



SUDS LEGEND

PERMEABLE PAVING	
GRASS/LANDSCAPED AREA	
IMPERMEABLE AREA	
EXISTING LANDSCAPED AREA	
TREE PITS	
DROPPED KERB	

SITE LEGEND

SITE BOUNDARY	
OWNERSHIP LINE	
DEMOLITION LINE	
SPOT LEVELS	

SURFACE AREA SCHEDULE

LEGEND	SURFACE TYPE	AREA m ²	RUNOFF COEFFICIENT	TOTAL AREA FOR LONG TERM STORAGE
	PERMEABLE PAVING	386.1m ²	0.5	193.1m ²
	IMPERMEABLE AREAS	794m ²	0.9	714.6m ²
	GRASS / LANDSCAPING AREAS	226.4m ²	0.3	
		1406.5m ²		907.7m ²

TREE PIT SCHEDULE

TP REF:	PIT AREA	SOIL DEPTH	DRAINAGE LAYER DEPTH	VOIDS %	STORAGE VOLUME
TP1	2.25m ²	0.6m	0.3m	30%	0.203m ³
TP2	2.25m ²	0.6m	0.3m	30%	0.203m ³
TP3	2.50m ²	0.6m	0.3m	30%	0.225m ³
TP4	2.50m ²	0.6m	0.3m	30%	0.230m ³
TP5	2.25m ²	0.6m	0.3m	30%	0.203m ³
TP6	2.35m ²	0.6m	0.3m	30%	0.212m ³

SUSTAINABLE URBAN DRAINAGE SYSTEM (SUDS):

PERMEABLE PAVING:

IT IS PROPOSED TO INCORPORATE A PERMEABLE PAVING SYSTEM INTO THE SITE DESIGN WITH THE AIM OF REDUCING RUNOFF FROM THE SITE IN TIMES OF PRECIPITATION AND IMPROVING QUALITY OF RUNOFF GENERALLY. A MINIMUM OF 250mm DEPTH OF 60mm-100mm SUB BASE WITH APPROXIMATELY 30% VOIDS IS TO BE USED TO PROVIDE ADDITIONAL SUB-GROUND STORAGE VOLUME FOR RAINFALL EVENTS. THE INTENTION IS TO PROVIDE A SUSTAINABLE FORM OF STORMWATER SOURCE CONTROL WITHIN THE SITE THAT WILL REDUCE THE TOTAL RUNOFF FROM THE SITE BY TEMPORARILY RETAINING THE RUNOFF WITHIN THE PAVING/SUB-BASE, PROMOTING EVAPOTRANSPIRATION. THE QUALITY OF RUN-OFF FROM THE SITE SHALL ALSO BE IMPROVED DUE TO THE FILTERING PROCESS OF THE PAVING, WHICH RETAINS SILTS AND DEGRADES HYDROCARBONS.

TREE PITS:

TREE PIT SYSTEMS WILL ALSO BE INCORPORATED THROUGH THE USE OF RECESSED POCKETS OF GRANULAR VOIDS STONE BENEATH THE STRUCTURAL SOIL & ROOT BALL OF TREES. THE TREE PITS SHALL INCORPORATE AN OVERFLOW DRAINAGE SYSTEM AT THEIR BASE WHICH CONNECTS TO THE SURFACE WATER DRAINAGE SYSTEM. THIS PERMITS INTERCEPTED RAINFALL TO PERMEATE THROUGH THE STRATA OF THE PLANTER SYSTEM AND TO BE CAPTURED FOR NATURAL IRRIGATION OF THE TREE AND FACILITATING EVAPOTRANSPIRATION, BUT ALLOWING FOR OVERFLOW OF SURFACE WATER INTO SEWERS AND TO THE ATTENUATION TANK DURING EXTREME RAINFALL EVENT. WHERE POSSIBLE THE TREE PITS WILL HAVE LOCALLY DROPPED KERBS TO INFLUENCE WATER FLOW FROM THE IMPERVIOUS AREAS INTO THE TREE PITS.

PROPOSED SUDS PLAN
SCALE 1:200

Rev	Date	Drn	CHKD	Description
0	04/03/22	SR	FW	Issued in response to RFI

LOHAN & DONNELLY
Consulting Engineers

13 Gardiner Place, Mountjoy Square, Dublin 1. T: 01 8787770
W: www.lohan-donnelly.com E: info@lohan-donnelly.com

Project:	Drive Thru Coffee Unit for New Ireland Assurance Company PLC	Project No.:	21192	Dep. No.:	C06
Drawing:	Proposed SuDS Plan	Scale:	@A1	Date:	Feb' 22
Model Reference:	21192-LDE-ZZ-ZZ-M2-SC-0003	Drawn:	SR	Rev.:	0
Drawing Reference:	21192-LDE-ZZ-ZZ-DR-SC-1C06	Model Rev.:		Submittal:	P.01.1
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