

ATTACHMENT F1 – TREATMENT, ABATEMENT AND CONTROL SYSTEMS

Details of the proposed treatment, abatement and control systems at the proposed waste recovery facility are provided in the following sections of the Environmental Impact Statement for the various environmental receptors:

Receptor	Proposed Treatment, Abatement and Control Measures
Flora and Fauna	EIS Section 4.4
Soil	EIS Section 5.4
Water	EIS Section 6.4
Air	EIS Section 7.4
Human Beings (Noise Impact)	EIS Section 8.4
Human Beings (Cultural Impact)	EIS Section 9.4
Human Beings (Visual Impact)	EIS Section 10.4
Human Beings (Economic Impact)	EIS Section 11.4
Human Beings (Traffic Impact)	EIS Section 12.4

Table F1.1 Cross References for Proposed Environmental Control Measures

ATTACHMENT F2 – GROUNDWATER PROTECTION

In order to minimise the risk of pollution to groundwater arising as a result of waste recovery activities, a number of mitigation measures are proposed. These measures give effect to Articles 3,4,5,6 and 7 of Council Directive 80/68/EEC of 17 December 1979 on the protection of groundwater against risk of pollution by dangerous substances and Article 6 of Directive 2006/118/EC on the protection of groundwater against pollution and deterioration and are outlined in Section 6.4 of the Environmental Impact Statement (EIS).

Notwithstanding the provisions outlined in Section 6.4 of the EIS, it is emphasised that the materials which will be imported and handled at the Fassaroe waste recovery facility will be inert and by definition therefore, devoid of contamination by the Annex 1 and Annex 2 substances listed in Council Directive 80/68/EC.

Additional precautionary measures associated with the acceptance and handling of waste are detailed in the following sections of the EIS

- Section 2.4 (Waste Acceptance and Handling)
- Appendix 2.1 (Waste Handling and Acceptance Plan)
- Appendix 2.2 (Contingency Plan, Section 3, Spillage and Leakage Management Plan)

As a significant proportion of surface water at the application site ultimately recharges to groundwater, preservation of groundwater quality necessitates careful management of water across the site also. Details of surface water management at the application site are provided in Section 2.2.9 of the EIS.

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ATTACHMENT F3 – AIR QUALITY MONITORING AND SAMPLING

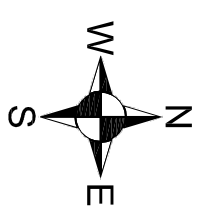
Details of the air quality monitoring and sampling to be undertaken at the proposed waste recovery facility are provided in Section 2.6.2 of the Environmental Impact Statement.

Proposed air quality monitoring locations are shown in Figure F3.1 and Figure 7.1 of the Environmental Impact Statement.

Monitoring Reference No.	Parameter	Monitoring Frequency	Location (Grid Co-ordinates)	Accessibility of Sampling Points
D1	mg/m ² /day	Quarterly	323653E 217412N	Easy – open ground
D2	mg/m ² /day	Quarterly	323844E 217452N	Easy- open ground
D3	mg/m ² /day	Quarterly	323839E 217909N	Easy – open ground

