790	0.000	4.7	4.7
4850	0.1	1.254	1316.369	0.000	4.7	4.7
4855	0.0	1.252	1314.948	0.000	4.7	4.7
4860	0.0	1.251	1313.528	0.000	4.7	4.7
4865	0.0	1.250	1312.168	0.000	4.7	4.7
4870	0.0	1.248	1310.750	0.000	4.7	4.7
4875	0.0	1.247	1309.333	0.000	4.7	4.7
4880	0.0	1.246	1307.916	0.000	4.7	4.7
4885	0.0	1.244	1306.560	0.000	4.7	4.7

Blarney Housing Development:	Date: 09/12/2025		
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Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Outlet(L/s)	Total Outflow (L/s)
4890	0.0	1.243	1305.145	0.000	4.7	4.7
4895	0.0	1.242	1303.731	0.000	4.7	4.7
4900	0.0	1.240	1302.371	0.000	4.7	4.7
4905	0.0	1.239	1300.923	0.000	4.7	4.7
4910	0.1	1.238	1299.556	0.000	4.5	4.5
4915	0.0	1.236	1298.124	0.000	4.7	4.7
4920	0.0	1.235	1296.744	0.000	4.7	4.7
4925	0.0	1.234	1295.363	0.000	5.1	5.1
4930	0.0	1.232	1294.035	0.000	4.6	4.6
4935	0.0	1.231	1292.587	0.000	4.8	4.8
4940	0.2	1.230	1291.181	0.000	4.7	4.7
4945	0.1	1.228	1289.815	0.000	4.7	4.7
4950	0.1	1.227	1288.436	0.000	4.7	4.7
4955	0.1	1.226	1287.041	0.000	4.7	4.7
4960	0.0	1.224	1285.648	0.000	4.7	4.7
4965	0.1	1.223	1284.280	0.000	4.7	4.7
4970	0.1	1.222	1282.913	0.000	4.7	4.7
4975	0.0	1.220	1281.513	0.000	4.7	4.7
4980	0.0	1.219	1280.110	0.000	4.7	4.7
4985	0.2	1.218	1278.745	0.000	4.7	4.7
4990	0.1	1.217	1277.381	0.000	4.7	4.7
4995	0.0	1.215	1275.958	0.000	4.6	4.6
5000	0.0	1.214	1274.596	0.000	4.6	4.6
5005	0.1	1.213	1273.226	0.000	4.6	4.6
5010	0.0	1.211	1271.856	0.000	4.6	4.6
5015	0.1	1.210	1270.424	0.000	4.6	4.6
5020	0.4	1.209	1269.040	0.000	4.6	4.6
5025	0.0	1.207	1267.644	0.000	4.6	4.6
5030	0.0	1.206	1266.276	0.000	4.6	4.6
5035	0.1	1.205	1264.926	0.000	4.6	4.6
5040	0.1	1.203	1263.544	0.000	4.6	4.6
5045	0.0	1.202	1262.188	0.000	4.6	4.6
5050	0.0	1.201	1260.819	0.000	4.6	4.6
5055	0.1	1.199	1259.403	0.000	4.7	4.7
5060	0.0	1.198	1258.004	0.000	4.7	4.7
5065	0.1	1.197	1256.706	0.000	4.6	4.6
5070	0.1	1.196	1255.360	0.000	4.6	4.6
5075	0.1	1.194	1254.010	0.000	4.6	4.6
5080	0.0	1.193	1252.585	0.000	4.6	4.6
5085	0.1	1.192	1251.234	0.000	4.6	4.6
5090	0.1	1.190	1249.891	0.000	4.6	4.6
5095	0.0	1.189	1248.499	0.000	4.6	4.6
5100	0.1	1.188	1247.143	0.000	4.7	4.7
5105	0.1	1.186	1245.821	0.000	0.9	0.9
5110	0.1	1.185	1244.480	0.000	4.6	4.6
5115	0.1	1.184	1243.095	0.000	4.8	4.8
5120	0.0	1.183	1241.793	0.000	4.7	4.7
5125	0.1	1.181	1240.420	0.000	4.7	4.7
5130	0.1	1.180	1239.074	0.000	4.5	4.5
5135	0.1	1.179	1237.713	0.000	4.5	4.5
5140	0.0	1.177	1236.414	0.000	4.3	4.3
5145	0.1	1.176	1235.074	0.000	4.5	4.5
5150	0.1	1.175	1233.740	0.000	4.7	4.7
5155	0.1	1.174	1232.436	0.000	4.7	4.7
5160	0.1	1.172	1231.078	0.000	4.9	4.9
5165	0.0	1.171	1229.692	0.000	4.6	4.6
5170	0.1	1.170	1228.320	0.000	4.4	4.4
5175	0.1	1.169	1226.950	0.000	4.8	4.8

