



Organic Gold (Marketing) Ltd. Composting Plant



REPLY TO REQUEST FOR ADDITIONAL INFORMATION

June 2006





DOCUMENT CONTROL SHEET

Client	Organic Gold (Marketing) Ltd.					
Project Title	Organic Gold Compost Facility					
Document Title	Reply to EPA Article 12 Requests					
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ARTICLE 12 & 13 COMPLIANCE REQUIREMENTS

BACKGROUND

Organic Gold were requested by the EPA to supply further information to complement an EPA Waste Licence Application submitted to the EPA on the 30th of March 2004 in accordance with Article 14(2)(b)(ii) of the Waste Management (Licensing) Regulations. This request was made in a letter of correspondence from the EPA dated the 23rd of February 2006. This report responds to this request for further information from the EPA and provides detailed information in response to these requests.

1. ***Submit a revised site layout map incorporating the location of the water tank on the concrete composting slab and indicate its purpose. Please note the tank in question is not Tank C but a tank observed adjacent to the temporary storage shed during the site notice inspection on the 19/05/05.***

RESPONSE TO QUESTION 1

A revised Site Layout Drawing **DG0002 A06** is attached in **Appendix A** and indicates the location of the additional storage Tank E. Storage Tank E is located beside the temporary storage shed and acts as a storage tank for the mix that is used in the Mist Air System. This tank is fully enclosed. A material safety data sheet for this mix is attached in Appendix 3 of Volume 2 of the EIS.

2. ***Submit an engineers report confirming that the concrete composting slab is impermeable and sufficient for groundwater protection.***

RESPONSE TO QUESTION 2

A Chartered Engineer carried out an inspection of the concrete slab in the yard area on the 9th of May 2006 and found that "the composting slab is in so far as can be reasonably ascertained, impermeable and sufficient for groundwater protection". A copy of this report can be found in **Appendix B**.

3. ***Confirm the method of transfer of leachate from Tank B to Tank C and describe the controls in place that activate this transfer.***

RESPONSE TO QUESTION 3

A submersible sludge pump will be attached to Tank B which will pump leachate into Tank C. An automatic level switch on Tank B will be set up to trigger the flow of leachate from Tank B to Tank C once the predetermined level within Tank B has been reached. The technical specifications for this pump and the automatic level switch and trigger levels will be forwarded to the EPA before any operations take place at the proposed facility.

In the event of mechanical breakdown or power failure, a float and plumb line will be used to ascertain the level of leachate within Tank B. If required, leachate can then be transferred from Tank B to Tank C using:

- 1) A Perkins Diesel generator which is available on site during periods of power failure, which has an energy output of 80KVA. This can be used to power electrical pumps to pump out the leachate from the storage tanks.

- 2) The Ruscon slurry spreader, which is used on site, to mechanically suck out the leachate from the storage tanks and which can then be re-circulated over the windrows. This is powered by the diesel engine of the tractor.

Alternatively, if the windrows require moisture, the leachate will be sucked out of Tank B using the Ruscon Slurry Spreader and re-circulated over the windrows instead of being placed in Tank C for storage.

4. **Give details of the predicted leachate, soiled water and storm water volumes in m³ and estimates of process usage of same.**

RESPONSE TO QUESTION 4

The volume of run-off produced on the site area has been broken down into 3 categories.

- 1) Storm Water
- 2) Soiled Water
- 3) Leachate

- 1) Storm Water – This equates to the run-off generated from the rainfall on the roofed areas. The maximum production of storm water occurs in October with a maximum daily production of 5.3 m³.
- 2) Soiled Water (or Dirty water as referred to previous report RP0005_D02) - This equates to all the other hard standing areas excluding the working area immediately surrounding the in-vessel units. For the purpose of these calculations, the windrow area has been assumed as hard standing - this is conservative as the nature of the process occurring in the windrow area will mean that the area is more likely to absorb the rainfall than generate run-off. Again the maximum production occurs in October with a maximum daily rate of 29.27 m³.
- 3) Leachate (or ABP Dirty Water as referred to in previous report RP0005_D02) - This equates to the working area immediately surrounding the in-vessel units. As stated previously, minuscule amounts of leachate are expected to be produced from within the in-vessel units. The majority of the leachate will be from the hard standing working areas. The maximum production occurs in October and equates to 2.55m³ of leachate.

