

CRUGMOR FARM, PENPARC, CARDIGAN

WASTE RECOVERY PLAN – COMPOST FACILITY

OCTOBER 2013

Prepared for:

**Mr. Marc Davies
Crugmor Farm
Penparc
Cardigan**

ExCAL Limited

ExCAL House, Capel Hendre Industrial Estate, Ammanford,
Carmarthenshire, SA18 3SJ
Tel: 01269 831606
Fax: 01269 841867



DOCUMENT CONTROL SHEET

PROJECT:	CRUGMOR FARM, PENPARC, CARDIGAN
TITLE:	WASTE RECOVERY PLAN – COMPOST FACILITY

PROJECT REF:	196-01-06-13
REPORT No.:	196-01-06.R1

PREPARED BY:

D Simons:



APPROVED BY:

S Whitehouse:



Version	Date	Amendments
Original	October 2013	

This report, and information or advice which it contains, is provided by ExCAL solely for internal use and reliance by its Client in performance of ExCAL's duties and liabilities under its contract with the Client. Any advice, opinions, or recommendations within this report should be read and relied upon only in the context of the report as a whole. The advice and opinions in this report are based upon the information made available to ExCAL at the date of this report and on current UK standards, codes, technology and construction practices as at the date of this report. Following final delivery of this report to the Client, ExCAL will have no further obligation or duty to advise the Client on any matters, including development affecting the information or advice provided in this report. This report has been prepared by ExCAL in their professional capacity as Environmental Consultants. The contents of this report do not, in any way, purport to include any manner of legal advice or opinion. This report is prepared in accordance with the terms and conditions of ExCAL's contract with the Client. Regard should be had to those terms and conditions when considering and/or placing any reliance on this report. Should the Client wish to release this report to a Third Party for the party's reliance, ExCAL may, at its discretion, agree to such release provided that:

- (a) ExCAL's written agreement is obtained prior to such release and,
- (b) By release of the report to the Third Party, that Third Party does not acquire any rights, contractual or otherwise, whatsoever against ExCAL and ExCAL, accordingly, assume no duties, liabilities or obligations to that Third Party, and
- (c) ExCAL accepts no responsibility for any loss or damage incurred by the Client or for any conflict of ExCAL's interests arising out of the Clients' release of this report to the Third Party.

CRUGMOR FARM, PENPARC, CARDIGAN

WASTE RECOVERY PLAN

Contents	Page
1.0 INTRODUCTION	1
2.0 THE SITE 2	
3.0 PLANNING PERMISSION	3
4.0 DISCUSSION	4
4.1 Benefit	4
4.1.2 The green waste recycling development roads	4
4.1.3 The Green waste recycling development bunds	5
4.1.4 Overall benefit to Crugmor Farm	5
4.2 Construction Standards	5
4.3 Existing and Proposed levels	5
4.4 Waste Types	6
4.5 Volume of waste required	7
4.6 Is the minimum volume of waste being used?	8
APPENDIX A	Planning Permissions
APPENDIX B	Waste Types
APPENDIX C	Drawings
APPENDIX D	Volume Modelling Export

1.0 INTRODUCTION

Mr Davies owns Crugmor Farm and has been granted planning permission to establish a green waste recycling plant on his farm in Penparc, Cardigan.

The recycling facility will undertake two primary activities: -

- Recycling of aggregate generated from inert soils;
- Production of compost from green waste.

Materials generated by the aggregate recycling facility will be used to create some of the infrastructure for the facility including bunds, roads and hardstandings.

This Waste Recovery Plan has been produced to support the application for use of the recycled materials within the construction of the facility.

Recycled inert materials will be utilised to: -

- create a level working platform at the compost recycling facility;
- create access roads for the development;
- construct bunds which will line the road sides and surround the compost pad.

Use of inert aggregate and soils from the recycling facility will prevent the need to import virgin materials for construction.

New bunds will be overlaid with topsoil that will be seeded with locally occurring grass species.

The whole development is designed with the aim of achieving an excellent sustainability rating.

A Waste Recovery Plan (WRP) is required to facilitate and support the Permit Application for the site.

This Waste Recovery Plan has been prepared in accordance with Guidance issued by the Environment Agency.

2.0 THE SITE

Crugmor Farm was acquired by its owner, Mr Marc Davies in 1990 after renting the farm for approximately 6 years. The size of the holding is approximately 140 acres. The farm operates on beef and sheep.

The site is located within the village of Penparc, which is situated approximately 2.5 miles north east of the town of Cardigan.

The site is relatively good grade agricultural land but has little biodiversity and is currently utilised for grazing.

An aggregate recycling facility has been established on site under existing permissions where inert aggregate waste is screened and crushed. This facility will be the source of aggregate and soils for proposed works at the composting facility.

Figure 1: Aerial View



3.0 PLANNING PERMISSION

A copy of the Planning Permission for the development is contained in Appendix A.

The permission allows for: -

- Construction of an aggregate recycling facility;
- Construction of a compost production facility.

A plan of the approved proposed layout of these facilities is shown in drawing 196-01-02.d08 included in Appendix C.

4.0 DISCUSSION

To aid assessment, the proposed development has been split into 3 distinct aspects as follows: -

1. The green waste recycling pad and associated hardstanding;
2. The green waste recycling development access roads;
3. The green waste recycling development bunds.

Each of these aspects is discussed in greater detail below.

4.1 Benefit

4.1.1 The green waste recycling pad and hardstanding

The development of the green waste recycling facility will give rise to the following benefits: -

- i) The scheme will provide a strategic location in which locally generated green waste can be recovered;
- ii) The recycled green waste product generated will be re-used on the farm;
- iii) Utilising the recycled product will substitute similar products currently bought and imported to the farm, increasing the profitability of the farm;
- iv) The recycled green waste product could be sold to the wider community increasing the sustainability of the development and reducing the carbon footprint of the local community;
- v) The development will reduce the carbon footprint of locally generated green waste by treating it close to source;
- vi) Raising parts of the site to create a level pad surface will ensure safe operation of agricultural machinery required for the process;
- vii) Raising parts of the site to create level hardstanding will ensure safety of vehicles moving to and from the site;
- viii) Utilising recycled aggregate will directly replace virgin aggregate that would be required to construct the facility.

4.1.2 *The green waste recycling development roads*

The roads associated with the green waste recycling facility provide safe access and egress from the site whilst ensuring that vehicles cannot deviate from the site roads and become stuck in the surrounding fields. Creation of the roads will have the following benefits: -

- I. Creating stable roads of appropriate width will ensure safe access and egress for vehicles from site;
- II. Use of recyclable material to create roads in lieu of virgin materials or alternative materials such as concrete slab walls will reduce the carbon footprint of the development.

4.1.3 *The Green waste recycling development bunds*

- I. Creating bunds of suitable dimensions will ensure vehicles cannot leave the road and become stuck in the surrounding fields.
- II. Bunds will provide screening of the site activity, including flashing lights on vehicles and safety lighting installed from nearby sensitive receptors. Once seeded with grasses, the bunds will blend in with the surrounding environment reducing their visual impact.

4.1.4 *Overall benefit to Crugmor Farm*

Development of the green waste composting facility will enhance the profitability of Crugmor Farm whilst also diversifying the operations currently conducted on site.

The green waste development will provide a valuable sustainable service to the local community.

4.2 **Construction Standards**

Roads within the development will be constructed in general accordance with guidelines set out within Series 600 – Earthworks of the The Highways Specification, with specific attention paid to clauses 601, 602, 608 and 612. This will ensure that only suitable materials are utilised and that these are compacted in the correct manner.

As the recycling facility will be utilised by heavy goods vehicles and large plant associated with the composting process, bunds will be required to ensure all vehicles and plant utilising the roads and recycling area remain on the road or working surface and cannot migrate into the surrounding fields.

Bunds around the roads of the compost site will be constructed in accordance with the general recommendations given in Regulation 13 of the Health and Safety at Quarries - Quarries Regulations 1999 (hereafter referred to as Quarries regulations).

The regulations recommend a minimum height of 1.5m for bunds, or construction to a height that would prevent the largest fully loaded vehicle from leaving the road.

The bunds lining the roads will be 1.5m high with sides constructed to 1 in 2 slope with a top width of 0.5m, the cross sectional area of the bund would be 5.25m². these dimensions will enable geotechnical stability and safe maintenance.

Soils and engineering fills will be compacted in line with the British Standard BS6031 – Code of Practice for Earthworks for bunds and The Specification for Highway Works.

Landscaping works where required will refer to the British Standard BS4428 (1989) Code of practice for general landscape operations.

4.3 **Existing and Proposed levels**

A topographical survey of existing levels was conducted.

The compost pad requires levelling to allow safe operation of machinery that will create and maintain the compost windrows.

The compost production pad will be designed to facilitate good drainage and treatment of runoff. This required the creation of bunded settlement ponds.

Roads will require construction to allow access to the compost recycling pad, with bunds lining both the roadways and compost pad itself to prevent vehicles or product leaving the surface.

In order to quantify the minimum volume of material required to achieve the required working levels, a Digital Terrain Model utilising the LSS V9.90.02 software package.

Sections showing the existing and proposed levels across the development were created and are shown in drawings 196-01-06-Iss01 and 196-01-06-Iss02 in Appendix C.

The volume of aggregate and soil required and material types proposed are discussed in greater detail in the following section.