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5180	0.0	1.167	1225.677	0.000	5.7	5.7
5185	0.1	1.166	1224.334	0.000	2.1	2.1
5190	0.0	1.165	1222.956	0.000	4.5	4.5
5195	0.1	1.163	1221.632	0.000	4.6	4.6
5200	0.1	1.162	1220.320	0.000	4.7	4.7
5205	0.0	1.161	1218.911	0.000	4.6	4.6
5210	0.1	1.160	1217.615	0.000	4.4	4.4
5215	0.1	1.158	1216.244	0.000	4.6	4.6
5220	0.1	1.157	1214.921	0.000	4.2	4.2
5225	0.1	1.156	1213.558	0.000	4.5	4.5
5230	0.1	1.154	1212.281	0.000	4.5	4.5
5235	0.1	1.153	1210.928	0.000	4.5	4.5
5240	0.2	1.152	1209.599	0.000	4.6	4.6
5245	0.1	1.151	1208.230	0.000	4.8	4.8
5250	0.0	1.149	1206.934	0.000	4.5	4.5
5255	0.1	1.148	1205.541	0.000	4.5	4.5
5260	0.1	1.147	1204.251	0.000	4.5	4.5
5265	0.1	1.146	1202.894	0.000	6.3	6.3
5270	0.1	1.144	1201.630	0.000	4.6	4.6
5275	0.1	1.143	1200.326	0.000	5.1	5.1
5280	0.1	1.142	1199.030	0.000	4.8	4.8
5285	0.1	1.141	1197.651	0.000	4.5	4.5
5290	0.1	1.139	1196.325	0.000	4.5	4.5
5295	0.1	1.138	1194.955	0.000	4.6	4.6
5300	0.1	1.137	1193.650	0.000	4.5	4.5
5305	0.0	1.136	1192.297	0.000	4.5	4.5
5310	0.0	1.134	1191.023	0.000	3.8	3.8
5315	0.1	1.133	1189.640	0.000	4.5	4.5
5320	0.0	1.132	1188.345	0.000	4.5	4.5
5325	0.1	1.130	1187.036	0.000	4.4	4.4
5330	0.0	1.129	1185.700	0.000	4.5	4.5
5335	0.1	1.128	1184.421	0.000	4.3	4.3
5340	0.1	1.127	1183.042	0.000	4.5	4.5
5345	0.1	1.125	1181.794	0.000	4.6	4.6
5350	0.1	1.124	1180.464	0.000	4.5	4.5
5355	0.2	1.123	1179.074	0.000	4.5	4.5
5360	0.0	1.122	1177.774	0.000	4.5	4.5
5365	0.1	1.120	1176.457	0.000	4.5	4.5
5370	0.1	1.119	1175.172	0.000	4.4	4.4
5375	0.0	1.118	1173.859	0.000	4.5	4.5
5380	0.1	1.117	1172.561	0.000	4.5	4.5
5385	0.1	1.115	1171.217	0.000	4.5	4.5
5390	0.1	1.114	1169.915	0.000	4.5	4.5
5395	0.1	1.113	1168.570	0.000	4.4	4.4
5400	0.1	1.112	1167.241	0.000	4.4	4.4
5405	0.2	1.110	1165.985	0.000	4.5	4.5
5410	0.2	1.109	1164.630	0.000	4.4	4.4
5415	0.1	1.108	1163.362	0.000	4.4	4.4
5420	0.2	1.107	1162.004	0.000	4.4	4.4
5425	0.1	1.105	1160.729	0.000	4.5	4.5
5430	0.1	1.104	1159.473	0.000	4.6	4.6
5435	0.1	1.103	1158.138	0.000	4.5	4.5
5440	0.2	1.102	1156.843	0.000	4.3	4.3
5445	0.1	1.100	1155.576	0.000	4.3	4.3
5450	0.1	1.099	1154.290	0.000	4.3	4.3
5455	0.1	1.098	1153.028	0.000	4.4	4.4
5460	0.1	1.097	1151.682	0.000	5.5	5.5
5465	0.1	1.096	1150.375	0.000	4.4	4.4