The annual production amounts have been estimated and are outlined in Table 1 below.

Table 1: Estimated Annual Production of Run-off at the Proposed Site

Water Volumes	Estimated Annual Production
Storm Water	896 m ³
Soiled Water	9019 m ³
Leachate	785 m ³
Total	10,700 m³

It is extremely difficult to estimate the moisture requirements in the windrows area. However from experience at the current site and the wasteology site in Cambridgeshire, England, it is expected that all the storm water and soiled water will be re-circulated over the windrows area as this process is an extremely water hungry process, due to the drying effect of heat given off by the microbes, which break down the material. During periods of heavy rainfall, storm water and soiled water will be stored in the storage tanks until such a time that it can be re-circulated over the windrows.

The leachate (or ABP dirty water) will be re-circulated into the incoming feedstock material and placed in the in-vessel units for treatment.

For further information on re-circulation of storm water/ leachate etc., please refer to response to Question 7 in the previous report to the EPA in reply to an Article 14 request for further information (RP0005_D02).

5. Identify on a suitably scaled map the location of the well and provide details of mitigation measures to protect the well from contamination.

RESPONSE TO QUESTION 5

The location of the surface water abstraction well can be seen on the Surface Water Drainage Drawing **DG0007 A02** in **Appendix C**. It is located 330 metres from the South Western boundary of the composting slab. This well will not be at any risk of contamination from the activities from the proposed facility due its location up-gradient from the waste treatment processes and due to the fact that the facility is completely bunded by the concreted slab and there will be no impact on ground or surface water in the area surrounding the facility.

