

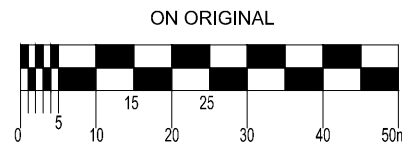
	Runoff Coefficients	Catchment A	
		Gross Areas (m2)	Factored Areas (m2)
Duplex Roof -Draining to SUDs	0.50	1501.7	750.85
Apartment - Green Roof	0.75	4276	3207
Paved Areas - Draining to Gullies	0.80	4678	3742.4
Paved Areas- Draining to SUDS (Permeable Driveways)	0.50	2614	1307
Soft Landscaping	0.15	16730.3	2509.545
		29800	11516.795



LIST OF IRISH WATER WASTEWATER STANDARD DETAILS BROUGHT INTO THE CONTRACT
STD-WW-02 TYPICAL LAYOUT FOR SEWER WITHIN NEW DEVELOPMENT
STD-WW-03 DRAIN AND SERVICE CONNECTION PIPEWORK
STD-WW-04 TYPICAL SEWER/SERVICE PIPE CONNECTION
STD-WW-05 TYPICAL SERVICE LAYOUT INDICATING SEPARATION DISTANCES
STD-WW-06 RESTRICTIONS ON TREES/SHRUBS PLANTING ADJACENT TO SEWERS
STD-WW-07 TRENCH BACKFILL & BEDDING
STD-WW-08 CONCRETE BED, HAUNCH & SURROUND TO WASTEWATER PIPES
STD-WW-09 BLOCKWORK MANHOLE (<450mmø)
STD-WW-10 PRE-CAST CONCRETE MANHOLE
STD-WW-11 IN-SITU CONCRETE MANHOLE
STD-WW-12 BACKDROP MANHOLES
STD-WW-13 PRIVATE SIDE INSPECTION CHAMBER
STD-WW-14 THRUST BLOCKS FOR RISING MAINS
STD-WW-15 SCOUR VALVE CHAMBER (FOUL RISING MAIN <200mmø)
STD-WW-16 SLUICE VALVE DETAILS FOR RISING MAINS DUCTILE IRON (D.I.) PIPE (<200mmø)(SHEET 1 OF 2)
STD-WW-17 SLUICE VALVE DETAILS FOR RISING MAIN POLYETHYLENE (P.E) PIPE (<200mmø)(SHEET 2 OF 2)
STD-WW-18 AIR VALVE CHAMBER (FOUL RISING MAIN <200mmø)
STD-WW-19 DUCT CHAMBER
STD-WW-20 EMERGENCY OVERFLOW STRUCTURE
STD-WW-21 TYPICAL DITCH/STREAM CROSSING FOR GRAVITY MAIN (SHEET 1 OF 2)
STD-WW-22 TYPICAL DITCH/STREAM CROSSING FOR RISING MAIN (SHEET 2 OF 2)
STD-WW-23 TYPICAL BRIDGE CROSSING FOR RISING MAIN (SHEET 1 OF 2)
STD-WW-24 TYPICAL BRIDGE CROSSING FOR RISING MAIN (SHEET 2 OF 2)
STD-WW-25 SECURITY GATE & FENCING
STD-WW-26 INDICATIVE PUMPING STATION LAYOUT
STD-WW-27 FLOW METER CHAMBER (FOUL RISING MAIN <200mmø)
STD-WW-28 INDICATIVE SUBMERSIBLE PUMPING STATION
STD-WW-28A INDICATIVE PRE-CAST CONCRETE SUBMERSIBLE PUMPING STATION
STD-WW-29 RISING MAIN DISCHARGE MANHOLE
STD-WW-30 KIOSK TYPE 1 PUMPING STATION & WET KIOSK (SHEET 1 OF 2)
STD-WW-31 KIOSK TYPE 2 + 3 PUMPING STATION & WET KIOSK (SHEET 2 OF 2)
STD-WW-32 HARDSTANDING AREA PUMPING STATION (PERMEABLE & IMPERMEABLE)
STD-WW-33 LAMP BOLLARD & LAMP STANDARD
STD-WW-34 VENT STACK

