

## ATTACHMENT F5 – GROUNDWATER

There are currently 7 No. groundwater monitoring wells installed around the Huntstown Quarry Complex. Of these

- 2 No. are located close to the North and West Quarries (GW04 and GW05),
- 1 No. is located close to the existing recovery facility at the Central Quarry (GW02),
- 2 No are located to the south-east and centre of the replacement C&D waste recovery facility (GW03 and GW07) and
- 2 No others (GW1 and GW06) are located further to the south and east, at the locations shown in Drawing F5-1.

Groundwater well (GW07) was only recently installed at the site of the replacement C&D waste recovery facility and has yet to be fully incorporated into the groundwater sampling and testing programme.

At the present time, groundwater sampling is undertaken on a quarterly basis. Testing of physical parameters is undertaken on collected samples on a quarterly basis, in accordance with the requirements of the existing waste licence (Ref. W0277) while testing of chemical parameters is undertaken on either a bi-annual or annual basis (depending on the parameter).

The principle objective of groundwater testing is to assess ground water quality and to confirm that on-going waste recovery activities are having no detrimental impact on groundwater quality. The groundwater wells will be monitored for the duration of the soil / C&D waste recovery activities at the licensed site and for a short duration thereafter, as required by the facility closure and aftercare plan.

Groundwater levels are also recorded on a quarterly basis in accordance with waste licence requirements. Further detail on groundwater quality and testing is presented in Section 6 of the Environmental Impact Statement which accompanies this waste licence review application.

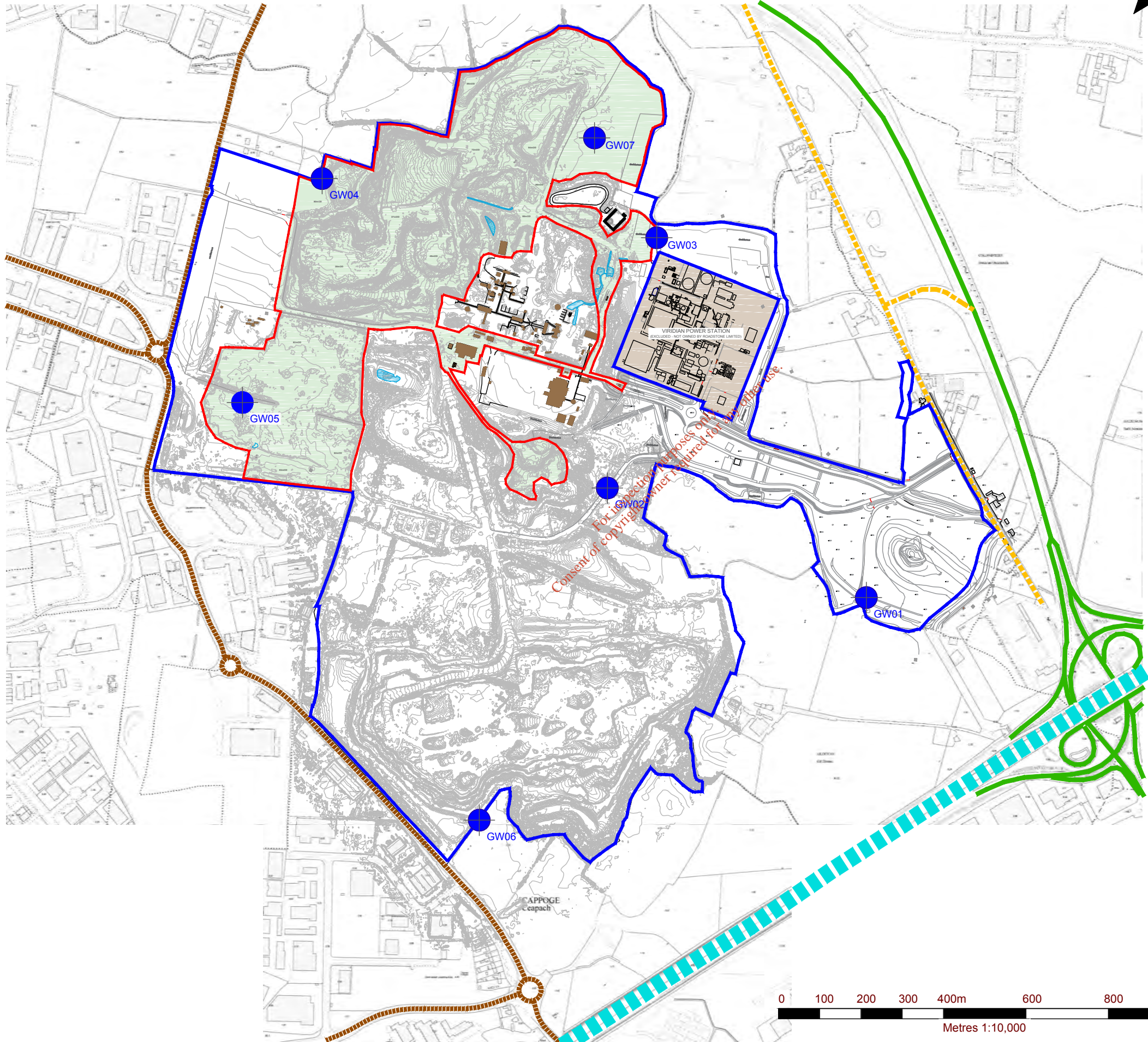
The existing groundwater monitoring locations are identified in Table F5-1 below.

