

Waste Recovery Plan

**Import of Waste Materials for
the Construction of New golf facilities**

Report for:
Golf Course Investment Limited
Clays Golf Club
Bryn Estyn road
Llan-y-pwll
Wrexham
LL13 9UB

Document Reference: GCI-CLA-MAN-PLN-0001

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Approval & Document revision history &

Revision	Date	Author	Checker	Approver	Comment
A01	30/05/17	RL	JL	Rhys Lewis	
A02	09/10/18	RL	JL	Rhys Lewis <i>Rhys Lewis</i>	Amendments following NRW comments of 10/09/18
		Director	Director	Director	

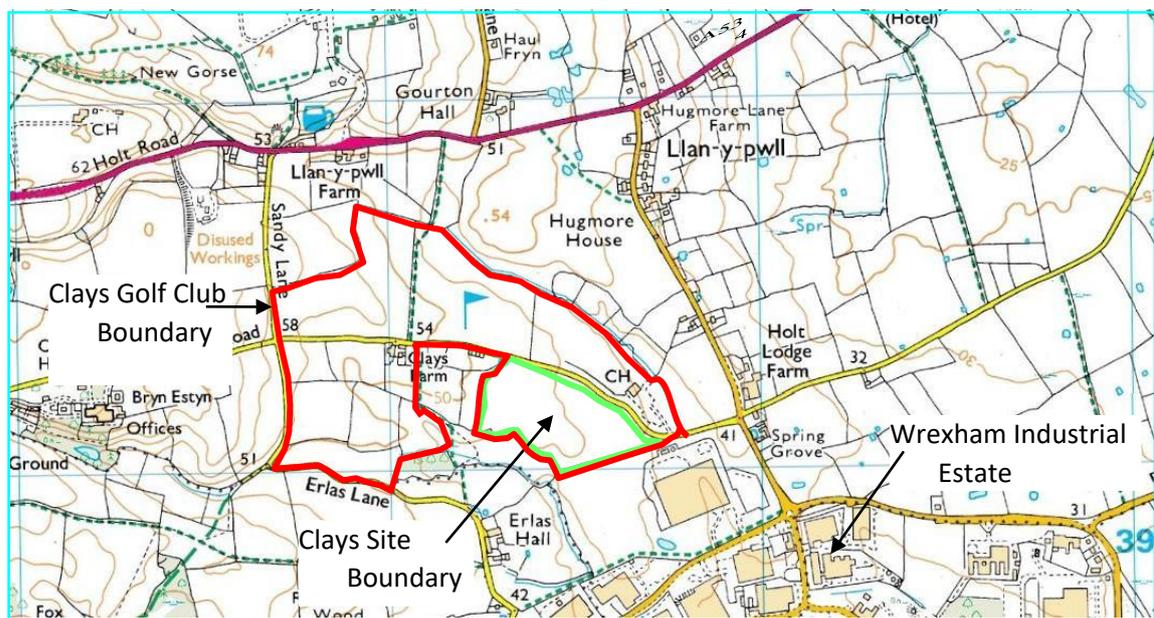
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1.0 Introduction

Overview & Background

- 1.1 R.E.A.S.C Ltd. was instructed by Golf Course Investment Ltd. (GCI) to undertake a Waste Recovery Plan (WRP) as part of a bespoke waste operations permit application to use of waste in a deposit for recovery activity for site location "Clays Site" as shown in Figure 1.1 below.
- 1.2 GCI Ltd. is the new owner of the Clays Golf club, as of 3rd November 2017. The former owner Clays Farm Golf Club Limited (CFGC) went into administration on 3rd November 2017. CFGC held a waste operations permit for Clays Site, EPR/XP/3691EG, under standard rules SR 2010 No.08 since October 2011, included Appendix A with Mr W. M. Lewis acting as an agent for CFGC.
- 1.3 This permit was transferred from CFGC to Mr Lewis on 05/01/2018 see Transfer Application No. EPR/XP3691EG/T002 included Appendix B.
- 1.4 CFGC were advised by Natural Recourses Wales (NRW) in July 2017 of changes to NRW Standards Rule Sets, withdrawing the rule set "SR 2010 No.08" included Appendix C.
- 1.5 Planning permission for Clays Site was granted in May 2005 and waste operations commenced in 2006 to deposit waste for the construction of new golf facilities as part of the extension of the existing golf club, see Figure 1.1. These operations were carried out under a Paragraph 19 Exemptionⁱ up to October 2011 when a permit, EPR/XP/3691EG was obtained, under standard rule SR 2010 No.08.