Blarney Housing Development:	Date: 09/12/2025		
	Designed by: SLeonard	Checked by:	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	MMOS Engineers:		

Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Outlet(L/s)	Total Outflow (L/s)
5470	0.1	1.094	1149.103	0.000	4.4	4.4
5475	0.1	1.093	1147.797	0.000	4.4	4.4
5480	0.0	1.092	1146.496	0.000	4.4	4.4
5485	0.0	1.091	1145.171	0.000	4.4	4.4
5490	0.1	1.089	1143.880	0.000	4.4	4.4
5495	0.0	1.088	1142.599	0.000	4.4	4.4
5500	0.1	1.087	1141.283	0.000	4.4	4.4
5505	0.1	1.086	1139.980	0.000	4.4	4.4
5510	0.0	1.084	1138.714	0.000	4.5	4.5
5515	0.1	1.083	1137.402	0.000	4.4	4.4
5520	0.1	1.082	1136.127	0.000	4.4	4.4
5525	0.1	1.081	1134.808	0.000	4.4	4.4
5530	0.1	1.080	1133.553	0.000	4.3	4.3
5535	0.1	1.078	1132.242	0.000	4.4	4.4
5540	0.1	1.077	1130.921	0.000	4.4	4.4
5545	0.1	1.076	1129.631	0.000	4.9	4.9
5550	0.1	1.075	1128.399	0.000	4.3	4.3
5555	0.1	1.073	1127.151	0.000	4.3	4.3
5560	0.0	1.072	1125.849	0.000	4.2	4.2
5565	0.1	1.071	1124.568	0.000	4.3	4.3
5570	0.1	1.070	1123.226	0.000	4.1	4.1
5575	0.1	1.069	1122.004	0.000	4.5	4.5
5580	0.1	1.067	1120.665	0.000	4.4	4.4
5585	0.1	1.066	1119.446	0.000	4.5	4.5
5590	0.0	1.065	1118.134	0.000	3.6	3.6
5595	0.1	1.064	1116.937	0.000	4.4	4.4
5600	0.1	1.062	1115.675	0.000	4.5	4.5
5605	0.1	1.061	1114.391	0.000	5.1	5.1
5610	0.1	1.060	1113.139	0.000	4.2	4.2
5615	0.4	1.059	1111.745	0.000	3.2	3.2
5620	0.0	1.058	1110.481	0.000	4.3	4.3
5625	0.4	1.056	1109.172	0.000	1.0	1.0
5630	0.2	1.055	1107.922	0.000	4.5	4.5
5635	0.0	1.054	1106.632	0.000	4.5	4.5
5640	0.1	1.053	1105.343	0.000	4.1	4.1
5645	1.2	1.051	1104.014	0.000	-0.9	-0.9
5650	0.1	1.050	1102.823	0.000	4.7	4.7
5655	0.1	1.049	1101.529	0.000	4.5	4.5
5660	0.1	1.048	1100.198	0.000	5.0	5.0
5665	0.1	1.047	1098.926	0.000	4.4	4.4
5670	0.1	1.045	1097.630	0.000	4.3	4.3
5675	0.1	1.044	1096.350	0.000	4.2	4.2
5680	0.1	1.043	1095.099	0.000	4.5	4.5
5685	0.2	1.042	1093.790	0.000	4.4	4.4
5690	0.0	1.041	1092.536	0.000	2.4	2.4
5695	0.1	1.039	1091.286	0.000	5.3	5.3
5700	0.2	1.038	1090.065	0.000	4.3	4.3
5705	0.1	1.037	1088.791	0.000	4.4	4.4
5710	0.1	1.036	1087.531	0.000	4.1	4.1
5715	0.1	1.035	1086.344	0.000	5.3	5.3
5720	0.1	1.033	1085.071	0.000	5.7	5.7
5725	0.1	1.032	1083.853	0.000	4.8	4.8
5730	0.1	1.031	1082.516	0.000	4.5	4.5
5735	0.1	1.030	1081.265	0.000	2.8	2.8
5740	0.1	1.029	1080.081	0.000	9.1	9.1
5745	0.1	1.027	1078.821	0.000	4.0	4.0
5750	0.1	1.026	1077.607	0.000	2.2	2.2
5755	0.1	1.025	1076.426	0.000	5.1	5.1