**Table F5-1**  
**Groundwater Monitoring Points**

Monitoring Reference No.	Parameter	Monitoring Frequency	Location (Grid Co-ordinates)	Accessibility of Sampling Points
GW01	Note 2	Bi-annually	711715E 740933N	Easy : open ground
GW02	Note 2	Bi-annually	711087E 741196N	Easy : open ground
GW03	Note 2	Bi-annually	711207E 741803N	Easy : open ground
GW04	Note 2	Bi-annually	710395E 741947N	Easy : open ground
GW05	Note 2	Bi-annually	710203E 740403N	Easy : open ground
GW06	Note 2	Bi-annually	710777E 740391N	Easy : open ground
<b>GW07</b>	<b>Note 2</b>	<b>Bi-annually</b>		<b>Easy : open ground</b>








**Note 1** : ITM Co-ordinates

**Note 2** : Groundwater test parameters include pH, Conductivity, Ammonia (as N), Orthophosphate (as P), Dissolved Metals (Cd, Cu, Fe, Pb, Mg, Mn, Ni and Zn), Total Dissolved Solids, Total Petroleum Hydrocarbons, Diesel Range Organics, Petrol Range Organics, Total Coliforms and Faecal Coliforms



**NOTES**  
 1. EXTRACT FROM 1:2,500 ORDNANCE SURVEY DIGITAL SHEET NO'S. 3062-A, 3062-B, 3062-C, 3062-D, 3063-A, 3063-C, 3130-A & 3130-B.  
 2. ORDNANCE SURVEY IRELAND LICENCE NO. SU 0000717 (C) ORDNANCE SURVEY & GOVERNMENT OF IRELAND

**LEGEND**

-  ROADSTONE LIMITED LAND INTEREST (c. 200.3 ha)
-  APPLICATION AREA (c. 55.0 ha)
-  N2 DUAL CARRIAGEWAY
-  NORTH ROAD (R135)
-  LOCAL ROAD
-  M50 MOTORWAY
-  GROUNDWATER MONITORING WELL LOCATION

LOCATION	EASTING	NORTHING
GW1	711715	740933
GW2	711087	741196
GW3	711207	741803
GW4	710395	741947
GW5	710233	741403
GW6	710777	740391
GW7	711056	742045

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**ROADSTONE LIMITED**  
 WASTE LICENCE REVIEW APPLICATION  
 HUNTSTOWN C&D WASTE RECOVERY FACILITY  
 NORTH ROAD, FINGLAS, DUBLIN 11  
 GROUNDWATER MONITORING LOCATIONS

**DRAWING F5-1**

Scale 1:10,000 @ A3	Date JUNE 2017
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## ATTACHMENT F6 – NOISE MONITORING

Noise emissions associated with ongoing rock extraction, aggregate processing, concrete production and waste recovery activities within Roadstone's landholding at Huntstown are monitored on a quarterly (ie. three monthly) basis at 4 No. locations (designated N1 to N4), all of which are located close to the Roadstone property boundary.

It is proposed that the existing noise monitoring stations will remain in place and that one additional dedicated monitoring station (N5) will be established prior to commencement of C&D waste recovery activities at the replacement facility in the north-eastern corner of the Roadstone landholding (subject to EPA review). Noise monitoring locations are indicated in Drawing F6-1.

Monitoring will continue for the duration of the licensed soil / C&D waste recovery activities and will also continue for a short duration thereafter, as required by the facility closure and aftercare plan.