Table F3.1 Air Quality (Dust) Monitoring Points

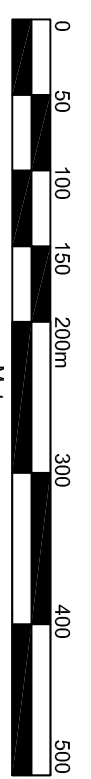
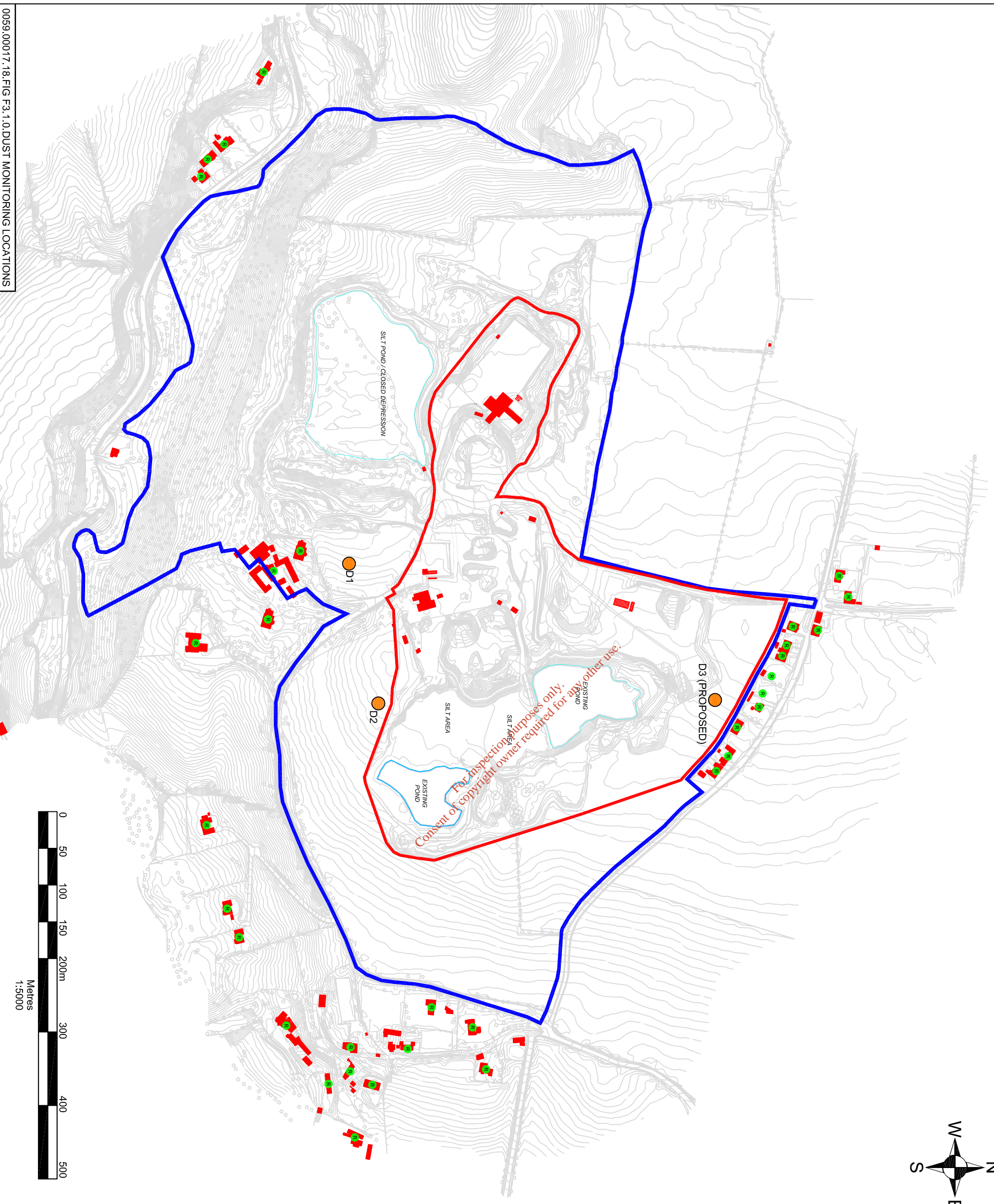
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- NOTES**
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LEGEND

	Applicant's Land Interest (c. 65.1 ha)
	Waste Licence Application Area (c. 21.4 ha)
	D1 Dust Monitoring Locations
	Location of Residences
	Building



0059.00017.18.FIG.F3.1.0.DUST MONITORING LOCATIONS

 SLR SLR CONSULTING IRELAND 7 DUNDRUM BUSINESS PARK WINDY ARBOUR DUBLIN 14 T: +353-1-2964667 F: +353-1-2964676 www.slrconsulting.com	 roadstone ROADSTONE DUBLIN LTD. FORTUNESTOWN TALLAGHT DUBLIN 24
ROADSTONE DUBLIN LTD. WASTE LICENCE APPLICATION FASSAROE WASTE RECOVERY FACILITY FASSAROE, BRAY, CO. WICKLOW DUST MONITORING LOCATIONS	
FIGURE F3.1	
Scale 1:5,000 @ A3	Date APRIL 2009

ATTACHMENT F4 – SURFACE WATER MONITORING AND SAMPLING

Details of the surface water monitoring and sampling to be undertaken at the proposed waste recovery facility are provided in Section 2.6.10 of the Environmental Impact Statement.

Sampling and testing of surface water at existing surface water bodies across the floor of the former quarry will continue for as long as these surface water bodies remain in place. Sampling and testing will be discontinued once the ponds are pumped dry and backfilled.