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Figure 1.1 Plan of Clays Golf Course and site of the construction works "Clays Site"

ⁱ Waste Management Licensing Regulations 1994, Paragraph 19, (Use of waste in construction) Schedule 3

- 1.6 The permit EPR/XP/3691EG has a supporting Waste Recovery Plan, HOL P-2005-0326 002 using the guidance of the Environment Agency RGN13 Defining Waste Recoveryⁱⁱ, included in Appendix D, which this WRP is an amendment to considering changes to the WRP under current guidance from the Environment Agency Waste recovery plans and permits.ⁱⁱⁱ
- 1.7 The total volume to complete the site is 223,194m³ based on the planning drawings references in this document, the method of this calculation is shown Appendix G.
- 1.8 Since the existing permit transfer to Mr Lewis, a detailed topographical survey of the site was undertaken June 2018 and the remaining volume of material required to complete the works to the planning drawings is 52,326m³ and is broken down as follows:
- 35,122m³ waste for recovery
 - 17,204m³ products (non-waste)
- 1.9 The method of volume calculations is based on 3D modelling and hand calculations details in Appendix G, by comparing the original site survey in 2005 the current survey in 2018. The tonnage of material required is based on a placed tonnage conversion factor of 1.5t/m³ as per the 2011 WRP, see Appendix G for further supporting information. Resulting estimated tonnages of:
- 52,683 tonnes waste for recovery
 - 25,806 tonnes of products (non-waste)
- 1.10 It is proposed to import the quality products (non-waste) from suitable sources to the site .
- 1.11 This WRP is written in the context to support the application of a waste operations permit under a bespoke permit varied from the existing permit EPR/XP/3691E, under standards rule set SR 2010 No.08.
- 1.12 The varied bespoke permit will include a total permitted 152,683 tonnes of waste, broken down to; 100,000 tonnes from the existing permit (standard rules permit) plus 52,683 tonnes required to complete the work i.e. only a further 52,683 tonnes can be deposited at the site.
- 1.13 The purpose of this WRP is to define the nature of the proposed activities and to demonstrate the importation would be for recovery purposes only based on the previous accepted WRP.
- 1.14 The report should be read in conjunction with the following documents:
- MRF - Clays Site Management Plan - MRF-CLA-MAN-PLN-0001 A04

2.0 Proposed Works

- 2.1 The principal objective of the operation at Clays Site (Figure 1.1) is to construct new golf facilities including;
1. Short game academy

ⁱⁱ RGN13 – Defining Waste Recovery: Permanent Deposit of Waste on Land

ⁱⁱⁱ Guidance - Waste recovery plans and permits <https://www.gov.uk/guidance/waste-recovery-plans-and-permits>

2. 9 hole par 3 course
3. 2 new holes for main course

In conjunction with facilities at Clays Golf club

4. Construction of 24 No. new driving bays
5. New shop
6. New greenkeepers accommodation / stores
7. Internal alterations
8. New short course
9. Modifications to existing entrance.

- 2.2 All these works described above have been granted planning permission by Wrexham County Borough Council (WCBC). Note items 1, 4, 5, 6 & 7 are complete and functional.
- 2.3 Planning was granted on 17/05/2005, Ref HOL P/2005/0326 for the construction of new golf facilities. These works utilise inert waste to construct the new golf facilities described in paragraph 2.1 above.
- 2.4 Detailed scheme drawings showing original and final ground levels with relevant cross sections is described in section 3.10 and are included in Appendix I.
- 2.5 A copy of the planning permission issued by Wrexham County Brough Council (WCBC) is provided in Appendix E.
- 2.6 Existing topsoil to be stripped to a depth of and stockpiled for future reuse. Inert material will be imported to create the new landforms, details of the method of construction and control measures are detail in section 3.7 and 3.10 below
- 2.7 The new golf course Fairways, Tees and Putting greens require products (non-waste) to construct these surfaces as specified in sections 3.13 and 3.14. These products (non-waste) are to be imported to the site as required.

3.0 Waste Recovery Assessment

3.1 Definition - Waste recovery

Described by the Environment Agency guidance as “Waste recovery is when your main aim is replacing a non-waste material you would have used in your operation with a waste material that performs the same function.