Blarney Housing Development:	Date: 09/12/2025		
	Designed by: SLeonard	Checked by:	Approved By:
Report Details: Type: Stormwater Control Results Storm Phase: Phase	MMOS Engineers:		

Time (mins)	Total Inflow (L/s)	Depth(m)	Resident Volume(m³)	Flooded Volume (m³)	Outlet(L/s)	Total Outflow (L/s)
5760	0.0	1.024	1075.148	0.000	4.3	4.3

Water Management Solutions

Klargester AquaOil Bypass MDPE and GRP / Full retention MDPE and GRP separator range

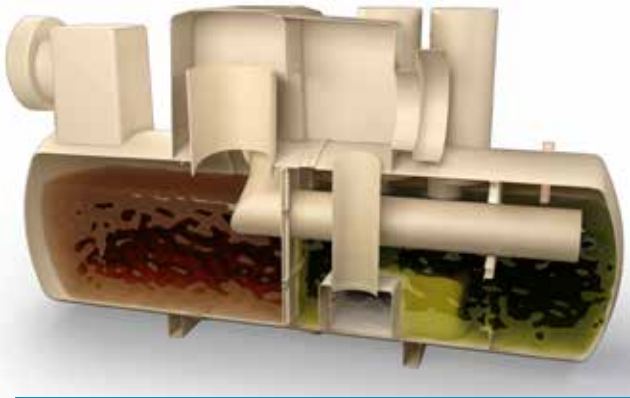
HVO ready**

170 – 69,444m²
Available to cover flow rates up to 285 litres per second

Why choose an AquaOil fuel and oil separator?

- Total peace of mind offered through SmartServ Pro remote monitoring system, for early fault detection and in line with Kingspan's Planet Passionate programme
- Total flexibility, with deep invert options available
- Range tested against full flow
- Easily utilised as part of SuDS Management Train
- Full range of bypass and full retention separators available

3 YR WARRANTY PERIOD*



Our range has been tested against full flow - why is this important?

Our units have been tested at their maximum flow rate (10l/s), unlike some products which have been tested based on bypass and therefore only 10% of the flow. This ensures total accuracy of our silt retention results, by replicating the full effect of the silt wash through.

As part of our Planet Passionate programme, Kingspan are dedicated to delivering innovative surface water management technologies, developed on the back of 70 years' experience.

