ATTACHMENT E1 – EMISSIONS TO SURFACE WATER

The nearest watercourse to the application site is the stream which runs immediately beyond the northern boundary, on the northern side of the R127 Regional Road. At the present time, rainfall across the application site either percolates downwards through the unsealed ground to the sump at the base of the quarry or is collected by existing drainage infrastructure across paved areas. Surface water collected at the quarry sump and by the existing drainage network is discharged to the stream beyond the north-eastern site boundary via a buried pipe, the approximate line of which is indicated in Figure E1.1.

Waste inspection and quarantine facilities are located within a covered structure constructed over a concrete slab. As incipient rainfall will not come into contact with consignments of suspected contaminated waste stored at the covered shed, there is no requirement to install any drainage infrastructure to provide for collection and storage of potentially contaminated surface water run-off.

Emissions to the watercourse north of the site will continue to take place for the duration of the quarry restoration works. During the restoration works, the upper surface of the backfilled materials will be graded so as to ensure that surface water run-off falls to a sump at a temporary low point within the backfilled materials. Water will be pumped from sumps to temporary settlement ponds at original ground surface level as and when required.

Surface water run-off will initially discharge to a 'silt pond' where suspended solids will settle out in a still water environment. As this pond is filled and replenished with additional surface water run-off, excess water at the far end of the pond will discharge via an overflow pipe to a second pond, the 'clear water pond'. A schematic layout of the proposed settlement ponds is provided in Figure E1.2. Clean water from these settlement ponds will be discharged via surface channels or by pumping, to site drainage infrastructure and the stream immediately north of the site.

In the longer term, after the backfilling works are complete, ground contours and/or drainage channels will be modified as necessary to ensure that surface water run-off across the restored site is directed to boundary ditches, existing site drainage infrastructure or to the proposed closed depression to be created in front of the eastern quarry face. It is necessary to provide this closed depression in order to preserve the nesting site for the peregrine falcon in the existing rock face. It is envisaged that this landform will be permanently drained by installing a buried pipeline which will provide for gravity drainage (via an interceptor or settlement ponds) to the existing buried pipeline at the north-eastern corner of the site. Thereafter surface water will be discharged via the existing pipeline to the stream which runs immediately north of the site.

Further details of surface water management at the waste recycling facility are provided in Section 2.2.9 of the Environmental Impact Statement which accompanies this application.



	NOTES
N	1. Based on OSi 25inch Dublin Sheet No. 5 & 5a
E	2. Ordnance Survey of Ireland Licence No. SU 0000709 (c) Ordnance Survey of Ireland & Government of Ireland
-8	LEGEND
	Applicant's Land Interest (c. 8.6ha)
	Waste Licence Application Area (c. 7.9ha)
	Buried Pipe
	Top of Bank
	Bottom of Bank
**.	Road
7	Contour Line
/	Building
	Internal Unpaved Road
	Internal Paved Road
	R Location of Residence
	ROADSTONE DUBLIN LTD. FORTUNESTOWN TALLAGHT DUBLIN 24
	SLR CONSULTING IRELAND 7 DUNDRUM BUSINESS PARK WINDY ARBOUR DUBLIN 14 T: +353-1-2964667
	WASTE LICENCE APPLICATION
	WASTE RECOVERY FACILITY, MILVERTON, SKERRIES, CO. DUBLIN
100	SITE INFRASTRUCTURE LAYOUT