3.2 Is the waste being used as a substitute for a non-waste material?

The waste types allowed under the permit, listed in section 3.7.1 can be used to meet the specifications of materials required to construct golf course as a substitute for a non-waste materials.

There is as the obligation to carry out works detailed in the Clays Site Planning Application^v described below and use of waste achieves all that non-waste could have done.

3.3 Specific Obligation to the do the works

- 3.3.1 The new golf facilities need to be constructed in line with the planning permission to mitigate lost golf facilities as a result of the land take, in blue shaded area, required for the construction of the now completed Northern Section of the WCBC Wrexham Industrial Estate Access Road^{vi}, see extract in Figure 3.1.1. from drawing 2754/D/ 602 B included in Appendix F



^v Document reference - HOL P/2005/0326

^{vi} Wrexham Industrial Estate Access Road (Northern Section), Planning Reference P/2007/1165, (2007)

Figure 3.3.1 Proposed Wrexham Industrial Estate Access Road – Drawing extract

3.3.2 Cross sections created from planning drawing show the proposal matches the obligation to construct the new golf course facilities included in Appendix I

3.4 Unused section

3.5 Historical evidence of Clays Site waste operations as a recovery operation

3.5.1 The site operations has been historically accepted as an exempt activity from the Waste Management Regulations (1994) in 2005. In 2011 the site works was accepted as a recovery operation as part the of waste operations permit and obtained under an Environment Agency standard rule set, details below:

- Waste Management License Exemption granted in 2005, under the Waste Management Licensing Regulation 1994, Schedule 3, Paragraph 19A. The engineering works to utilise secondary aggregates as a construction material.
- Waste operations permit EPR/XP/3691EG, under standard permit rule SR 2010 No.08 granted in 2011 accepting the ongoing engineering works as a recovery operation.

3.5.2 The ongoing works is proposed to be completed under a bespoke waste operations permit consisting of a deposit for recovery activity in order to complete the existing Clays Site Planning Application.

3.6 Is there a clear benefit from the activity?

3.6.1 The activity of constructing new golf facilities as described in paragraph 2.1 is detailed in the granted planning application HOL P/2005/0326

3.6.2 The benefit derived from the scheme is extension of the existing golf course, including the replacement of lost golf facilities resulting from the new alignment of the WCBC's Wrexham Industrial Estate Access Road.

3.7 Is the recovered waste material suitable for its intended use?

3.7.1 The intended use of the waste is to construct the new golf facilities as identified in the Clays Site planning application using imported inert materials. The waste types permitted for this operation are detailed in Table 3.2.1 that were previously identified and agreed in previous Paragraph 19 Exemptions applicationsⁱ

Waste Types and uses -			
Waste Code	Description	Typical Uses (See key*)	Additional Notes
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS		
01 04	wastes from physical and chemical processing of non-metalliferous minerals		
01 04 08	Waste gravel, crushed rocks other than those mentioned in 01 04 07	A,B,E,F	
01 04 09	Waste sand and clays.	A,B,E,F	
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)		
17 01	concrete, bricks, tiles and ceramics		
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06 <ul style="list-style-type: none"> Restrictions- metal from reinforced concrete must have been removed. 	A,B,D	
17 03	bituminous mixtures, coal tar and tarred products		
17 03 02	Road base and road plainings only other than those containing coal tar	D	See Note**
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil		
17 05 04	soil and stones other than those mentioned in 17 05 03 <ul style="list-style-type: none"> Restrictions- topsoil, peat, subsoil and stones only. 	A,B,E,F	
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS		
20 02	garden and park wastes (including cemetery waste)		
20 02 02	soil and stones <ul style="list-style-type: none"> Restrictions- topsoil, peat, subsoil and stones only. 	A,B,E,F	

Table 3.7.1 Waste types that are permitted for engineering purposes for waste recovery at Clays Site.

Key

- A. Structural fill for building, stabilising ramps, drainage, road construction. (apart from topsoil & peat)
- B. Construction of noise bunds, screening bunds, flood defence bunds, containment bunds, golf courses. Landscaping associated with construction work. Restoration of mineral workings. General fill material.
- C. Surface treatment of roads, tracks etc. Drainage.
- D. Road/track construction and repair, hard surfacing, car parks etc.

E. **Agricultural Improvement schemes.**

F. **Ecological improvements, wetland schemes, lakes**

**Note: Waste code '17 03 02 - Other bituminous mixtures,' is unsuitable as general fill to construct large land forms. Typically, this waste type will be used on the haul roads only.