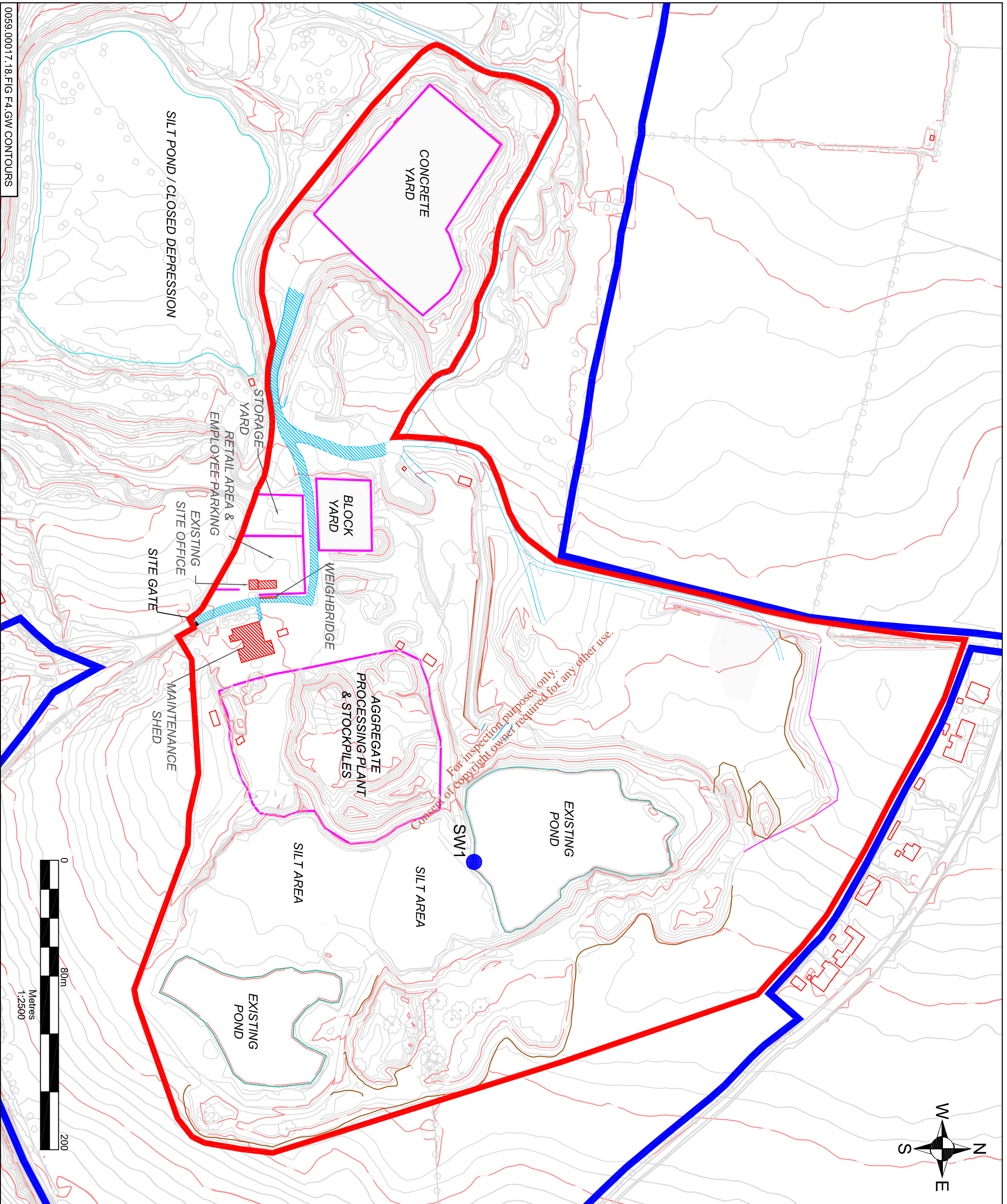
Existing monitoring locations are shown in Figure F4.1 and Figure 2.1 of the Environmental Impact Statement. It should be noted that technically all existing surface water bodies within the application site are deemed to be groundwater features.