4.4 Waste Types

The boundary of the compost development is shown in drawing 196-01-02.d08 in Appendix C.

Should the activity not be classified as recovery then Mr Davies proposes to use inert imported materials to complete the development where necessary.

Inert waste will be used solely as engineering fill.

The inert wastes outlined in greater detail below are suitable for the activities proposed due to their geotechnical similarities to virgin aggregate in terms of their load bearing capacity and ability to be compacted into layers required to create roads, bunds and surfaces

All waste materials to be utilised will be suitable for engineering compaction using standard earthworks equipment. Geotechnical testing will be undertaken on representative samples of materials to be used in engineering works to ensure that they are fit for purpose.

Compaction will be monitored to ensure that the soils are geotechnically stable when placed.

Waste Acceptance Criteria (WAC) testing will be undertaken, where required, to ensure that material brought to site is compliant with the Inert Waste Criteria.

The waste types proposed are listed in the table below, full descriptions of each waste type are given in Appendix B.

EWC Classification	Recovered Waste Material Used	Non-Waste Material it will Replace	Application of Waste Material
17 01 01 17 01 02 17 01 03 17 01 07	Concrete, Bricks, Tiles and Ceramics	Locally Sourced, Quarried Stone and Rock Material	1. Structural Fill for Track Construction 2. Hardstanding Development, including car park 3. Bund Structural Fill
17 03 02	Road Base and Road Planings		4. Track Surfacing
17 05 04	Soil and Stones	Excavated Natural Soils	1. Levelling at the Phase 1 Site 2. Post-build Bund Cover – To Promote

EWC Classification	Recovered Waste Material Used	Non-Waste Material it will Replace	Application of Waste Material
			the Growth of Grasses and other Flora
19 12 09	Minerals (for example stones, sand) excluding residual 'fines' from mechanical treatment of missed wastes at transfer station	Natural Soils and Local Quarried Material	1. Levelling at the Phase 1 Site

170101, 02, 03, 07, 170302 and 191209 will be utilised as engineering fill to raise the level and create a drainage layer.

170504 will be utilised to create the bunds which will be suitable to be seeded with locally occurring grasses

4.5 Volume of waste required

In line with the Environment Agency guidance, the minimum amount of waste required to achieve the restored site profile was calculated.

A topographical survey of the area was conducted to establish existing levels. The topographical data was then utilised to develop a 3d terrain model of the compost development in addition to sections showing existing and proposed levels for the roads across the site.

Volume exports were then reported from the model to establish the volume of material required to achieve the proposed finished levels for the compost pad, hardstanding and bunds.

The volume of material required to create the road and hardstanding was established by the surface area of each determined by LSS multiplied by the known fill depth of 0.5m.

Volume exports of features within the model are included in Appendix D.

The volume of fill material required has been broken down by feature in the table on the following page:-

Development	Calculated from	Volume (m ³)
Compost pad and lagoons	LSS volume export	16,332
Hardstanding	Surface area of hardstanding as determined by LSS volume export multiplied by road depth	1715
Compost Pad Bunds	LSS volume export	26,008
Road surface	Surface area of road as determined by LSS volume export multiplied by road depth	1974
Road bunds	LSS volume export	4440

A total of approximately 50,469 cubic meters of inert material will be required to achieve the finished levels shown.

Using the conversion factor of 1.5 cubic metres per tonne taken from the document HMRC: A General Guide to Landfill and Tax, Volume to Weight Conversion Factors, Section 5.5; approximately 75,704 Tonnes of inert waste will be required.

4.6 Is the minimum volume of waste being used?

The development has been designed to incorporate good engineering practice and to ensure the safety of all site users and safe operation of site machinery.

Appropriate standards have been utilised where available for all relevant aspects of the development.

The design utilises the minimum volume of material required to meet the standards and complete the site design.

APPENDIX A
Planning Permissions

Cyngor Sir
CEREDIGION

**ADRAN Y GWASANAETHAU
AMGYLCHEDDOL A THAI**



**DEPARTMENT OF ENVIRONMENTAL
SERVICES AND HOUSING**

CEREDIGION
County Council

PLANNING DECISION

Town and Country Planning Act 1990

PLANNING PERMISSION

Applicant:

Mr M Davies
Crugmore Farm,
Penparc
Cardigan
Ceredigion SA43 1RD

Agent

Miss M Rees
Asbri Planning Ltd
1a Axis Court
Riverside Business Park
Mallard Way
Swansea Vale
Swansea
SA7 0AJ

Part 1 - Particulars of application

Date of application 07/08/2012

Application No. A120564

Particulars and location of development

Crugmore Farm, Penparc, Cardigan

Construction of inert waste recycling and green waste composting facility and associated works

Grid reference: 220271 247229

Part 2 - Particulars of decision

Cyngor Sir Ceredigion hereby give notice in pursuance of the provisions of the Town and Country Planning Act 1990 that PERMISSION HAS BEEN GRANTED for the carrying out of the development referred to in Part 1 hereof in accordance with the application and plans submitted subject to the following conditions:-

1. The development hereby permitted shall be commenced before the expiration of five years from the date of this permission. Written notification of the date of commencement shall be sent to the Local Planning Authority a minimum of 14 days prior to commencement
2. Except where otherwise required by any condition attached to this planning permission, the development hereby approved shall be carried out in complete accordance with the approved plans and supporting documents received 7 August 201

Application number A120564 continued:

3. The site shall be used only for the composting of green waste and the recycling of inert construction, demolition and excavation waste materials (stone, concrete, brick, rubble, hardcore and soil) and for no other purposes (including any other purpose in Classes B2, B1 or B8 of the Town and Country Planning (Use Classes) Order 1987 (as amended), or in any provision equivalent to that Class in any statutory instrument revoking or re-enacting that Order with or without modification).
4. The volume of inert materials brought onto the site for screening, crushing and recycling shall not exceed 10,000 tonnes in any calendar year.
5. The volume of green waste materials brought onto the site for composting shall not exceed 20,000 tonnes in any calendar year.
6. Separate log shall be kept of every load of material brought in for composting, or for screening, crushing and recycling, which records the date, tonnage and source of each load and the contract to which it relates, together with the cumulative tonnage received during that calendar year. This record shall be retained on site and made available to the authority for inspection on site whenever the site is operational; or in the case of any written request by the authority to view the records, the requested records shall be submitted to the authority within five working days of the date of such request.
7. Except as maybe necessary in order to carry out the development hereby approved including any landscaping agreed in compliance with any condition attached to this permission, or where the material is incorporated into any other development on the land for which either planning approval has been (or is subsequently) granted, or the development is permitted under the Town and Country Planning (General Permitted Development) Order 1995 (or any subsequent revision or replacement of that Order) none of the materials to be brought on to the site for aggregate recycling shall be disposed of on site.
8. The storage of any skips on the land shall only be incidental to the use of the site and shall be confined to an area and overall height which shall have previously been approved in writing by the Local Planning Authority.
9. Notwithstanding the provisions of Part 4 and 8 of Schedule 2 under Article 3 of the Town and Country Planning (General Permitted Development) Order 1995 (or any Order amending, replacing or re-enacting that Order, with or without modifications), details of any screens, crushers, moveable structures, works, plant or machines not included in the submission documents that are to be used on site shall be submitted to and agreed in writing by the Local Planning Authority before being brought into use. Thereafter only those screens, crushers, moveable structures, works, plant or machines agreed, or any alternatives subsequently put forward and agreed by the Local Planning Authority shall be used on site.
10. The stockpiling of inert waste and recycled aggregate products shall only take place within the dedicated holding bays; and no green waste, compost, inert waste materials or recycled aggregate products shall be deposited or stockpiled to height exceeding 5 metres.

Application number A120564 continued:

11. No deliveries of waste shall be accepted at the site, and no crushing, screening or ancillary plant or vehicles shall be operated on the site, outside the following hours: 07:30hrs to 18:00hrs Monday to Friday and 08:00hrs to 16:00hrs on Saturday. No crushing, ancillary plant or vehicles shall be operated on the site at any time on Sundays, Bank Holidays, or Public Holidays. In addition, no screen or crusher shall be operated before 08:00hrs Monday to Friday, or before 10:00hrs on Saturday, unless it can be demonstrated by the developer that the rating level of the noise emitted from the site, as determined at location N2 identified on plan No. 196-01-02-D07 (applying measurements and assessments according to BS 4142:1997) will not exceed the existing background noise level by more than 3dB LAeq.
12. The noise levels arising from the development hereby approved shall not exceed 53dB(A) LAeq (1 hour) measured at monitoring point N2 identified on plan No. 196-01-02-D07.
13. In the event that noise levels arising from the development recorded at location N2 should exceed 53dB(A) LAeq then within one month of the developer being notified that the maximum permitted levels have been exceeded a scheme and programme of measures for the minimisation and suppression of noise, including provision for monitoring and review of the scheme, shall be submitted to and approved in writing by the Local Planning Authority; and thereafter the scheme shall be implemented as approved and complied with at all times.
14. All vehicles, plant and machinery operated within the site shall be maintained in accordance with the manufacturer's specification at all times, and shall be fitted with and use effective silencers.
15. The noise emitted at any time from the site shall not contain any discrete continuous note, i.e. whine, hiss, screech, hum or distinct impulses i.e. bangs, clicks, clatters or thumps (that are repeated as part of normal operations) distinguishable at any of the monitoring locations identified on plan No. 196-01-02-D07
16. No vehicles under the control of the operator using the site shall be fitted with reversing beepers. Instead, all such vehicles shall be fitted with and always use a non-audible safety device or a "smart" form of reversing alarm, in accordance with specifications to be submitted and approved within 3 months of the date of this permission.
17. The 'Dust Management Protocol' set out in the 'Dust Suppression Method Statement including the provision for monitoring, annual review of the scheme and the submission of an annual review document to the Local Planning Authority shall be implemented as submitted and complied with at all times.
18. The results of dust monitoring for each 12 month monitoring period shall be submitted to the Local Planning Authority within 21 days of the end of each monitoring period.
19. The highway access/junction approved under planning permission A100642, as modified by plan reference 031a-100-002 approved under this permission, and the new access road approved under this permission shall be completed and certified in writing as complete by or on behalf of the Local Planning Authority before any other part of the development commences.
20. Notwithstanding the fact that planning permission A100642 provides for a new internal access road between the Trunk Road and Crugmor Farm there shall be only one access road constructed and only the access road approved under this permission shall be used by traffic accessing the land in connection with the composting and inert waste facility hereby approved.

