Landscaping Proposal

Timoleague Agri Gen,
Barryshall,
Timoleague,
Bandon,
Co. Cork

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(I) Photo of proposed development area.
(II) Site Plan of proposed development.
(III) Site Plan of Integrated Constructed Wetland system (ICW).

2. Introduction

NRGE Ltd were engaged by Timoleague Agri Gen, Timoleague, Bandon, Co. Cork to prepare a landscaping proposal as an attachment to the EIS for Timoleague Agri gen regards the proposed development which will consist/consists of a Biogas Plant consisting of 2 no digester tanks, 2 no validation tanks, 1 no Homogenising tank, 3 no geo-membrane lined manure storage basins, 1 no fibre store, 1 No Feed Tank, Reception Building, Plant Building, Pasteurisation Tanks, Weighbridge and associated site works including an Integrated Constructed Wetlands to produce renewable energy and fertilizer at Barryshall, Timoleague, Co. Cork.

3. Description

The proposed landscaping and tree planting will be carried out on the site of the proposed development in Barryshall, Timoleague, Co. Cork, as identified on folio maps provided by Timoleague Agri Gen . A site visit was undertaken to inspect the above site, on behalf of NRGE Ltd, Mooresfort, Lattin Co. Tipperary. It was found that the site is on an incline and is partially visible from a number of locations adjacent to the public roadway.

An Integrated Construction Wetland system (ICW) will also be constructed (see report compiled by Aila Carthy of VESI Environmental) as part of the overall project. This ICW will have a screening specific to the construction and running of an ICW of its own as covered in said report.

There is some existing screening, but this proposed development will require more screening in the form of a burm using soil unearthed during construction activity.

To limit any potential environmental or aesthetic issue species of trees will be planted to fit in with local species.

On the North-western and South-western Boundaries existing mature trees will remain. The historic along the North-eastern boundary will also be maintained and strengthen. All non-native species as well as dead or diseased plants to be removed, with native hedgerow species to be planted as infill.

According to most specifications, screening buildings in coastal exposed sites should include the following recommended species:

Trees;
42 of the following will be planted as saplings; Sycamore (*Acer pseudoplatanus*), Alder (*Alnus glutinosa*), Hazel (Corylus), each 1.5 metres high at 6 metre spacing's, 1 metre out from the inner fence surrounding the biogas plant.

Screen Fencing:
Plant Hawthorn/Beech and Holly 0.6 metres in height, in a single row (at c. 600mm centres) between the trees.

Attached to this landscaping proposal is a map showing where the proposed trees are to go – *032 Site Plan Landscaping Planting.*

The constructed burm on the South Eastern side of the proposed site will be approximately 3m high with the sides sloped at a gradient of 1 in 1. The elevated section at the centre of the burm will vary in width from 4m to 9m. Planting on the top of the burm will be in 2.5m x 2.5m grids consisting Sycamore (*Acer pseudoplatanus*), Alder (*Alnus glutinosa*), Hazel (Corylus).

The burm constructed along the Eastern Side of the farm will vary in height from 2.5m to 3m and will follow the contour of the land the slopes for the burm will again have a gradient at the sides of 1 in 1. The planting of the trees will be 1.5 metres high at 6 metre spacing's, 1 metre out from the inner fence surrounding the biogas plant.

Alder is a member of the birch family of trees, *Betulaceae*, and can reach 25 metres in height. Like the birches, it is a pioneer species which grows quickly and is relatively short-lived, with the maximum age typically being 150 years. The annual rate of growth can be up to 90 cm a year when the tree is young, and after the death of the original trunk, new shoots can sprout from the base, forming a multi-stemmed clump of new growth.

Hazel is a member of the birch family of trees, Betulaceae, and can grow to a height of 10 metres, although in Scotland it is usually no more than 6 metres tall. Typically it has a number of shoots or trunks branching out at, or just above, ground level, and this growth habit has led to some people referring to it as a bush rather than a tree, because it doesn't meet the strict definition for a tree, of having a single stem that is unbranched near the ground.