3.7.2 These are confirmed to be suitable for the intended use and not cause pollution by a combination of sampling and chemical testing before the waste is brought to the site and on site control system / procedure when the material is brought to site which is described in the Clays Site Method of Works Statement contained in the Clays Site Management Plan.

3.8 Is the minimum amount of waste being used to achieve the intended benefit?

3.8.1 The planning application drawings in plan and sections detail the ground profiles required to create the size, form and type of features of the new golf course to replace and enhance the golfing facilities lost to the new alignment of the Wrexham Industrial Estate Access Road.

3.9 Will the proposal be completed to an appropriate standard?

3.9.1 The proposal will be constructed in accordance with the planning application drawing and to the high standards required to meet the performance criteria of a golf course in terms of aesthetics, maintainability of mowing slopes, soil profiles for rough grass / shrub areas, fairways and greens etc. see Section 3.10 below.

3.10 Engineering design and construction techniques

3.10.1 Golf Course design

3.10.2 The course has been designed by the landscape consultant Arwel Griffith, and is detailed on drawing "New Golf Facilities, Detailed Layout and Landscaping Proposals drawing," GCI-CLA-CIV-DRG-0005 C01 in Appendix I

3.11 New Mound Design

3.11.1 The imported fill will comprise of granular and cohesive materials. The slopes of the mounds will be formed at no greater than 1v in 2h (26.6°) for cohesive materials and 1v 1½ h (33. 7°) for granular materials, to maintain long term stability. To improve the stability of the new mounds constructed of cohesive materials, granular fill will be deposited on the outer margins of the mounds.

3.11.1 Topsoil, seeding and is to be carried out to establish adequate cover of vegetation to mitigate surface erosion.

3.12 Soil Reinstatement

3.12.1 All soil to be reinstated in dry conditions on appropriately contoured and prepared ground as specified on the drawing. They will be replaced in correct sequence; subsoils first and then topsoils to the depth required. Care will be taken to avoid soil losses or contamination with other materials.

3.12.2 On completion of reinstatement soil will be thoroughly loosened to remove any compaction and the area shall not be traversed by machinery (unless absolutely necessary) or used for storage purposes.

3.12.3 The depth of topsoil spread shall not normally exceed 300 mm. Suitable (loosened) subsoil shall provide the remainder of the minimum rooting depth. The minimum rooting depth shall be normally 450 mm for grass, 600 mm for shrubs and 900 mm for trees^{vii}.

3.13 Fairways

- Subsoil to be placed at a depth of 500mm – consisting of a granular nature to be placed under the extent of the fairways.
- Topsoil to be placed at a depth of 300mm – consisting of existing topsoil.
- Subsoil Ripping will be carried out to a depth of 600mm at spacing 900 to 1000m

3.14 New Putting Greens and Tees

3.14.1 To allow the grass on the Greens to be propagated, and cut at several millimetres high to maintain a dense sward and maintain free draining surface the following construction form is required.

- Sub- grade (granular fill) 200mm minimum up to required level
- Drainage- positive drain to soak-way (Clean, open stone)
- Gravel blanket (300mm -350mm)
- Intermediate layer – (non woven Terram)
- Root zone (Coarse sand topsoil blend) (300mm)
- Laid Turf (for Greens)

3.14.1 This construction form is developed from the United States Golf Association (USGA) “Recommendations For a Method of Putting Green Construction” and “Building the USGA Green: Tips for Success”

3.15. New mounds

- Subsoil to be placed at a depth of 500mm to 600mm – consisting of existing subsoil
- Topsoil to be placed at a depth of 200mm to 300mm – consisting of existing topsoil.

3.15.1 These depths vary depending on the mass tree planting as detailed on the Landscaping Proposals

3.16 Construction Methodology

3.16.1 Positions of new mounds, proposed levels, and profiles are set out on site. Topsoil and subsoil is stripped and stored on site for reuse.

^{vii} BS 3882:2007 Specification for topsoil and requirements for use: Part 5.6

3.16.2 These incoming waste streams will be segregated to cohesive and granular and spread out to build up ground levels of the fairways and new mounds as shown on “Detailed Layout and Landscaping Proposals” drawing.

3.17 Mound Construction

3.17.1 As the waste streams will be segregated, this allows the appropriate material to be selected for the required slope profile details on the “Detailed Layout and Landscaping Proposals” drawing.