Application number A120564 continued:

21. No development other than the construction of the access/junction and new access road shall be carried out until a scheme has been submitted to and approved in writing by the Local Planning Authority, which indicates how all future traffic requiring access to the site will be prevented or discouraged from accessing the site via the existing access lane to the north of Crugmor Farm. Thereafter the scheme shall be implemented as approved.
22. The visibility splays of the new access/junction shall be maintained free of any obstruction exceeding 600mm above road level at all times.
23. The best practicable means shall be taken to ensure that all vehicles leaving the site are in such a condition as not to emit dust, or deposit slurry, mud, or other material from the site upon the roads in the vicinity. No commercial vehicles shall enter the public highway unless their wheels and chassis are clean.
24. No loaded vehicles shall leave the site un-sheeted except those only carrying bagged materials or materials in closed containers, or aggregate materials in excess of 500mm.
25. Before any green waste is brought onto the site for composting a revised surface water drainage scheme shall be implemented in accordance with a scheme to be submitted to and approved in writing by the Local Planning Authority. The revised scheme shall include: the provision of a sealed drainage system to collect any leachate and organic rich run-off generated by the composting facility; and the provision of additional oil interceptors to intercept run off from any areas where there are vehicle movements and storage. Such scheme shall be designed so that it does not generate any increased flows into a watercourse.
26. Any repair, maintenance and refuelling of plant and machinery, shall only take place on an impervious surface drained to an oil interceptor.
27. No tipping or temporary storage of materials shall take place within 10 metres of any watercourse; and under no circumstances shall tipped material be allowed to enter any watercourse or culvert.
28. Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls or in proprietary double skinned tanks. The volume of the bunded compound shall be at least equivalent to the capacity of the tank plus 10%. If there is multiple tankage, the compound shall be at least equivalent to the capacity of the largest tank, or the combined capacity of interconnected tanks, plus 10%. All filling points, vents, gauges and sight glasses must be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipework shall be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets shall be detailed to discharge downwards into the bund.
29. In addition to the hedgerow planting and screening referred to in the submission documents, the developer shall provide and maintain additional soft landscaping and planting including screening to the west and south of the composting area in accordance with a scheme to be submitted to and agreed in writing with the Local Planning Authority prior to commencement of work on site.
30. All landscaping and planting in the approved scheme shall be carried out within 12 calendar months of commencement of the development or in such phases as may be agreed in writing with the Local Planning Authority.

Application number A120564 continued:

31. All existing and proposed trees, bushes and hedgerows including those to be planted in accordance with the approved landscaping and planting scheme shall be retained and maintained, and shall not be wilfully damaged or destroyed or uprooted, felled, lopped, or topped without the previous written consent of the Local Planning Authority. Any trees, bushes or hedgerows being removed without such consent or dying, being severely damaged or becoming seriously diseased shall be replaced with shrubs of such size and species as may be agreed in writing by the Local Planning Authority.
32. The developer shall conform to the recommendations of British Standard 5837:2005 'Trees in relation to construction – Recommendations' to provide a buffer between the woodland area / stream and the area of Phase 2 of the proposed development.
33. The recommendations set out under Section 6 of the Phase 1 Habitat Survey prepared by Excal Ltd. dated July 2012 shall be implemented in full within 12 calendar months of commencement of the development or in such phases as may be agreed in writing with the Local Planning Authority.
34. Details of the location, height, design, sensors, and luminance of any floodlighting and security lighting to be used in connection with the development hereby approved (which shall be designed to minimise the potential nuisance of light spillage on adjoining properties and highways), shall be submitted to and approved in writing by the Local Planning Authority before being erected. Thereafter no security lighting or floodlighting, other than that approved, shall be used on the site without the prior written approval of the Local Planning Authority.
35. Any floodlights to be utilised shall not be illuminated between the hours of 18:15 to 07:30 Monday to Friday, nor between 00:00 to 08:00 or 16:00 and 24:00 on Saturday or at any time on Sunday or National Holidays (save for security lighting activated by unauthorised entry by persons or vehicles), unless otherwise agreed in writing with the Local Planning Authority.
36. The developer shall ensure that a professionally qualified architect is present during the undertaking of any ground works in the development area, so that an archaeological watching brief can be carried out. The archaeological watching brief will be undertaken to the standards laid down by the Institute for Archaeologists. The developer shall inform the planning authority in writing, the name of the said archaeologist at least two weeks prior to the commencement of the development.

Reasons:

1. Pursuant to Section 91 of the Town and Country Planning Act 1990
2. To ensure compliance with the approved plans.
3. In order to protect the visual amenities of the area and to regulate the use of land.
- 4, 5. To enable the authority to adequately control the scale of the development and to minimise its impact on the residential amenity of the area.
6. To allow the Local Planning Authority to adequately monitor activity at the site and in the interests of the amenity of the residents of the area.
7. To regulate the use of land; and to limit the visual impact of the development and protect the character of the area.
- 8, 9. To protect residential and local amenity.
10. In the interests of visual amenity
- 11, 12, 13, 16. To protect amenities of local residents and the amenities of the locality from the effects of any noise arising from the development.

Application number A120564 continued:

14. To ensure minimum disturbance from operations and avoidance of nuisance to the local community.
15. To protect the amenities of the locality from the effects of any noise arising from the development.
17. To protect the amenities of the locality from the effects of any dust arising from the development.
18. To enable the Local Planning Authority to monitor the effectiveness of the dust suppression scheme, in the interests of the amenities of local residents and the amenities of the locality.
19. In the interests of highway safety.
20. To ensure that there is not an over provision of access roads to the detriment of the visual amenities of the area.
21. In the interests of highway safety; and to protect the amenities of local residents.
22. In the interests of road safety and the free flow of traffic.
23. In the interests of highway safety and to prevent mud and dust getting on the highway.
24. To prevent mud and dust getting on to the highway in the interests of highway safety and safeguarding the local environment
25. To minimise the risk of pollution of watercourses and aquifers; and to prevent flooding.
26. To minimise the risk of pollution of watercourses and aquifers.
27. To minimise the risk of flooding and pollution of watercourses and aquifers.
28. To prevent pollution of the water environment.
- 29, 30. To ensure that the site is properly landscaped in the interests of the visual amenity of the area and for biodiversity
31. In the interests of protection of biodiversity on the site and in the locality and to ensure the development is adequately screened in the interests of the visual amenities of the area.
- 32, 33. In the interests of protection of biodiversity on the site and in the locality.
34. To minimise nuisance and disturbance to residential and local amenity; and in the interests of highway safety.
35. To minimise nuisance and disturbance to neighbours (and the surrounding area); and in the interests of highway safety.
36. To enable a site of archaeological interest to be adequately investigated and recorded

Informatives:

For the avoidance of doubt the supporting documents referred to under condition 2 are all the documents shown bulleted on the letter from Asbri Planning dated 6 August 2012, which accompanied the application).

For the avoidance of doubt this planning permission only covers the use of the site for green waste composting and the recycling of inert waste. The planning permission does not extend to the use of the land for any other waste recovery, transfer or disposal operations, with the exception of those ancillary activities that are necessarily required in order to carry out the green waste composting and inert waste recycling operations approved under this permission. The ancillary activities permitted include the screening, removal, separation, temporary storage and

Application number A120564 continued:

onward forwarding of any contaminants incidentally found within any loads of green waste or inert waste brought on to the site, but does not include the handling, screening, removal, separation, temporary storage and onward forwarding of any waste materials derived from any loads brought onto the site that do not fundamentally comprise only of green waste or inert waste.

For the avoidance of doubt, the compost produced on site will only cease to be waste if it conforms to PAS100 standard. Compost products not conforming to this standard constitute waste and the deposition of waste on land requires planning permission for waste disposal.

Use of PAS100 compost on the land at Crugmore Farm for the agricultural benefit of the land will not require planning permission. The deposition of any compost not conforming to PAS100 on the Farm (which constitutes waste disposal) is not covered by this planning permission.

For the avoidance of doubt this planning permission does not permit the landfill disposal of any inert materials on the land. The deposition of secondary aggregates conforming to the Agregain (WRAP) protocol is permitted only in respect of any engineering operations necessary in order to carry out the development approved under this planning permission, including any engineering works necessary to provide any landscaping improvements submitted to and agreed by the planning authority in compliance with any condition attached to this planning permission.