ORDNANCE SURVEY IRELAND LICENCE
No EN 0017920
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GOVERNMENT OF IRELAND

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- NOTES:
- GENERAL NOTES:
- ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE WORKS REQUIREMENTS.
 - ALL DIMENSIONS IN METRES UNLESS SPECIFIED OTHERWISE.
 - ALL CO-ORDINATES ARE TO IRISH TRANSVERSE MERCATOR.
 - ALL LEVELS ARE TO ORDNANCE DATUM (MAIN HEAD).
 - ALL TEMPORARY TRAFFIC & OPERATIONS MANAGEMENT SHALL COMPLY FULLY WITH THE WORKS REQUIREMENTS.
 - THE CONTRACTOR MUST LAISE DIRECTLY WITH LOCAL AUTHORITY DEPARTMENTS AS DIRECTED IN THE WORKS REQUIREMENTS.
 - ALL VEHICULAR & PEDESTRIAN, CYCLE & PRIVATE ACCESS ROUTES WITHIN AND SURROUNDING THE WORKS EXTENTS MUST BE MAINTAINED THROUGHOUT THE WORKS IN ACCORDANCE WITH THE CONTRACTORS APPROVED TEMPORARY TRAFFIC & OPERATIONS MANAGEMENT PLAN.

- DRAWING SPECIFIC NOTES:
- ALL DRAWINGS TO BE CHECKED BY CONTRACTOR ON SITE AND ENGINEER INFORMED OF DISCREPANCIES BEFORE WORK COMMENCES.
 - CONTRACTOR SHALL SATISFY HIMSELF AS TO THE ACCURACY OF EXISTING DRAINAGE LEVELS & THE LOCATION OF EXISTING SERVICES ON SITE PRIOR TO COMMENCEMENT OF WORKS ON SITE.
 - ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE NRA SPECIFICATION FOR ROAD WORKS UNLESS NOTED OTHERWISE.
 - MANHOLE COVER LEVELS ARE TO CONFORM WITH FINISHED ROAD AND PATH LEVELS.
 - ALL SURFACE WATER DRAINAGE WORKS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY'S CODE OF PRACTICE FOR DRAINAGE AND THE GUDS.
 - ALL FOUL DRAINAGE WORKS TO BE IN ACCORDANCE WITH IRISH WATERS' CODE OF PRACTICE FOR WASTEWATER SUPPLY AND WASTEWATER INFRASTRUCTURE STANDARD DETAILS.
 - FOUL SEWERS TO BE CONCRETE PIPES (SPIGOT AND SOCKET JOINTS AND RUBBER RING FITTINGS COMPLYING WITH IS EN 1916) OR THERMOPLASTIC STRUCTURED WALL PIPES (COMPLYING WITH THE PROVISION OF IS EN 13476 AND WS 4-35-01 2000) AND COMPLY WITH THE REQUIREMENTS OF THE IRISH WATER CODE OF PRACTICE.
 - ALL SURFACE WATER SEWERS TO BE CLASS H CONCRETE TO EN1916 & IS 6 2004.
 - SURFACE WATER COLLECTOR DRAINS 150mm DIA.
 - FOUL HOUSE CONNECTIONS TO BE 100mm DIA.
 - THIS DRAWING IS BASED ON TOPO SURVEY BY J&L SURVEY LTD. DATED 06/2016.
 - CONTRACTOR SHALL INSPECT THE ROUTE & CONFIRM LOCATIONS OF ALL TREES, FEATURES, ENTRANCES & ASPECTS IMPACTING CONSTRUCTION OF THE WORKS.
 - NOTE THAT THE CONTRACTOR AND/OR ARCHITECT ARE RESPONSIBLE FOR CONNECTIONS INTO THE BUILDING

- LEGEND:
- SITE BOUNDARY
 - GREEN ROOF SEDUM BLANKET OR SIMILAR APPROVED
 - ROOF AREA DRAINING TO SUDS
 - PAVED AREAS DRAINING TO TREETIPS VIA GULLIES
 - PAVED AREAS DRAINING TO SUDS

rev	date	description	by	chkd.
		A - Approved		
		B - Approved with comments		
		C - Do not use		
client approval				
suitability	S2 - INFORMATION	issue purpose	PLANNING	
DBFL Consulting Engineers Civil, Structural & Transportation Engineering www.dbfl.ie				
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project ref. WHITE PINES EAST , RATHFARNHAM, DUBLIN 16				
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client ARDSTONE HOMES LTD				
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drawing no.			revision	
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