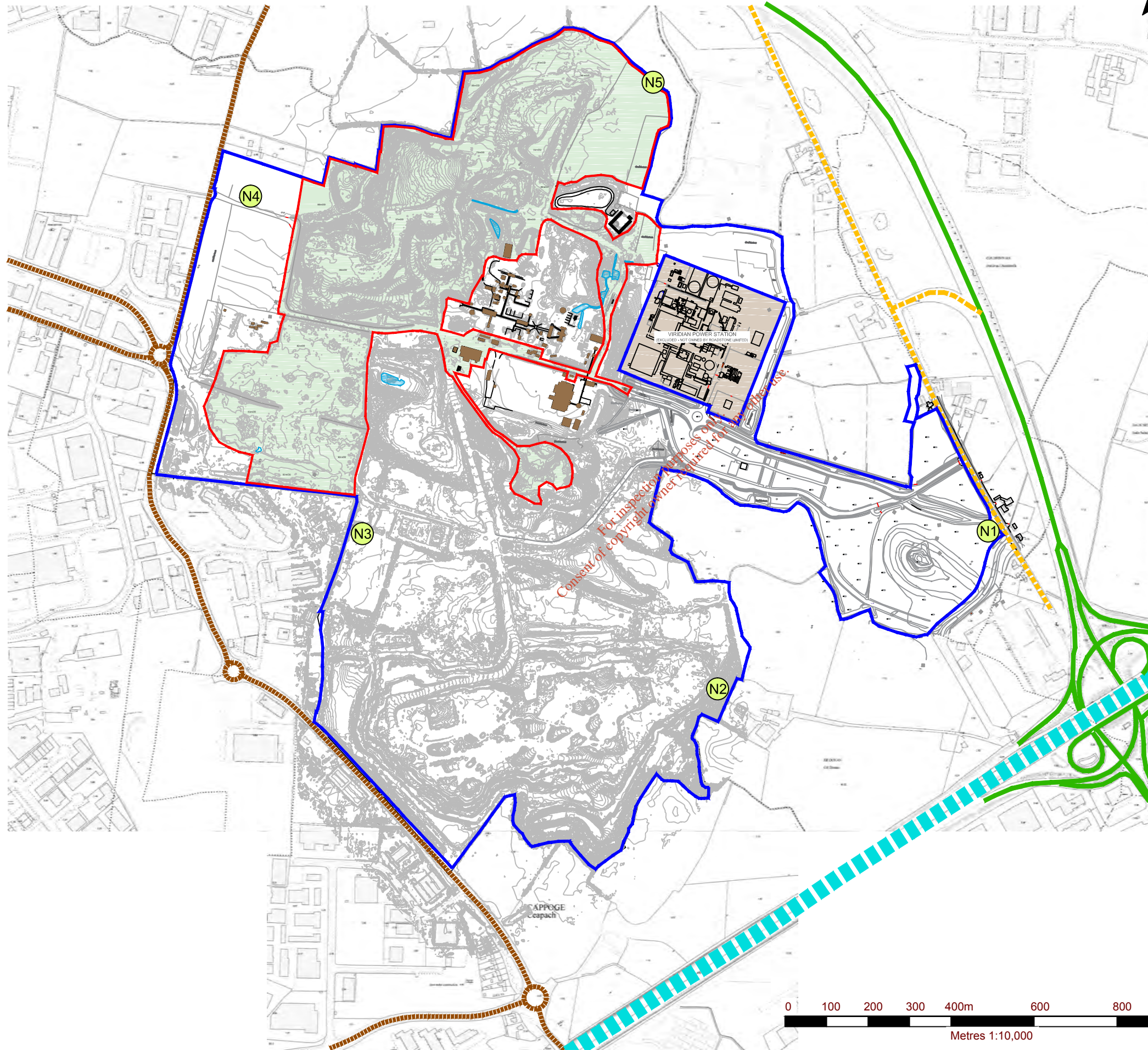
Noise monitoring is undertaken using a Larson Davis Model 824 Sound Level Meter, calibrated using a Larson Davies Acoustic Calibrator CAL 200 (or equivalent). Noise monitoring locations are indicated in Drawing D2-3.

The existing and proposed noise monitoring locations are identified in Table F6-1 below.

**Table F6-1  
Noise Monitoring Points**

Monitoring Reference No.	Parameter	Monitoring Frequency	Location (Grid Co-ordinates)	Accessibility of Sampling Points
N1	Sound Level (dBA)	Quarterly	711992E 741103N	Easy – Open Ground
N2	Sound Level (dBA)	Quarterly	711339E 740723N	Easy – Open Ground
N3	Sound Level (dBA)	Quarterly	710483E 741097N	Easy – Open Ground
N4	Sound Level (dBA)	Quarterly	710214E 741910N	Easy – Open Ground
N5	Sound Level (dBA)	Quarterly	742184E 742184N	Easy – Open Ground

**Note 1** : ITM Co-ordinates



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- N2 DUAL CARRIAGEWAY
- NORTH ROAD (R135)
- LOCAL ROAD
- M50 MOTORWAY
- NOISE MONITORING LOCATION

LOCATION	EASTING	NORTHING
N1	711992	741103
N2	711339	740723
N3	710483	741097
N4	710214	741910
N5	711184	742184

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**NOISE MONITORING LOCATIONS**

**DRAWING F6-1**  
 Scale 1:10,000 @ A3  
 Date JUNE 2017