For the avoidance of doubt this planning permission does not extend to the granting of planning permission for any development that lies outside the planning boundaries of the application site. The submission documents make reference to sourcing clay from Crugmor Farm to use in the development approved under this permission. The applicant needs to be aware that any mineral extraction operations (which includes the extraction of clay) for this purpose will require a separate planning permission. Mineral extraction on an agricultural holding for agricultural use on the holding is covered by permitted development rights. However, the development hereby approved lies outside the definition of agriculture and therefore any mineral extraction on the holding in connection with the development hereby approved lies outside the scope of agricultural permitted development.

The site is approximately 1km from the Banc y Mwldan Site of Special Scientific Interest (SSSI). The Banc y Mwldan SSSI is of special interest for rare and uncommon invertebrates and plants which depend on a series of lime-rich flushes on the SSSI. CCW have flagged up the importance of following the recommendations of the Environment Agency with regard to pollution prevention and water management, in order to safeguard the interest of the Banc y Mwldan SSSI.

There are habitats of importance for wildlife immediately adjacent to the proposed site area, including water courses and semi-natural broadleaved woodland.

British Standard 5837: 2005 'Trees in relation to construction – Recommendations' provides recommendations and guidance for arboriculturalists, architects, builders, engineers, land managers, landscape architects and contractors, planners, statutory undertakers, surveyors, and all others interested in harmony between trees and construction. This standard supersedes BS 5837: 1991 'A Guide for trees in relation to construction'.

Footpath 74/31/D dissects the site (as identified in the Design and Access Statement). It is essential that this right of way remains open and available both during the construction process and thereafter.

Application number A120564 continued:

Any exterior security lights will need to be low level, and fitted with hoods to direct the light downwards below the horizontal plane, at an angle not less than twenty degrees from horizontal and away from the adjacent buildings and vegetation.

The proposed activity falls under the Environmental Permitting (England and Wales) Regulations 2010. This scale of facility will need to operate under an environmental permit issued by the Environment Agency (Wales). This will either be a bespoke permit or a standard rules permit. Standard rules permits are available for composting facilities which are to be located more than 250 metres from dwellings or workplaces. There is no guarantee that a permit will be issued.

One particular aspect of composting that needs to be controlled is the release of potentially harmful bio aerosols. The Environment Agency (Wales) take this into account before authorising any new composting facility located where the composting operations would be within 250 metres of sensitive receptors.

The applicants for environmental permits for new composting operations within 250 metres of workplaces or dwellings have to carry out a Site Specific Bio aerosol Risk Assessment (SSBRA) in support of their permit application. Before granting a permit the Environment Agency (Wales) need to be satisfied that the SSBRA shows that bio aerosols can and will, be maintained no higher than acceptable levels at the sensitive receptors.

The Environment Agency (Wales) current position for such sites is that, subject to the SSBRA assessment applicants will be issued permits where:

- the maximum quantity of waste handled at any one time does not exceed 500 tonnes, or
- if the quantity of waste handled exceeds 500 tonnes, the operations are carried out in a way and with the necessary measures (e.g. negative aeration, enclosure) to ensure that they are not likely to result in the uncontrolled release of high levels of bio aerosols.

The Environment Agency (Wales) will assess the need for monitoring at new sites as part of the permit determination, based on the individual circumstances of the particular site and taking into account the cost of monitoring.

With regard to the SSBRA, generally the complexity of a risk assessment is related to the size and complexity of the proposed facility and the uncertainty of the risk posed, varying from a qualitative, largely generic approach at one extreme to a site specific quantitative risk assessment at the other.

Standard methods of determining bio aerosol levels are available. However based on the Environment Agency (Wales) present scientific understanding of bio aerosols, the way they behave and their health impacts the Environment Agency (Wales) now consider that there is currently no suitable methodology for carrying out adequate quantitative SSBRAs for new composting facilities. Accordingly, the Environment Agency (Wales) believe that they need to take a precautionary approach and not normally permit those facilities where they would have expected a quantitative SSBRA until such time as a suitable methodology becomes available. The types of new facilities affected by this are those that would have handled more than 500 tonnes of waste at any one time and would have carried out any "composting operations in the open that are likely to result in the uncontrolled release of high levels of bio aerosols", as defined above. In practice, this would not include situations where the entire composting operation is carried out inside a building, or where composting takes place outside, but using negative aeration and without turning. However it would include compost maturation in conventional outdoor turned windrows, carried out following other treatment operations such as in-

Application number A120564 continued:

vessel composting, treatment in a dry AD (anaerobic digestion) plant and treatment in an MBT (mechanical biological treatment) plant.

Guidance on the evaluation of bio aerosol risk assessments for composting facilities is available on their website at:

<http://www.environment-agency.gov.uk/research/library/position/41211.aspx>.

Below are other issues which the Environment Agency (Wales) indicate will need to be addressed in order to obtain a permit.

- The composting facility is likely to generate leachate and organic rich run off, this will have to go to the main sewer (under consent) or sealed drainage system.
- Odour Management will be required and a prior assessment before operation is strongly recommended.
- For the inert waste site dust and noise assessments will be required prior to operation to assess background levels.
- Run off from inert sites may be able to go through a surface water system following treatment e.g. suspended solids removal.
- Oil interceptors will be required on surface water systems where run off is collected from areas where there are vehicle movements and storage.

Regulation of flows to a watercourse may be achieved by:

- On site storage with restricted flows only being discharged;
- Soakaways in the case of small developments, which will be subject to Building Control approval. Soakaways should not be located within 6m of a road or building;
- Sustainable Drainage System, which will be subject to Building Control.



Date 22 January 2013

Neuadd Cyngor Ceredigion,
Penmorfa, Aberaeron, Ceredigion,
SA46 0PA

Bryan Thomas
Cyfarwyddwr Adran Amgylcheddol a Thai
Director of Environmental Services and
Housing

The development plan covering Ceredigion is the Dyfed Structure Plan. The following Structure Plan policies were relevant to the consideration of this application.

E8

EN1A

EN23

EN7

M11

Note: This permission refers only to that required under the Town and Country Planning Acts and does not include any consent or approval under any other enactment byelaw, order or regulation.

Appeals to The National Assembly for Wales

Application number A120564 continued:

If you are aggrieved by the decision of your local planning authority to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the National Assembly for Wales under section 78 of the Town and Country Planning Act 1990.

If you want to appeal, then you must do so within six months of the date of this notice, using a form which you can get from the Planning Inspectorate at Cathays Park, Cardiff. CF1 3NQ.

The National Assembly for Wales can allow a longer period for giving notice of appeal, but it will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.

The National Assembly for Wales need not consider an appeal if it seems to it that the local planning authority could not have granted planning permission for the proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of the development order and to any other directions given under a development order. In practice, the National Assembly for Wales does not refuse to consider appeals solely because the local planning authority based their decision on a direction given by it.

Purchase notices

If either the local planning authority or the National Assembly for Wales refuses permission to develop land or grants it subject to conditions, the owner may claim that he can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.

In these circumstances, the owner may serve a purchase notice on the County Council in whose area the land is situated. This notice will require the Council to purchase his interest in the land in accordance with the provisions of Part IV of the Town and Country Planning Act 1990.

APPENDIX B

Waste Types

Waste Types as Defined in the Regulatory Guidance Note No. Environmental Permitting Regulations (EPR) 13: Permanent Deposit of Waste on Land:

17 01 Concrete, bricks, tiles and ceramics

17 01 01 Concrete: Use Classification A, B, D.

17 01 02 Bricks: Use Classification A, B, D.

17 01 03 Tiles and ceramics: Use Classification A, B, D.

17 01 07 Mixtures of concrete, bricks, tiles and ceramics: Use Classification A, B, D.

17 05 Soil (including excavated soil from contaminated sites) stones and dredging spoil.