*Terms and conditions apply. View online at https://www.kingspan.com/gb/en-gb/products/wastewater-management/warranty-terms

**Also suitable for Midel Oil

Kingspan

WE ARE PLANET PASSIONATE

Product Code	Flow (l/s)	Drainage Area (m^2)	Silt Capacity (ltrs)	Oil Capacity (ltrs)	Length (mm)	Diameter (mm)	Manhole Cover Dimensions (mm)	Base to Inlet Invert (mm)	Base to Inlet Invert (mm)	Min. Inlet Invert (mm)	Std Pipework Diameter (mm)
Polyethylene Chamber Construction											
NSFP003	3	170	300	30	1700	1350	600	1410	1335	550	160
NSFP006	6	335	600	60	1700	1350	600	1410	1335	550	160
GRP Chamber Construction											
NSFA010	10	555	1000	100	2610	1225	600	1050	1000	500	200
NSFA015	15	835	1500	150	3910	1225	600	1050	1000	500	200
NSFA020	20	1115	2000	200	3230	2010	600	1810	1760	1000	315
NSFA030	30	1670	3000	300	3960	2010	600	1810	1760	1000	315
NSFA040	40	2225	4000	400	4750	2010	600	1810	1760	1000	315
NSFA050	50	2780	5000	500	5790	2010	600	1810	1760	1000	315
NSFA065	65	3610	6500	650	7360	2010	600	1810	1760	1000	315
NSFA080	80	4445	8000	800	5744	2820	600	2500	2450	1000	315
NSFA100	100	5560	10000	1000	6200	2820	600	2500	2450	1000	400
NSFA125	125	6945	12500	1250	7365	2820	600	2500	2450	1000	450
NSFA150	150	8335	15000	1500	8675	2820	600	2550	2450	1000	525
NSFA175	175	9725	17500	1750	9975	2820	600	2550	2450	1000	525
NSFA200	200	11110	20000	2000	11280	2820	600	2550	2450	1000	600
NSFA210	210	11667	21000	2100	11994	2820	600	2550	2450	1000	600
NSFA225	225	12500	22500	2250	12766	2820	600	2550	2450	1000	600
NSFA240	240	13333	24000	2400	13528	2820	600	2550	2450	1000	600
NSFA255	255	14167	25500	2550	14300	2820	600	2550	2450	1000	600
NSFA270	270	15000	27000	2700	15071	2820	600	2550	2450	1000	600
NSFA285	285	15833	28500	2850	15833	2820	600	2550	2450	1000	600

Forecourt Separator Range Technical Specifications

Sepaator Class	Backfill Type	Total Capacity (Ltrs)	Darinage Area (m^2)	Peak Flow Rate (l/s)	Length (mm)	Diameter (mm)	Access Shaft Diameter (mm)	Base Inlet Invert (mm)	Base to Outlet Invert (mm)	Standard Fall Across (mm)
1	Concrete	10000	720	15	3915	2020	600	2180	2130	50
1	Concrete	10000	115	20	3915	2020	600	2180	2130	50

Bypass Separator Range Technical Specifications

Model Reference	Flow (l/s)	Peak Flow Rate (l/s)	Drainage Area (m^2) Based on UK rainwater flow	Storage Capacity (Ltrs)		Length (mm)	Diameter (mm)	Access Shaft Diameter* (mm)	Base Inlet Invert (mm)	Base to Outlet Invert (mm)	Standard Fall Across (mm)	Min Inlet Invert (mm)	Standard Pipework Diameter (mm)**
				Silt	Oil								
Polyethylene Chamber Construction													
NSBP003	3	30	1670	300	45	1700	1350	600	1420	1320	100	500	160
NSBP004	4.5	45	2500	450	60	1700	1350	600	1420	1320	100	500	160
NSBP006	6	60	3335	600	90	1700	1350	600	1420	1320	100	500	160
GRP Chamber Construction													
NSBE010	10	100	5560	1000	150	2069	1220	750	1450	1350	100	700	315
NSBE015	15	150	8335	1500	225	2947	1220	750	1450	1350	100	700	315
NSBE020	20	200	11111	2000	300	3893	1220	750	1450	1350	100	700	375
NSBE025	25	250	13890	2500	375	3575	1420	750	1680	1580	100	700	375
NSBE030	30	300	16670	3000	450	4265	1420	750	1680	1580	100	700	450
NSBE040	40	400	22222	4000	600	3230	1920	600	2185	2035	150	1000	500
NSBE050	50	500	27778	5000	750	3960	1920	600	2185	2035	150	1000	600
NSBE075	75	750	41667	7500	1125	5941	1920	600	2235	2035	200	950	675
NSBE100	100	1000	55556	10000	1500	7661	1920	600	2235	2035	200	950	750
NSBE125	125	1250	69444	12500	1875	9548	1920	600	2235	2035	200	950	750