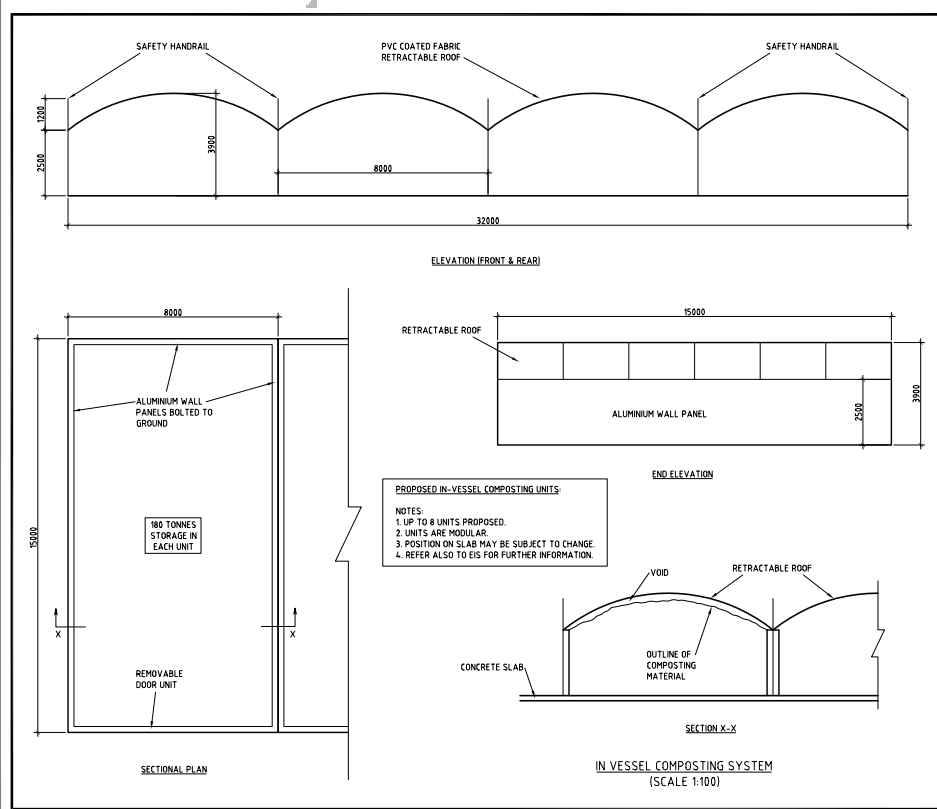
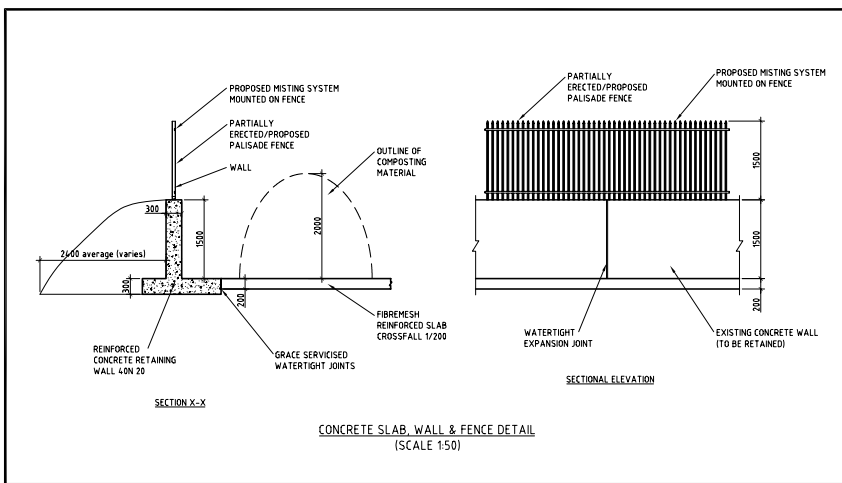
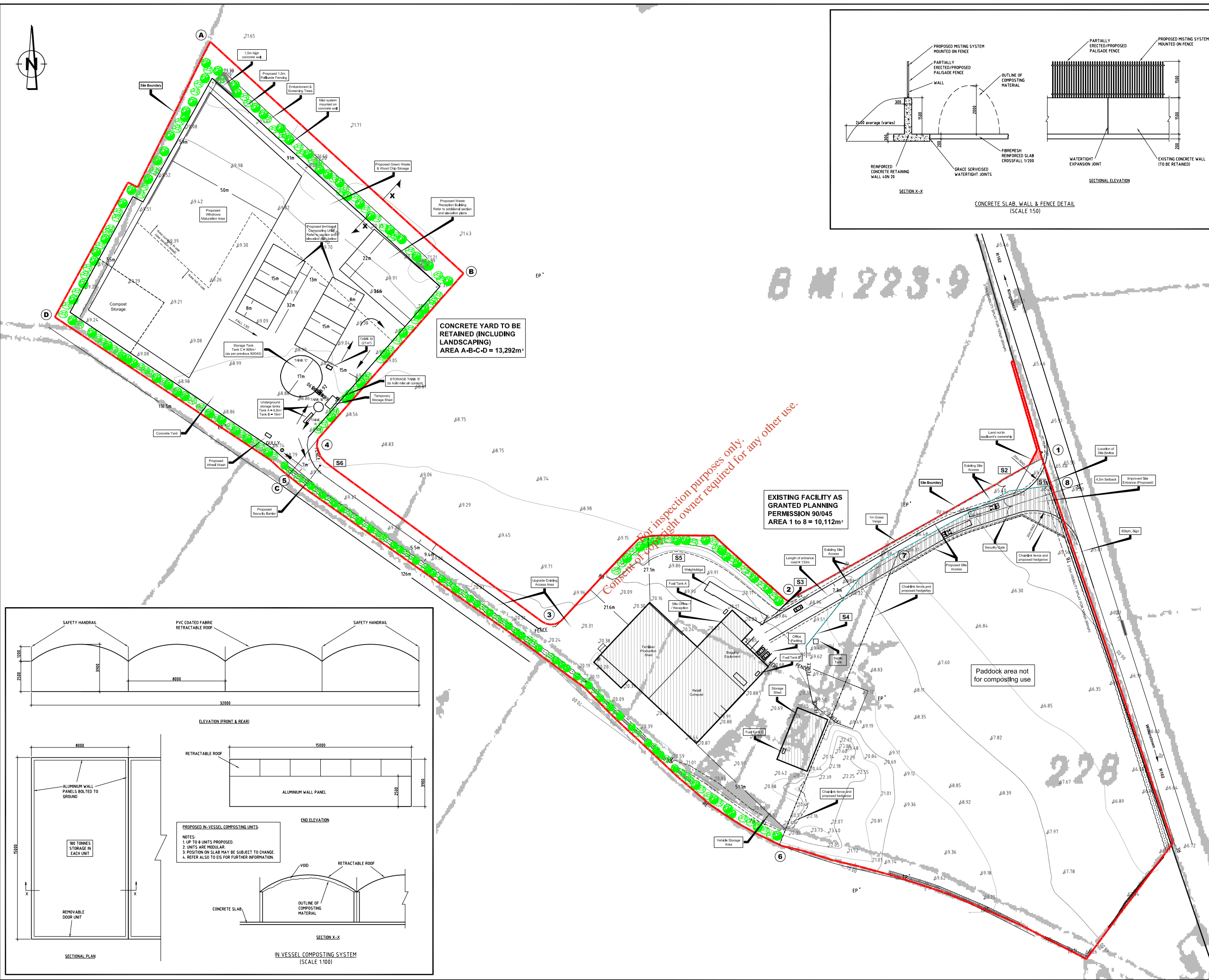
The groundwater abstraction well located on the composting slab is currently not in use and will not be used for future activities. This well will be completely sealed by an appropriately qualified engineer before operations commence at the proposed facility and details of which, will be submitted to the EPA accordingly.