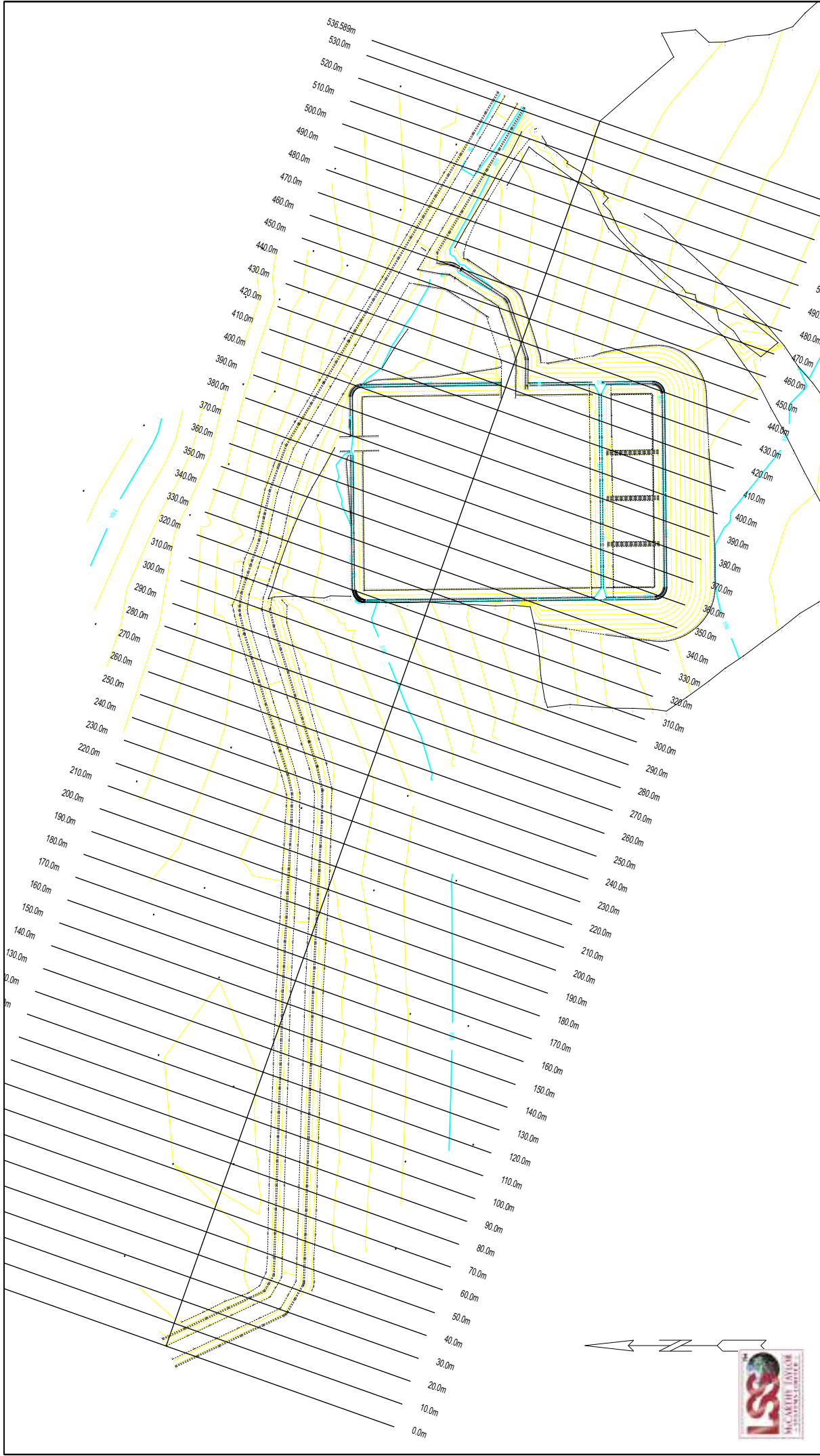
17 05 04 Soil and stones A, B, E, F (Must be sampled and analysed from contaminated sites and a site specific Risk Assessment undertaken).

19 12 Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified.

19 12 09 minerals (for example stones, sand) A, B (Excluding residual 'fines' from mechanical treatment of missed wastes at transfer stations).

APPENDIX C

Drawings



198-01-08

Water Resource Plan

Concept Design and Urban Layouts

Scale 1:500

Plan 1 of 10

EC&A Ltd

EC&A Name

Client Name

Address

SW 10 0L

10/10/2018

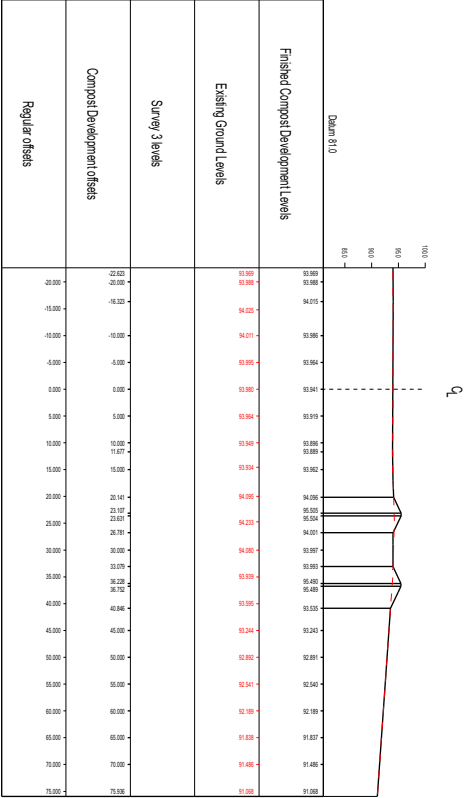
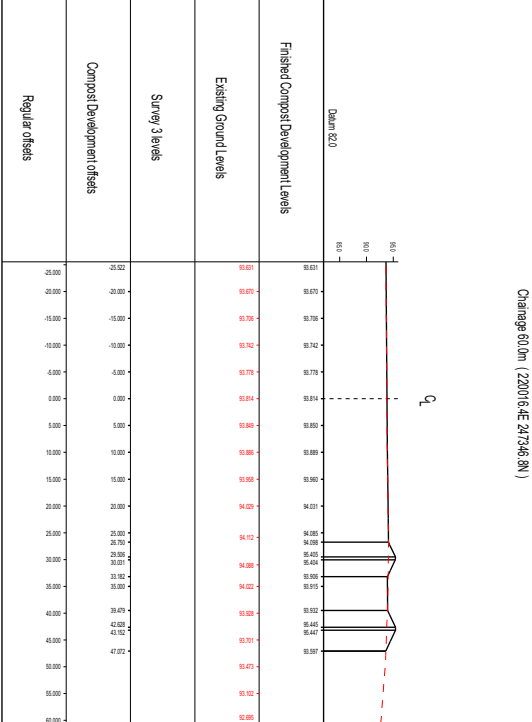
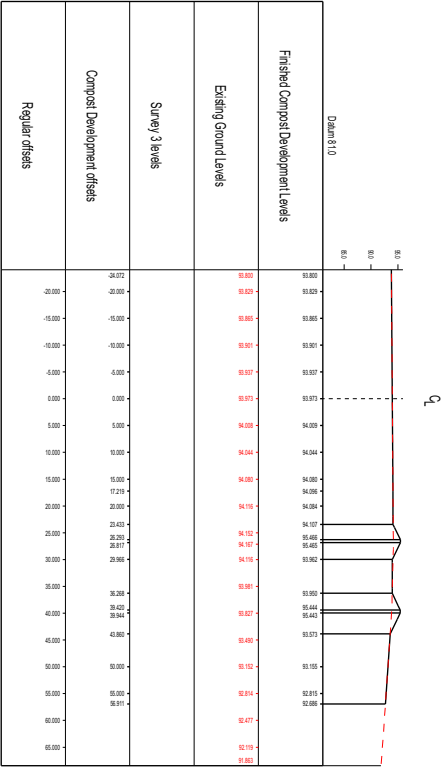
Tree

Hedge

Gross

LEGEND

100

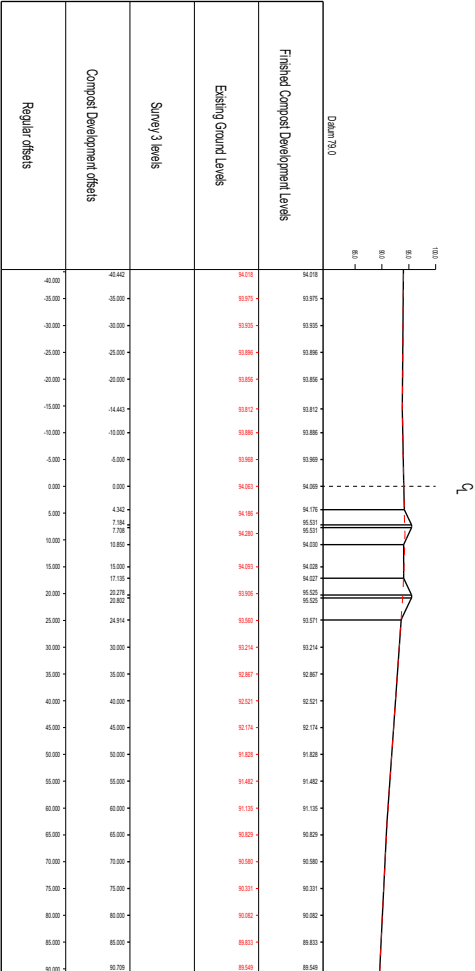


E-CAL Ltd
E-CAL Name
Company Name
Address
City
State
Post Code

Page 1 of 1

Version 1.0

Page 1 of 1



Change 120.0m (2007.9E-4726.8N)

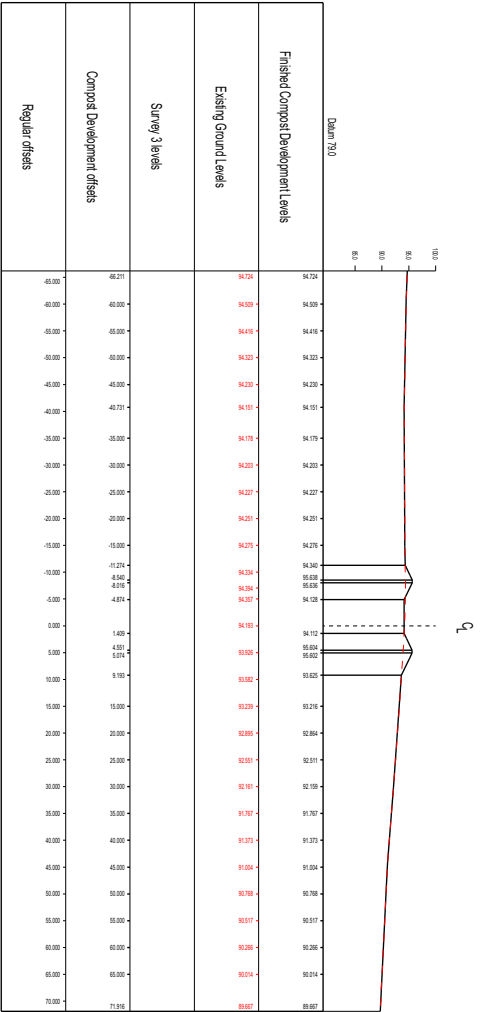


E.CAL Ltd
E.CAL Ltd
Corporate Information
Annual
Statement
2018/19

Page 17 of 17

19/01/2019
19/01/2019

19/01/2019
19/01/2019
Corporate Information
Annual
Statement
2018/19



Change 770.0m (220120.0E-247910.1N)