*Some units have more than one access shaft - diameter of largest shown | **Large pipework available on request.

For more information on any of our products: **T:** +44 (0)28 3026 6799
E: klargesterinfo@kingspan.com or visit **klargester.ie**

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APPENDIX B

(i) Confirmation of Feasibility

CONFIRMATION OF FEASIBILITY

Kate Cosgrave

The Chapel
Blackrock House
Blackrock Road
Co. Cork
T12 KRK7

Uisce Éireann
Bosca OP 448
Oifig Sheachadta na
Cathrach Theas
Cathair Chorcaí

Uisce Éireann
PO Box 448
South City
Delivery Office
Cork City

www.water.ie

24 October 2025

Our Ref: CDS25004956 Pre-Connection Enquiry at, Saint Ann's Road, Blarney, Co. Cork

Dear Applicant/Agent,

We have completed the review of the Pre-Connection Enquiry.

Uisce Éireann has reviewed the pre-connection enquiry in relation to a Water & Wastewater connection for a Multi/Mixed Use Development of 141 unit(s) at, Saint Ann's Road, Blarney, Co. Cork, (the **Development)**.

Based upon the details provided we can advise the following regarding connecting to the networks;

- **Water Connection** - Feasible without infrastructure upgrade by Uisce Éireann
  Please be advised that, based on the existing pressure in the network, a Pressure Reducing Valve (PRV) may be required at this site entrance.
- **Wastewater Connection** - Feasible without infrastructure upgrade by Uisce Éireann

This letter does not constitute an offer, in whole or in part, to provide a connection to any Uisce Éireann infrastructure. Before the Development can be connected to our network(s) you must submit a connection application and be granted and sign a connection agreement with Uisce Éireann.

As the network capacity changes constantly, this review is only valid at the time of its completion. As soon as planning permission has been granted for the Development, a completed connection application should be submitted. The connection application is available at www.water.ie/connections/get-connected/

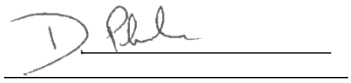
Where can you find more information?

- **Section A -** What is important to know?
- **Section B -** Details of Uisce Éireann's Network(s)

This letter is issued to provide information about the current feasibility of the proposed connection(s) to Uisce Éireann's network(s). This is not a connection offer and capacity in Uisce Éireann's network(s) may only be secured by entering into a connection agreement with Uisce Éireann.

For any further information, visit **www.water.ie/connections**, **email newconnections@water.ie** or contact 1800 278 278**.**

Yours sincerely,



Dermot Phelan
Connections Delivery Manager

Section A - What is important to know?