Hazel's ability to produce multiple stems gives it a dense, spreading appearance and has led to its extensive use for coppicing. It is a short-lived tree, reaching 50-70 years in age, but if it is coppiced, either by people or naturally through damage to its trunks, it will live much longer.

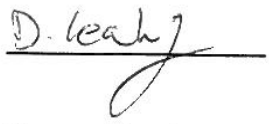
The sycamore tree grows very fast, and its branches spread out to give it a large, rounded shape. It is a native tree to central and southern Europe. It usually only lives for about 150 years and the flowers of a sycamore tree are yellow-green in colour, and hang down from the branches in clusters.

Planting will be carried out in the first growing season after planning has been granted and when soil from excavation is available to construct the burm.

4. Recommendations

- Aftercare should include trimming to control Hawthorn growth
- Grass control around saplings.
- Spray the site with round-up (4 litres/Ha) pre-planting to eliminate competing weeds.
- Any trees that fail must be replanted.

This report has been prepared by NRGE Ltd with all reasonable skill, care and diligence. Information report herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.



Dermot Leahy BAgrSc

(Environmental Science)

ATTACHMENTS

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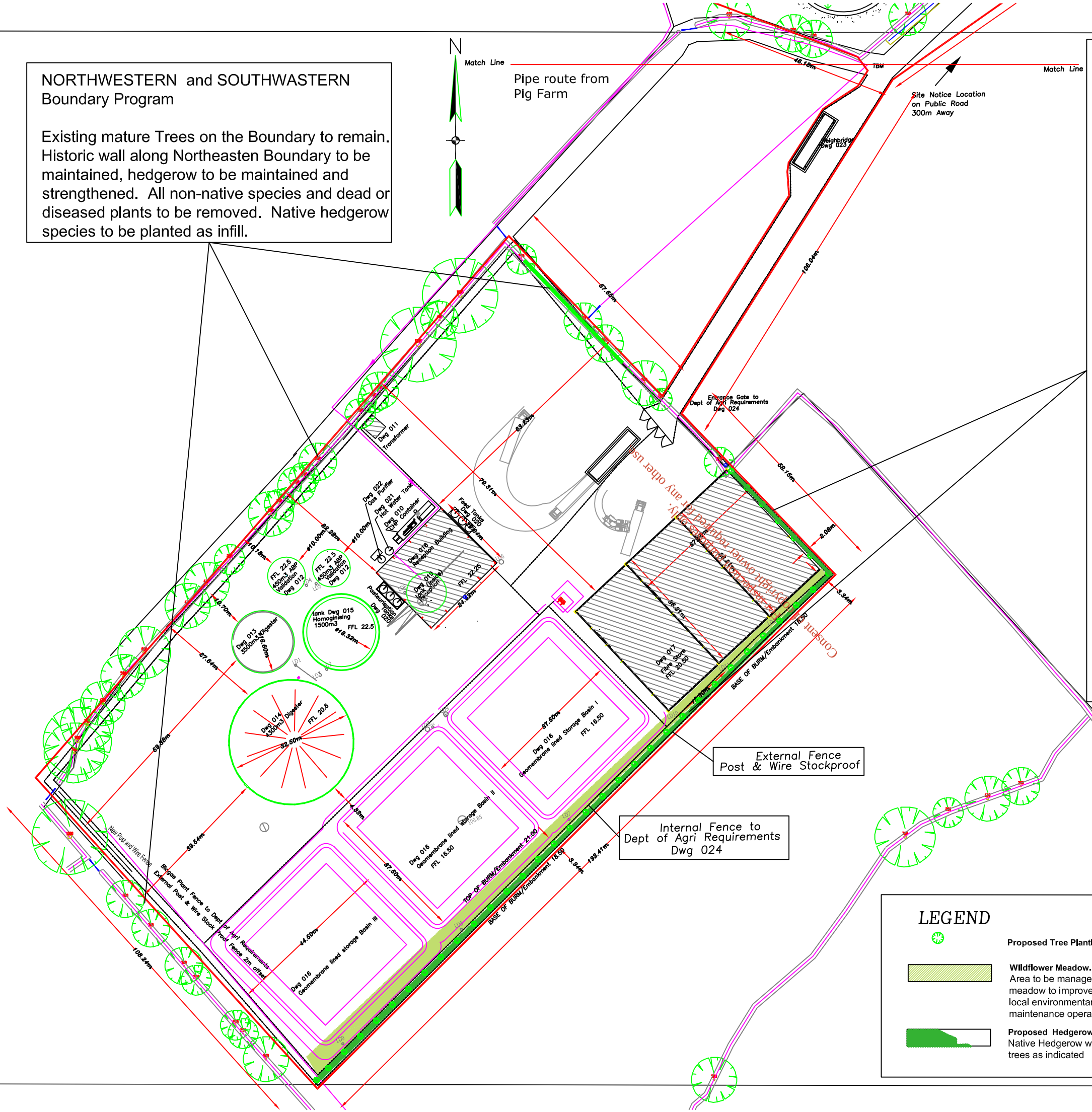
(IV) Photo of proposed development area.
(V) Site Plan of proposed development.
(VI) Site Plan of Integrated Constructed Wetland system (ICW).