Monitoring Reference No.	Parameter	Monitoring Frequency	Location (Grid Co-ordinates)	Accessibility of Sampling Points
SW1	Note 1	Bi-annually	323853N 217673E	Easy : edge of existing pond

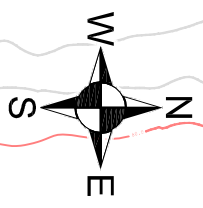
Note 1 : Surface water test parameters to include Temperature, pH, Dissolved Oxygen, Conductivity, Sodium, Potassium, Chloride, Ammoniacal Nitrogen, Sulphate, Dissolved Metals (Ca, Cu, Fe, Pb, Mg, Mn, Ni and Zn) and Total Alkalinity

Table F4.1 Surface Water Monitoring Points

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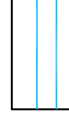
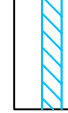

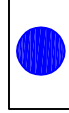
0059_00017_18.FIG F4.GW CONTOURS



NOTES

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LEGEND

-  Applicant's Land Interest (c. 65.1 ha)
-  Waste Licence Application Area (c. 21.4 ha)
-  Internal Unpaved Road
-  Internal Paved Road
-  Building
-  Surface Water Monitoring Location

roadstone
 ROADSTONE DUBLIN LTD.
 FORTUNESTOWN
 TALLAGHT
 DUBLIN 24

SLR
 SLR CONSULTING IRELAND
 7 DUNDURUM BUSINESS PARK
 WINDY ARBOUR
 DUBLIN 14
 T: +353-1-2964667
 F: +353-1-2964676
 www.slrconsulting.com

ROADSTONE DUBLIN LTD.
 WASTE LICENCE APPLICATION
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 SURFACE WATER
 MONITORING LOCATION
FIGURE F4.1

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ATTACHMENT F6 – GROUNDWATER MONITORING AND SAMPLING

Details of the groundwater monitoring and sampling to be undertaken at the proposed waste recovery facility are provided in Section 2.6.4 of the Environmental Impact Statement.

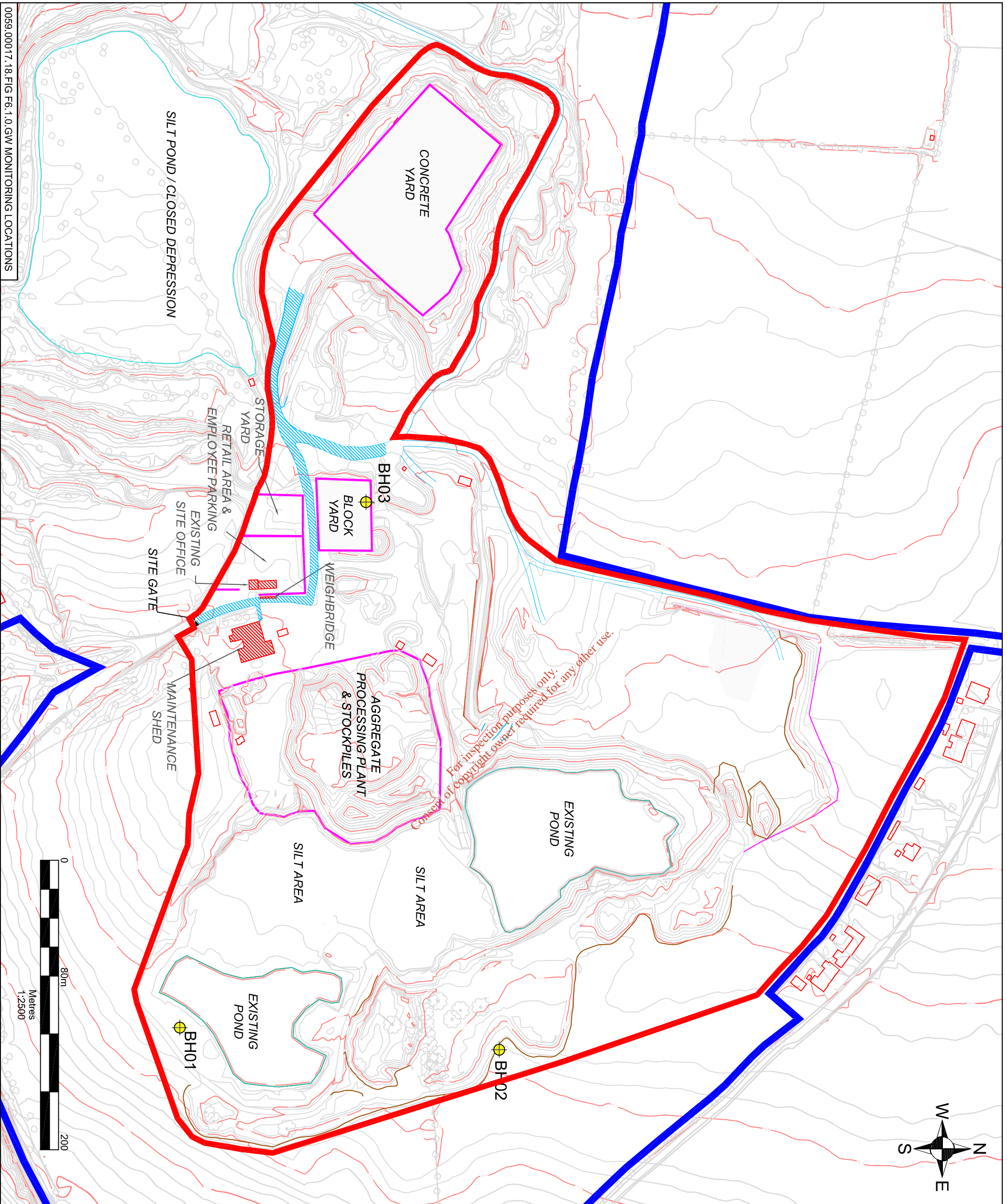
Proposed monitoring locations at existing groundwater wells are shown in Figure F6.1 and Figure 6.5 of the Environmental Impact Statement.