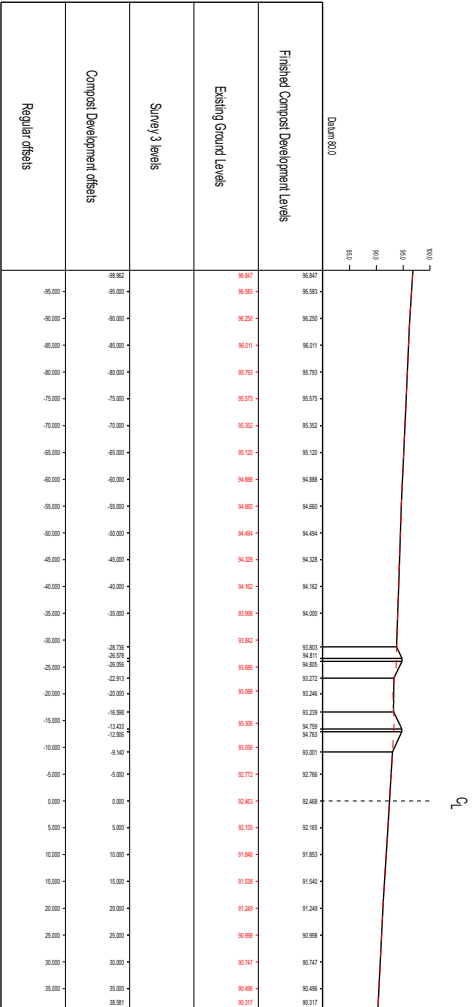
E.CAL Ltd
E.CAL Name
Company Information
Address
State
Postcode

Page 17 of 17

Version 1.00

19501.06
E.CAL Name
Company Information

Page 17 of 17



Change 230.0m (2207765E 247290.0N)

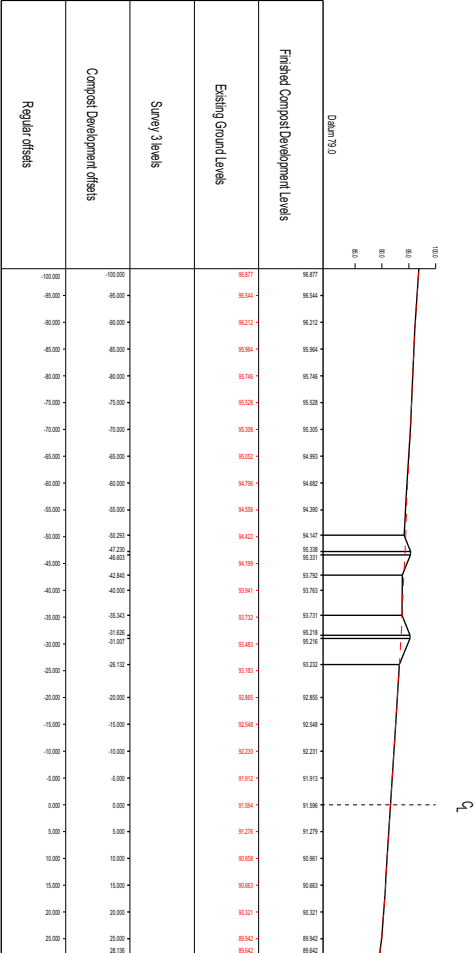


E.CAL Ltd
E.CAL Name
Company Name
Address
State
Postcode

Page 7 of 21

Version 1.00

Page 7 of 21



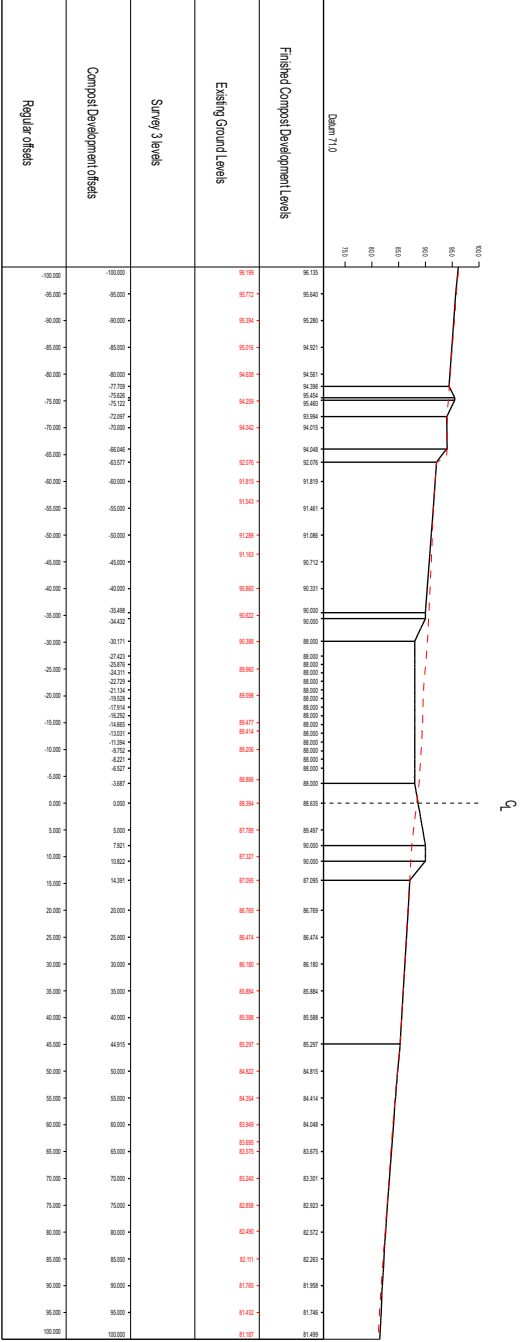
Change 250.0m (22024 SE 47280.0N)



E.CAL Ltd
E.CAL Ltd
Company Information
Address
Street
M10000000

19501.06
19501.06
Company Information
Address
Street
M10000000

19501.06
19501.06
Company Information
Address
Street
M10000000



Chinaga 330.0m (220709E 247256.8N)