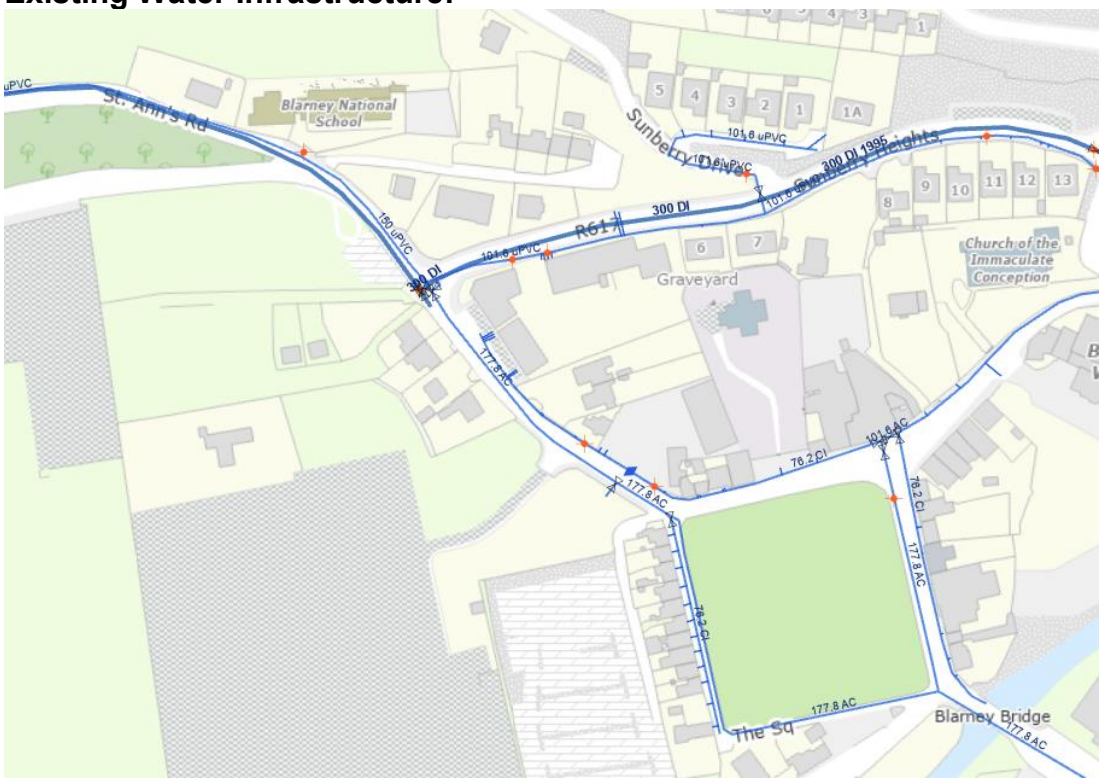
What is important to know?	Why is this important?
Do you need a contract to connect?	• Yes, a contract is required to connect. This letter does not constitute a contract or an offer in whole or in part to provide a connection to Uisce Éireann's network(s). • Before the Development can connect to Uisce Éireann's network(s), you must submit a connection application and be granted and sign a connection agreement with Uisce Éireann.
When should I submit a Connection Application?	• A connection application should only be submitted after planning permission has been granted.
Where can I find information on connection charges?	• Uisce Éireann connection charges can be found at: https://www.water.ie/connections/information/charges/
Who will carry out the connection work?	• All works to Uisce Éireann's network(s), including works in the public space, must be carried out by Uisce Éireann*. *Where a Developer has been granted specific permission and has been issued a connection offer for Self-Lay in the Public Road/Area, they may complete the relevant connection works
Fire flow Requirements	• The Confirmation of Feasibility does not extend to fire flow requirements for the Development. Fire flow requirements are a matter for the Developer to determine. • **What to do?** - Contact the relevant Local Fire Authority
Plan for disposal of storm water	• The Confirmation of Feasibility does not extend to the management or disposal of storm water or ground waters. • **What to do?** - Contact the relevant Local Authority to discuss the management or disposal of proposed storm water or ground water discharges.
Where do I find details of Uisce Éireann's network(s)?	• Requests for maps showing Uisce Éireann's network(s) can be submitted to: datarequests@water.ie

What are the design requirements for the connection(s)?	• The design and construction of the Water & Wastewater pipes and related infrastructure to be installed in this Development shall comply with ***the Uisce Éireann Connections and Developer Services Standard Details and Codes of Practice,*** available at www.water.ie/connections
Trade Effluent Licensing	• Any person discharging trade effluent** to a sewer, must have a Trade Effluent Licence issued pursuant to section 16 of the Local Government (Water Pollution) Act, 1977 (as amended). • More information and an application form for a Trade Effluent License can be found at the following link: https://www.water.ie/business/trade-effluent/about/ **trade effluent is defined in the Local Government (Water Pollution) Act, 1977 (as amended)