- Photo of proposed development area

NORTHWESTERN and SOUTHWASTERN Boundary Program

Existing mature Trees on the Boundary to remain. Historic wall along Northeasten Boundary to be maintained, hedgerow to be maintained and strengthened. All non-native species and dead or diseased plants to be removed. Native hedgerow species to be planted as infill.



NORTHEASTERN and SOUTHEASTERN Boundary Program

The perimeter fence surrounding the biogas plant will be a double fence in accordance with the Department of Agriculture's requirements. It is proposed to screen plant in the area between the fences in the first growing season after the plant is constructed as follows

Trees: 42 No

Plant: Sycamore (*Acer pseudoplatanus*), Ash (Fraxinus), Alder (*Alnus spp)*
Hazel (*Corylus*)*saplings each 1.5m high at 6.0m spacings , 1m out from the inner fence surrounding the biogas plant*

Screen fencing 415 No

Plant hawthorn/ beech and holly 0.6m high in single rows (at c.600 mm centres) between the trees.

Aftercare

Aftercare is essential for the successful establishment of the newly planted hedge! Trim back spindly top growth of hawthorn to encourage basal growth.

Grass and weeds must be controlled by the any or a multiple of the following methods :
- o Black polythene
- o Biodegradable mulches egg wood chippings
- o Mechanical/manual control
- o Herbicides

Replace dead plants at the appropriate time

LEGEND

Proposed Tree Planting

Wildflower Meadow.
Area to be managed as a wildflower meadow to improve the biodiversity of the local environmentand reduce maintenance operations