Monitoring Reference No.	Parameter	Monitoring Frequency	Location (Grid Co-ordinates)	Accessibility of Sampling Points
BH01	Note 1	Bi-annually	323970E 217464N	Easy : open ground
BH02	Note 1	Bi-annually	323985E 217684N	Easy : open ground
BH03	Note 1	Bi-annually	323607E 217592N	Easy : open ground

Note 1 : Groundwater test parameters to include Temperature, pH, Dissolved Oxygen, Conductivity, Sodium, Potassium, Chloride, Ammoniacal Nitrogen, Sulphate, Dissolved Metals (Ca, Cu, Fe, Pb, Mg, Mn, Ni and Zn) and Total Alkalinity

Table F6.1 Groundwater Monitoring Points

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0059,00017,18,FIG.F6.1,0.GW MONITORING LOCATIONS

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LEGEND

	Applicant's Land Interest (c. 65.1 ha)
	Waste Licence Application Area (c. 21.4 ha)
	Borehole Location
	Internal Unpaved Road
	Internal Paved Road
	Building

roadstone
ROADSTONE DUBLIN LTD.
FORTUNESTOWN
TALLAGHT
DUBLIN 24

SLR
SLR CONSULTING IRELAND
7 DUNDURUM BUSINESS PARK
WINDY ARBOUR
DUBLIN 14
T: +353-1-2964667
F: +353-1-2964676
www.slrconsulting.com

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GROUNDWATER MONITORING LOCATIONS

FIGURE F6.1

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ATTACHMENT F7 – NOISE MONITORING

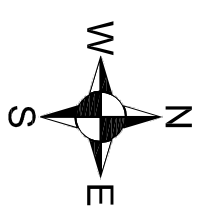
Details of the noise monitoring to be undertaken at the proposed waste recovery facility are provided in Section 2.6.8 of the Environmental Impact Statement.

Proposed noise monitoring locations are shown in Figure F7.1 and Figure 8.1 of the Environmental Impact Statement.

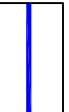




Monitoring Reference No.	Parameter	Monitoring Frequency	Location (Grid Co-ordinates)	Accessibility of Sampling Points
N1	Sound Level (dBA)	Quarterly	323653E 217411N	Easy : open ground
N3	Sound Level (dBA)	Quarterly	323716E 217920N	Easy : open ground
N4	Sound Level (dBA)	Quarterly	323978E 217457N	Easy : open ground
N5	Sound Level (dBA)	Quarterly	324012E 217618N	Easy : open ground