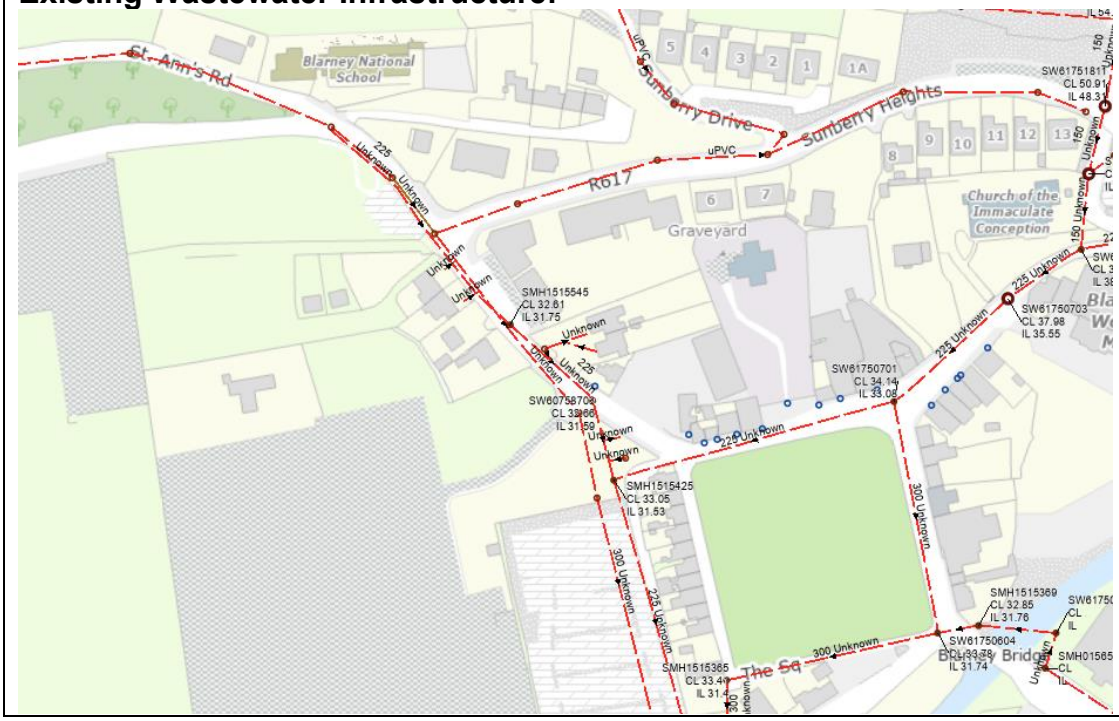
Section B – Details of Uisce Éireann's Network(s)

The map included below outlines the current Uisce Éireann infrastructure adjacent the Development: To access Uisce Éireann Maps email datarequests@water.ie

Existing Water Infrastructure:



Existing Wastewater Infrastructure:



Note: The information provided on the included maps as to the position of Uisce Éireann's underground network(s) is provided as a general guide only. The information is based on the best available information provided by each Local Authority in Ireland to Uisce Éireann.

Whilst every care has been taken in respect of the information on Uisce Éireann's network(s), Uisce Éireann assumes no responsibility for and gives no guarantees, undertakings or warranties concerning the accuracy, completeness or up to date nature of the information provided, nor does it accept any liability whatsoever arising from or out of any errors or omissions. This information should not be solely relied upon in the event of excavations or any other works being carried out in the vicinity of Uisce Éireann's underground network(s). The onus is on the parties carrying out excavations or any other works to ensure the exact location of Uisce Éireann's underground network(s) is identified prior to excavations or any other works being carried out. Service connection pipes are not generally shown but their presence should be anticipated.