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APPENDIX A

Revised Site Layout Drawing DG0002A06

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NOTES

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- All Levels refer to Ordnance Survey Datum, Malin Head.
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- LEGEND:**
- Additional land at existing site entrance to be included in proposed upgraded site entrance
 - Land not in the ownership of Organic Gold (Refer to application form)
 - Existing Site Access
- SIGNAGE LEGEND**
- S1 EPA Waste Licence Facility - Organic Gold (Marketing) Ltd.
 - S2 Speed Limit 20 km/hr.
 - S3 Report to Site Office
 - S4 Fertiliser Production Shed
 - S5 Proceed to Tipping Area and Composting Slab
 - S6 Waste Inspection Ahead

No.	Date	Amendment / Issue	App.
A06	May'06	Issue to Client for Approval	CB
A05	Sep'05	Issue to Client for Approval	CB
A04	Mar'05	Issue to Client for Approval	CB
A03	Jan'05	Issue to Client for Approval	CB
A02	Jan'05	Issue to Client for Approval	CB
A01	Jun'04	Issue to Client for Approval	CB

Client:

Organic Gold Ltd., Wilkinstown, Navan, Co. Meath

RPS Consulting Engineers

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Project:

ORGANIC GOLD COMPOSTING FACILITY

Title:

PROPOSED SITE LAYOUT PLAN

Drawn by:	RH	Job No:	MDE0202
Checked by:	WP	File No:	MDE0202DG0002A06
Approved by:	CB	Drg. No:	DG0002
Scale:	1:500@A0	Rev:	A06
Date:	JUNE '04		

APPENDIX B

Composting Slab Inspection Report

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Frank Burke & Associates

Civil Engineering,
Infrastructure & Planning Consultant

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Co. Meath, Ireland.

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Mr. John Finnegan
C/o Organic Gold (Marketing) Ltd.
Wilkinstown
Navan
Co. Meath
9-5-06

Re: - EPA Reg. No. 219-1 – Further Information in respect of with notice under Article 14(2)(b) (ii) of the Waste Management (Licensing) Regulations – S.I. 395 of 2004.

Dear Sir,

We refer to your recent instructions in respect of the letter from the EPA of the 16th of June last in respect of the above and in particular item 2 relating to the concrete slab.

Further to our inspection of this morning, the 9th of May, we are of the view that at the time of inspection, the composting slab (slab in lower yard) is in so far as can be reasonably ascertained, impermeable and sufficient for ground water protection.

We thrust the above is to your satisfaction.

We await hearing from you.