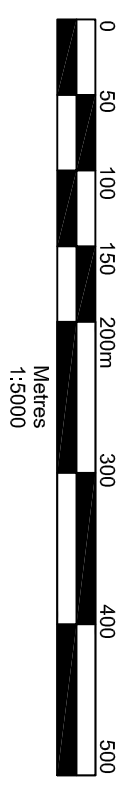
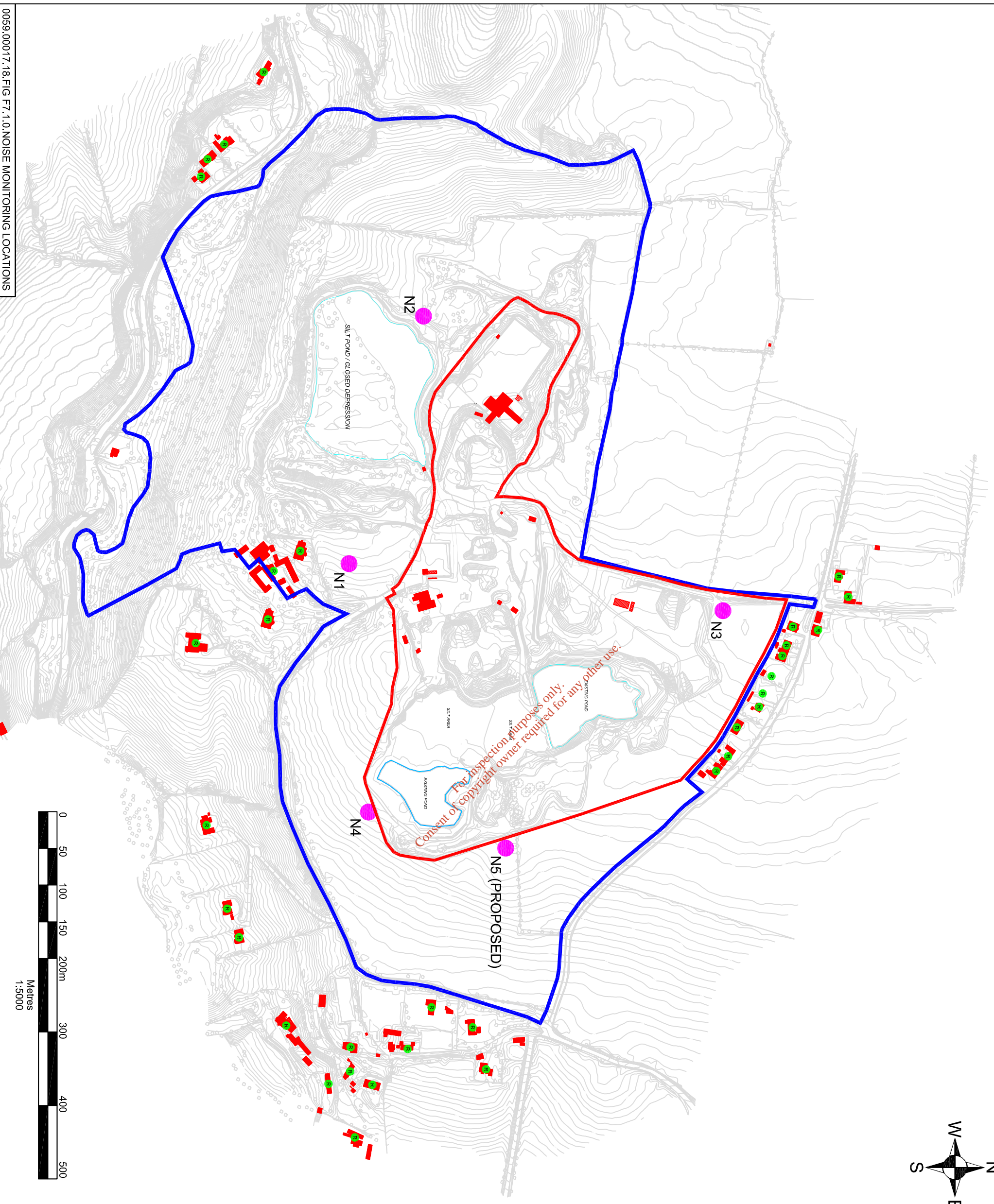
Table F7.1 Noise Monitoring Points

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- LEGEND**
-  Applicant's Land Interest (c. 65.1 ha)
 -  Waste Licence Application Area (c. 21.4 ha)
 -  N1 Noise Monitoring Locations
 -  Location of Residences
 -  Building



0059.00017.18.FIG F7.1.0.NOISE MONITORING LOCATIONS

roadstone
 ROADSTONE DUBLIN LTD.
 FORTUNESTOWN
 TALLAGHT
 DUBLIN 24

SLR
 SLR CONSULTING IRELAND
 7 DUNDRUM BUSINESS PARK
 WINDY ARBOUR
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 NOISE MONITORING LOCATIONS

FIGURE F7.1

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