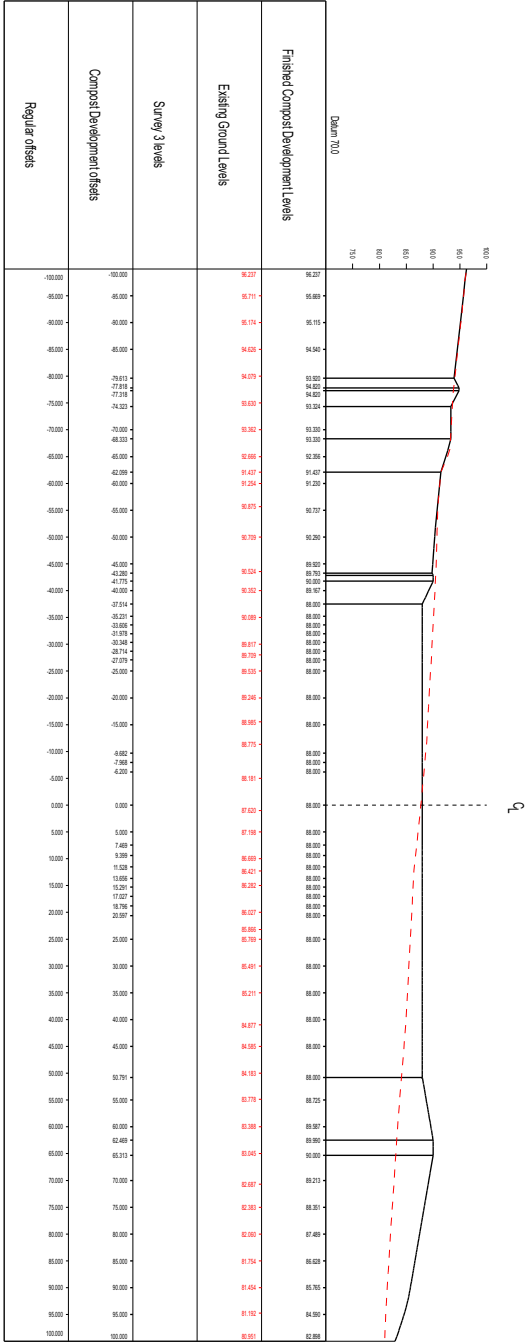


E.CAL
Limited

19501.06

19501.06

19501.06

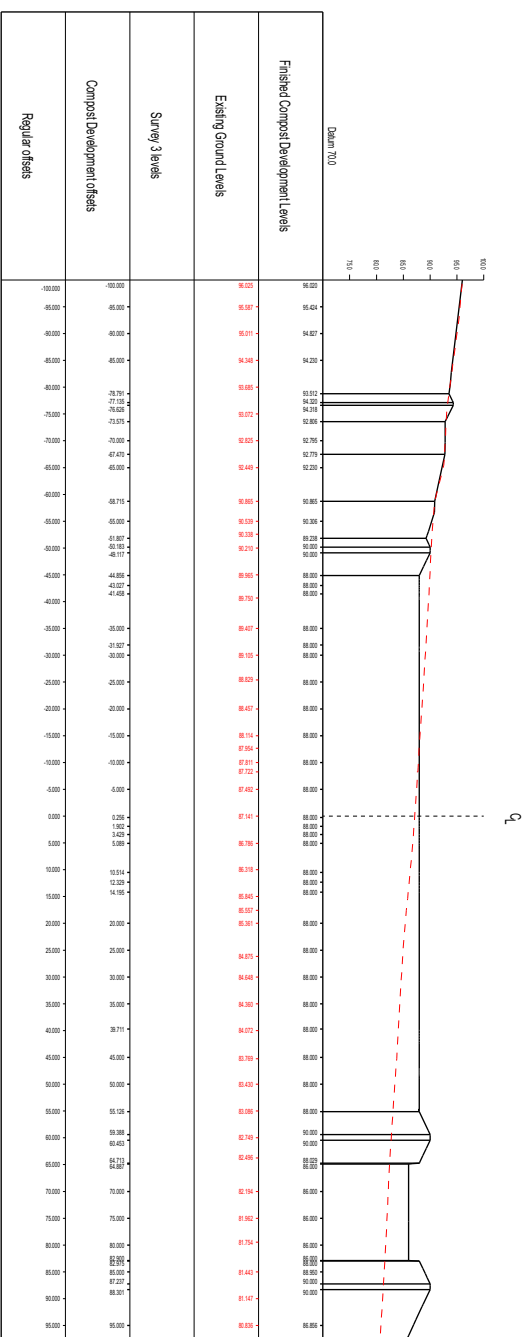


E.CAL
Limited

19501.06

19501.06

19501.06



Chainage 370.0m (220308.6E 247243.3N)



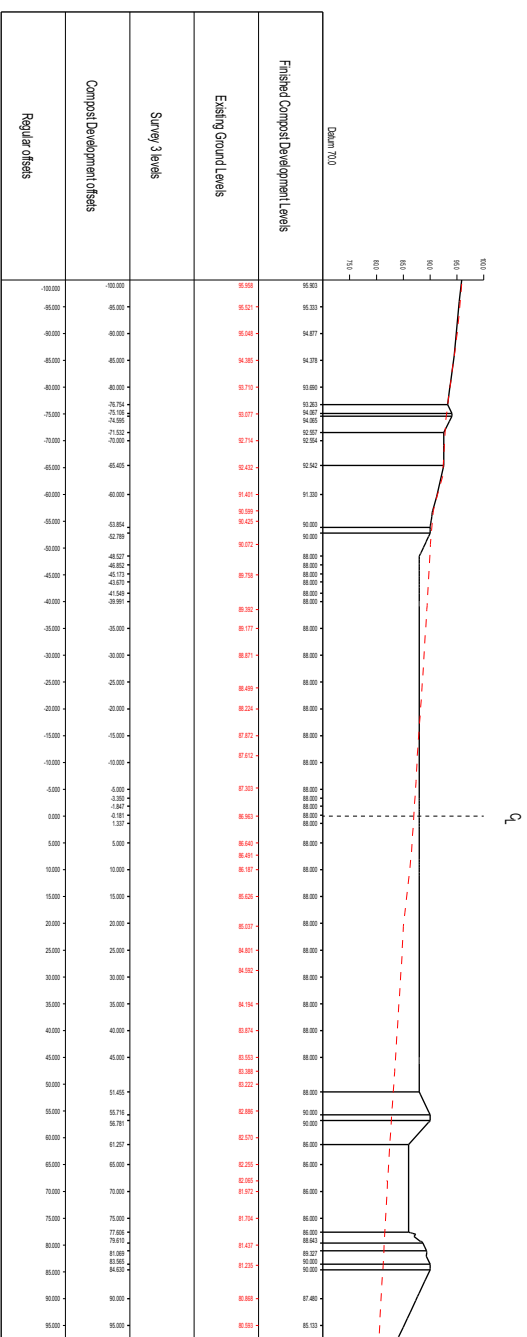
EXCAL Ltd
BCL House
Capthorne Industrial Estate
Amenbury
SARUM
Tel: 01265 824606

Printed on OCT 13 11:18

Medical scale 1 kgC

19601-06
BlackBerry®
Corporate Development Team Services

7/6/01-06-100



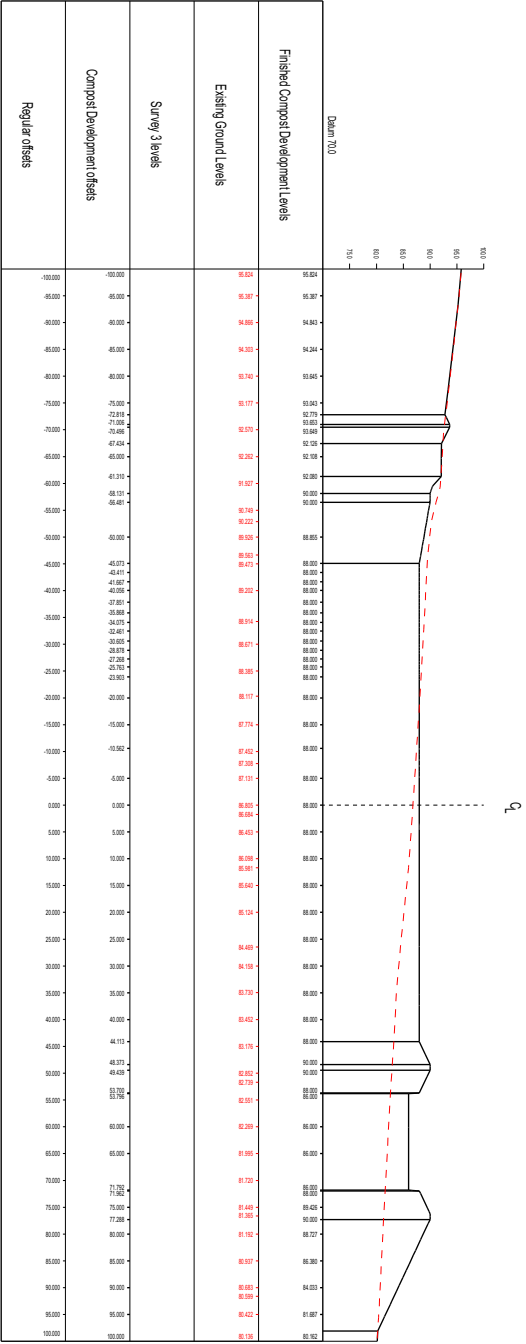
EXCAL Ltd
 25 Oak House
 Copthorne Industrial Estate
 Avenham Road
 SAE 3SL
 Tel: 01293 853626

Printed on 17 OCT 13 11:18

Model scale 1:100
Vertical scale 1:100

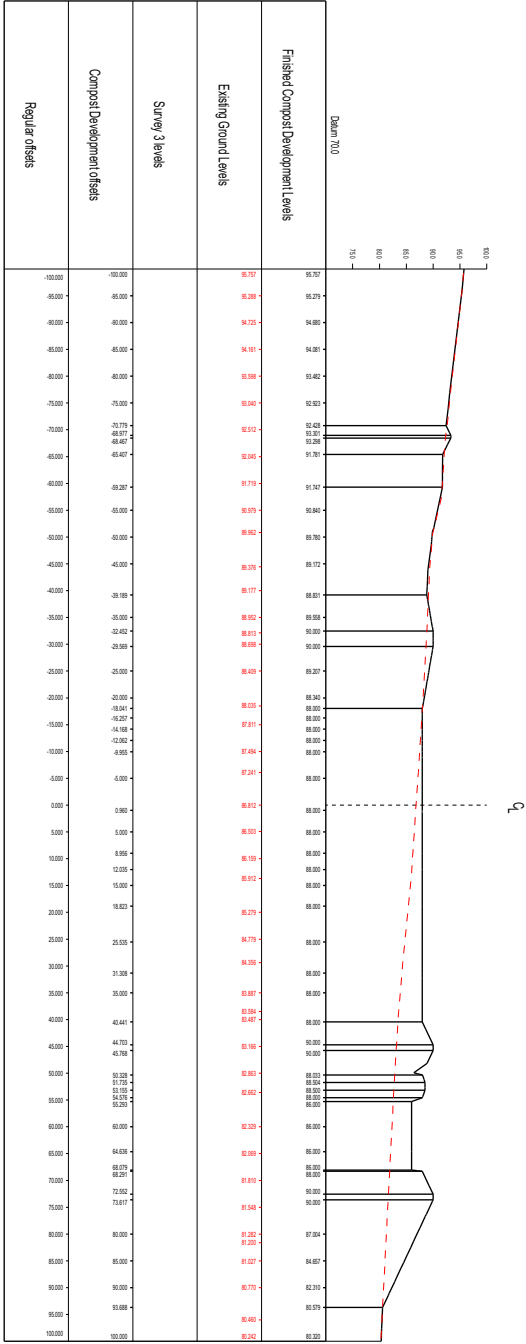
196-01-06
Waste Recovery Plan
Concept Development (Crisi Section)