Proposed Hedgerow .
Native Hedgerow with emergent trees as indicated

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Lattin
Co Tipperary
Phone 062 53385
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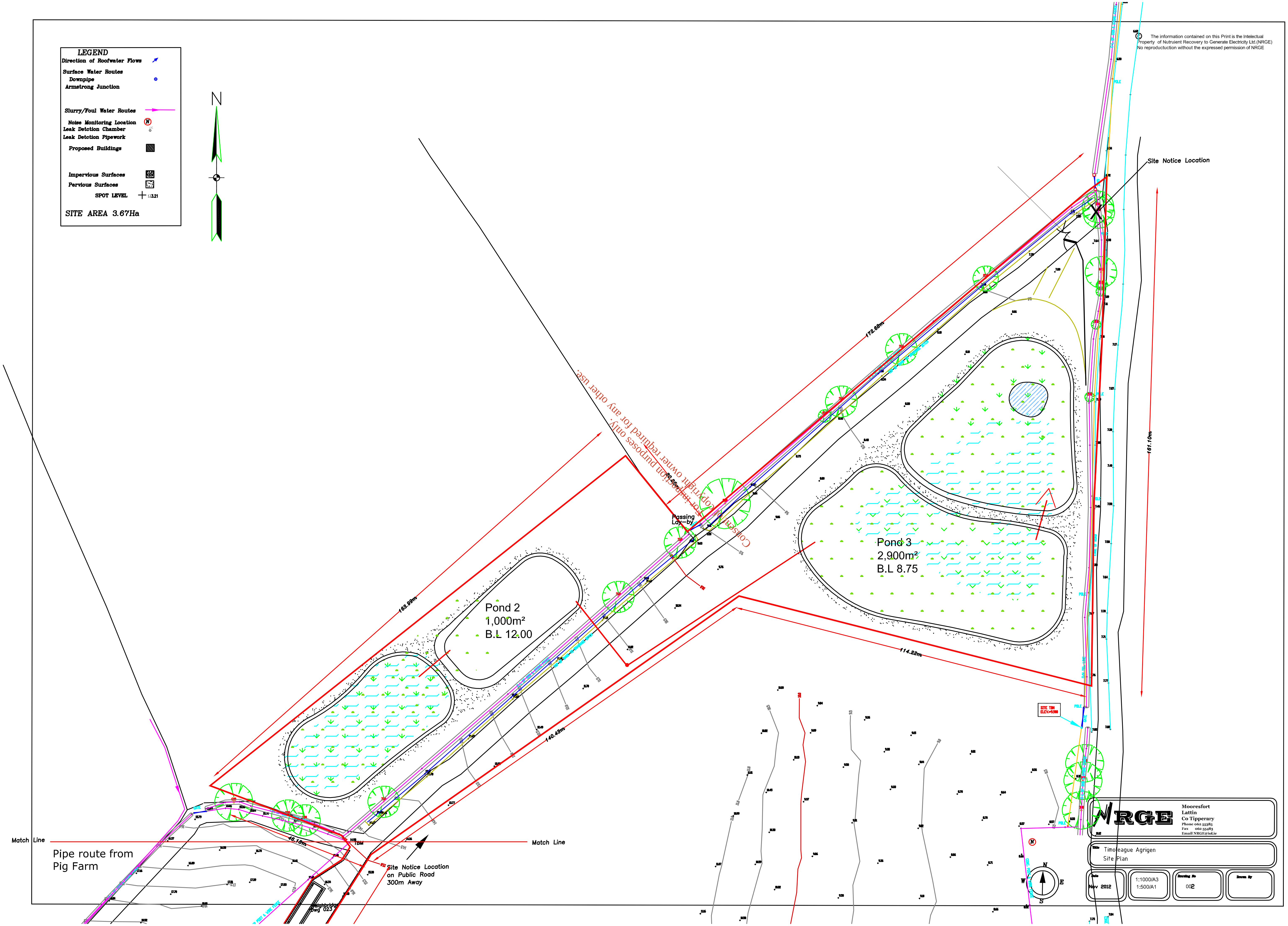
Email NRGE@iol.ie

Timoleague Agrigen
Site Plan Landscape Planting

Date		Drawing No	Drawn By
Apr 2013	1:1000/A3 1:500/A1	032	



LEGEND
Direction of Roofwater Flows
Surface Water Routes
Downpipe
Armstrong Junction
Slurry/Foul Water Routes
Noise Monitoring Location
Leak Detection Chamber
Leak Detection Pipework
Proposed Buildings
Impervious Surfaces
Pervious Surfaces
SPOT LEVEL
SITE AREA 3.67Ha
N
Pond 2
1,000m²
B.L 12.00
Pond 3
2,900m²
B.L 8.75
Passing Lay—by
163.99m
172.68m
140.43m
114.22m
161.10m
46.19m
Match Line
Match Line
Pipe route from Pig Farm
Site Notice Location on Public Road 300m Away
Site Notice Location
Weighbridge Dwg 023
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NRGE
Mooresfort
Lattin
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Timoleague Agrigen
Site Plan
Nov 2012
1:1000/A3
1:500/A1
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