Yours Sincerely,



Frank Burke
Chartered Engineer

APPENDIX C

Revised Surface Water Drainage Drawing DG0007 A02

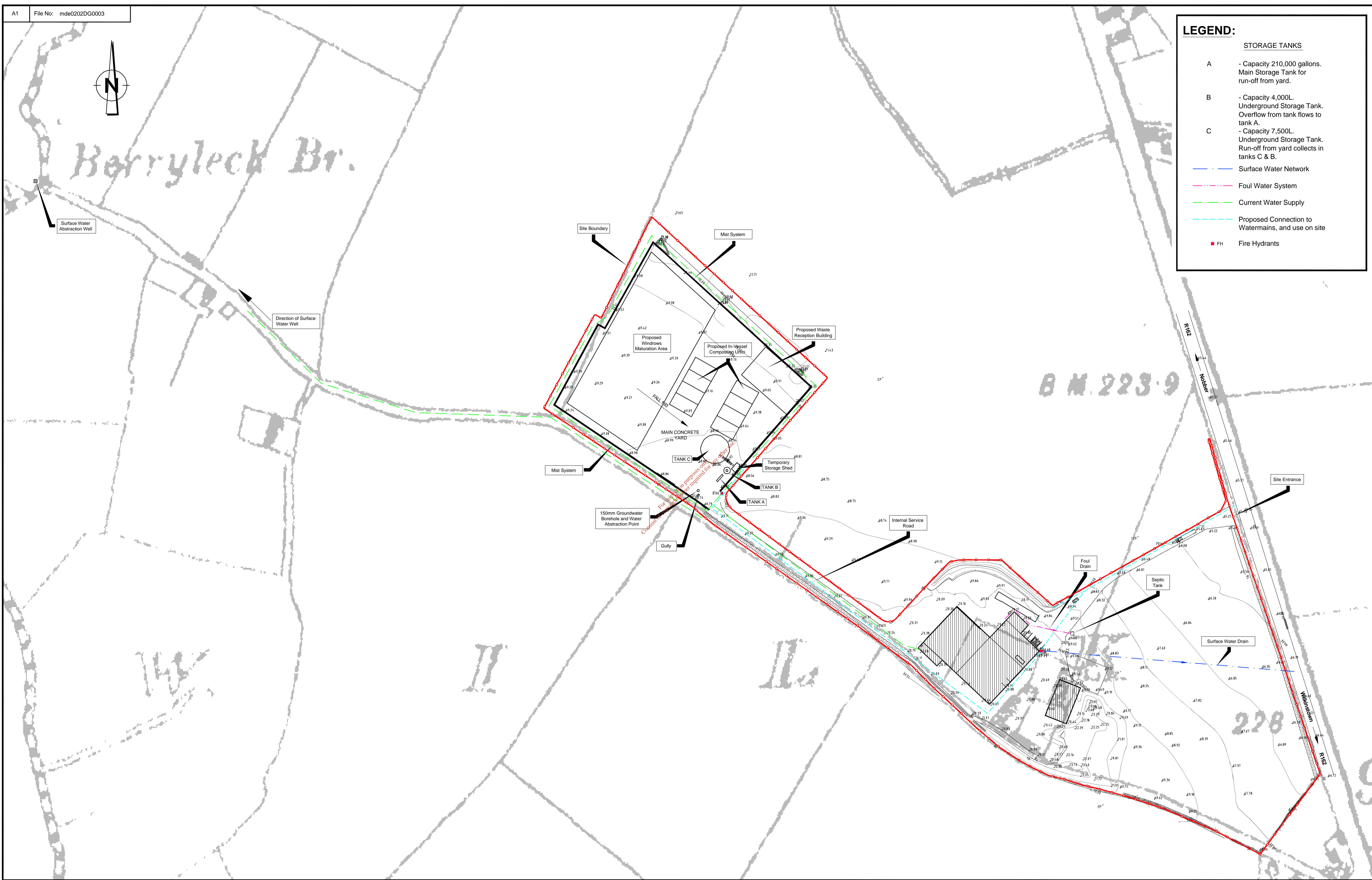
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LEGEND:

STORAGE TANKS

- A - Capacity 210,000 gallons. Main Storage Tank for run-off from yard.
- B - Capacity 4,000L. Underground Storage Tank. Overflow from tank flows to tank A.
- C - Capacity 7,500L. Underground Storage Tank. Run-off from yard collects in tanks C & B.

- Surface Water Network
- Foul Water System
- Current Water Supply
- Proposed Connection to Watermains, and use on site
- FH Fire Hydrants



Client:



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No.	Date	Amendment / Issue	App.
A02	May 06	Issue to Client for Approval	CB
A01	Aug 05	Issue to Client for Approval	CB

Project:

ORGANIC GOLD COMPOSTING FACILITY

Title:

SURFACE WATER DRAINAGE

Drawn by:	RH	Job No:	mde0202
Checked by:	LH	File No:	mde0202dg0007A02
Approved by:	CB	Drg. No:	DG0007
Scale:	1:1000	Rev:	A02
Date:	Aug '05		