156-01-06-1001



Change 400.0m (220336.8E 24723.3N)



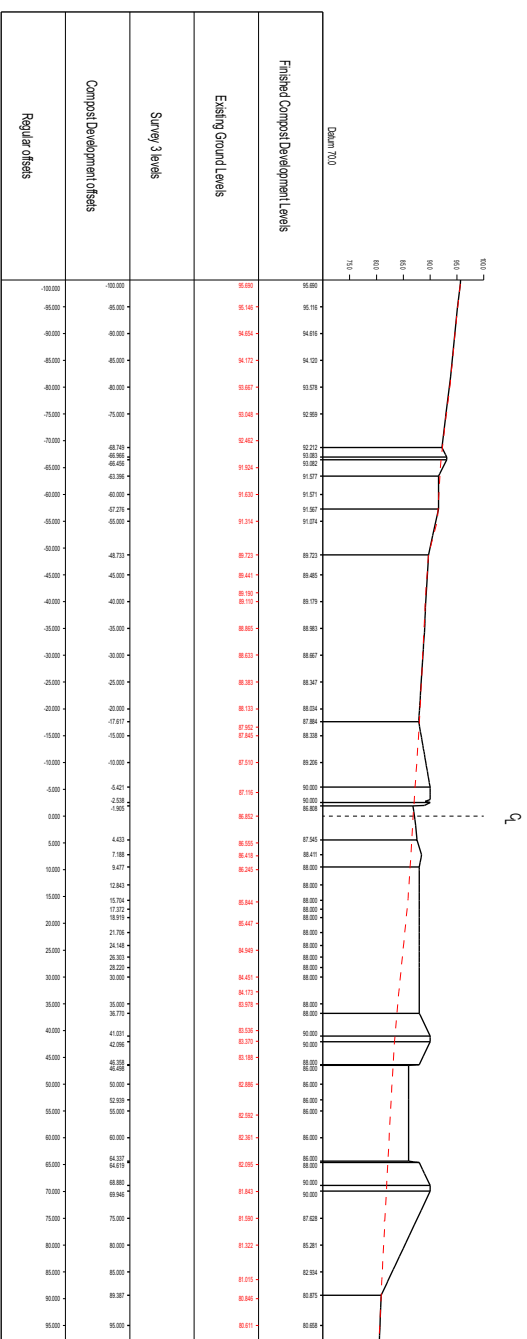


Change 410.0m (220346.3E 247229.9N)



E.CAL
Limited

19501.06
19501.06
19501.06



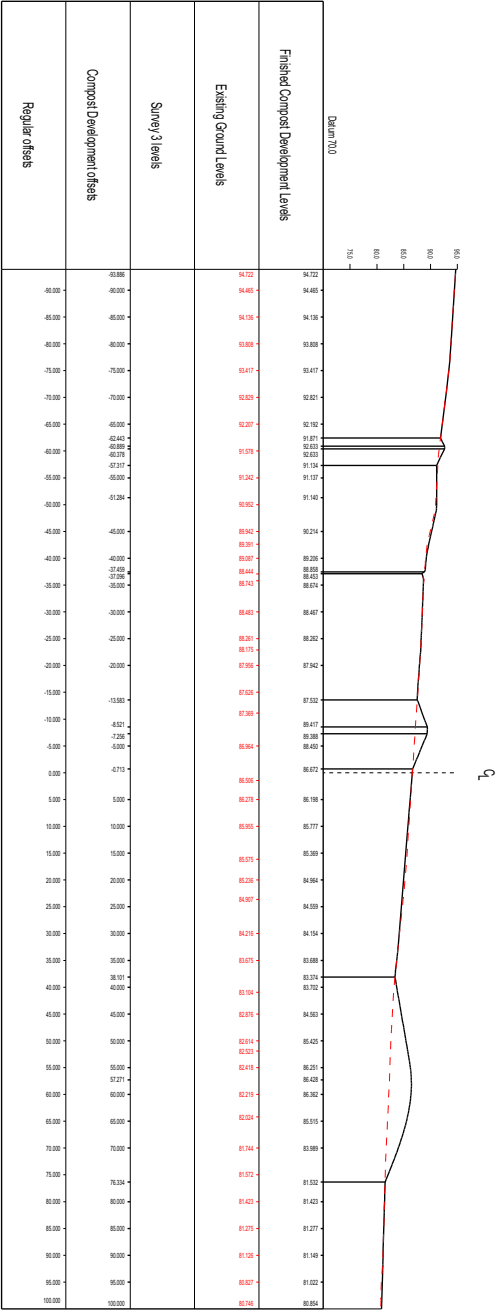
EXCAL Ltd
Excel House
Digital House, 1, Great East Street
Alderbury
Salisbury
Tel: 01262 823606

Printed on 17 OCT 13 11:18

We did scale 1.000

196-01-06
Wade Ricary/Jan
Crop/Development Cms Section

87601-06-1000



E.CAL Ltd
Data Name
Compost Development
Offset
1:10000

Page 17 of 17

19501.06

19501.06
Compost Development
Offset
1:10000

19501.06

APPENDIX D

Volume Modelling Export

COMPOST PAD AND ASSOCIATED INFRASTRUCTURE

±

McCarthy Taylor Partnership
Page : 001
LSS v9.90.15 / 1509.01
2013.10.16 16:10

WV 9 FINAL 1

EXCAL Ltd

WV 9 FINAL - CRUGMOR COMPOST PAD

AREA AND VOLUME CALCULATION

Volume between current survey : WV 9 FINAL - CRUGMOR COMPOST PAD
and other survey : FULL ORIGINAL LEVELS - COMPOST ROAD

Volumes by surface feature in the current survey :

Surface Description	Cut area (m ²)	Cut volume (m ³)	Fill area (m ²)	Fill volume (m ³)	Total area (m ²)
Net volume					
(m ³)					
A1 C Pad and Lagoon 13420.527	2571.575	-2911.008	6179.716	16331.535	8751.291

Note : "FILL" when the CURRENT survey is above the OTHER. All areas are plan areas.



WV 9 FINAL - CRUGMOR COMPOST PAD

AREA AND VOLUME CALCULATION

Volume between current survey : WV 9 FINAL - CRUGMOR COMPOST PAD
and other survey : FULL ORIGINAL LEVELS - COMPOST ROAD

Volumes by surface feature in the current survey :

Surface Description Net volume (m ³)	Cut area (m ²)	Cut volume (m ³)	Fill area (m ²)	Fill volume (m ³)	Total area (m ²)
A2 Compost Bunds 25391.998	633.761	-615.550	6668.497	26007.548	7302.258

Note : "FILL" when the CURRENT survey is above the OTHER. All areas are plan areas.

⊕

McCarthy Taylor Partnership
Page : 001
LSS v9.90.15 / 1509.01
2013.10.16 16:11

WV 9 FINAL 3

EXCAL Ltd

WV 9 FINAL - CRUGMOR COMPOST PAD

AREA AND VOLUME CALCULATION

Volume between current survey : WV 9 FINAL - CRUGMOR COMPOST PAD
and other survey : FULL ORIGINAL LEVELS - COMPOST ROAD

Volumes by surface feature in the current survey :

Surface Net volume	Description	Cut area (m ²)	Cut volume (m ³)	Fill area (m ²)	Fill volume (m ³)	Total area (m ²)
A3	Road Bund 4315.374 (Undetermined : n/a)	473.330	-124.875	5801.129	4440.249	6274.459 110.511

Note : "FILL" when the CURRENT survey is above the OTHER. All areas are plan areas.

*** WARNING *** no volume determined for the following areas :

Current survey valid, outside other : 110.511
Other survey outside current : 99.855



WV 9 FINAL - CRUGMOR COMPOST PAD

AREA AND VOLUME CALCULATION

Volume between current survey : WV 9 FINAL - CRUGMOR COMPOST PAD
and other survey : FULL ORIGINAL LEVELS - COMPOST ROAD

Volumes by surface feature in the current survey :

Surface Description Net volume	Cut area (m ²)	Cut volume (m ³)	Fill area (m ²)	Fill volume (m ³)	Total area (m ²)
A4 Road Surface -369.923	3382.661	-455.964	564.737	86.041	3947.398

Note : "FILL" when the CURRENT survey is above the OTHER. All areas are plan areas.

⊕

McCarthy Taylor Partnership
Page : 001
LSS v9.90.15 / 1509.01
2013.10.16 16:12

WV 9 FINAL 5

EXCAL Ltd

WV 9 FINAL - CRUGMOR COMPOST PAD

AREA AND VOLUME CALCULATION

Volume between current survey : WV 9 FINAL - CRUGMOR COMPOST PAD
and other survey : FULL ORIGINAL LEVELS - COMPOST ROAD

Volumes by surface feature in the current survey :

Surface Net volume	Description	Cut area (m ²)	Cut volume (m ³)	Fill area (m ²)	Fill volume (m ³)	Total area (m ²)
A5	Hardstanding -601.849 (Undetermined : n/a)	2663.120	-660.178	766.346	58.329	3429.466
						14.718

Note : "FILL" when the CURRENT survey is above the OTHER. All areas are plan areas.

*** WARNING *** no volume determined for the following areas :

Surveys identical (no cut or fill) : 14.718