3.17.1 These materials will be spread in 150mm layers, and heavily trafficked by a tracked bulldozer to form the mounds. The final profiles will be formed using an excavator, guided by profile boards and levels.

3.17.1 After soil restoration is completed drainage will be constructed adjacent to be the base of the new mounds to drain the slopes in the form of rubble drains as required.

3.18. Fairways, Greens and Tees

3.18.1 On reaching the level of the base of the required subsoil layers for the new landforms, soil reinstatement (detailed above) for the described landforms will be carried out. On completion of this, seeding and planting as detailed on the “Detailed Layout and Landscaping Proposals” drawing.

4.0 Summary

4.1 This WRP has been produced to support the construction of new golf facilities as part of the extension of the existing Clays Golf Club.

It demonstrates the following:

- There is a specific obligation to construct the new golf course facilities;
- The activity would have progressed regardless of whether non-waste or waste was used for the infilling.
- Historical evidence of the waste operations as a recovery operation
- The minimum volume is being imported;
- The engineering and environmental quality standards that must be applied.

4.2 The evidence provided with the within the permit application is considered sufficient to demonstrate that the operation is recovery and the placement of the fill is not a disposal activity.

Appendix A - Waste operations permit for Clays Site, EPR/XP/3691EG

creating a better place



The Company Director and/or Secretary
Clays Farm Golf Centre Limited
Bryn Estyn Road
Llan-y-Pwll
Wrexham
LL13 9UB

Our ref: EPR/XP3691EG/A001

Date: 7th October 2011

Dear Sir or Madam,

Issue of standard permit

Permit reference: EPR/XP3691EG/A001

Waste Returns reference: EAWML 102738

Applicant: Clays Farm Golf Centre Limited

Standard facility: Clays Site, Bryn Estyn Road, Llan-y-Pwll, Wrexham, LL13 9UB

I enclose a copy of your permit and standard rules list.

Please look at the table below and note any of the information or actions that apply to your permit.

If...	then..
you plan to keep your records at a site other than where the activity takes place	you need to let us know within 20 working days of receiving this letter.
you need to submit quarterly or annual waste returns on waste movements. Please refer to your permit conditions.	you can get the forms you need from our website http://www.environment-agency.gov.uk/business/topics/waste/.121942asp X If you do not have web access phone our Customer Contact Centre. When submitting your waste returns please quote the above EAWML reference number
you need to submit other returns	send these to your area office. Speak to your area officer to check local arrangements.
your permit includes an installation	we've enclosed the pollution inventory letter, notice, schedule and fact sheet.
your permit includes pre-operational and improvement conditions	check the deadlines for the completion of measures and make sure you carry them out by the times stated.

You will also need to look at the document 'How to comply with your environmental permit' as this will help you understand how to meet the conditions of the permit. You can find this on our website at

<http://www.environment-agency.gov.uk/business/topics/permitting/32320.aspx>

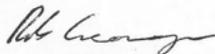
If you do not have internet access please telephone our Customer Contact Centre.

Environment Agency, PSC, EP Team, Quadrant 2, 99 Parkway Avenue, Sheffield, S9 4WF
Customer services line: 03708 506506
Email: psc@environment-agency.gov.uk
Fax: 0114 2626660



If you have any questions about this permit please phone our Customer Contact Centre on 03708 506 506. They will put you in touch with a local area officer.

Yours faithfully,

A handwritten signature in cursive script, appearing to read 'Rt George'.

Robert George
Permitting Support Advisor

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit

Permit number
EPR/XP3691EG

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010

Clays Farm Golf Centre Limited ("the operator"),

whose registered office is

**Bryn Estyn Road
Wrexham
North Wales
LL13 9UB**

company registration number 02576723

to operate waste operations described in standard rules **SR2010No8** at

**Clays Site
Bryn Estyn Road
Llan-y-Pwll
Wrexham
LL13 9UB**

to the extent authorised by and subject to the conditions of this permit.

Under regulation 27(2) of the Regulations, standard rules **SR2010No8** are conditions of this permit.

Name	Date
Ben Evans	05/10/2011

Authorised on behalf of the Environment Agency

Permit

The Environmental Permitting (England & Wales) Regulations 2010

Clays Farm Golf Centre Limited

Clays Site
Bryn Estyn Road
Llan-y-Pwll
Wrexham
LL13 9UB

Permit number
EPR/XP3691EG

Schedule 1 - Site plan

This is the plan referred to in the standard rules SR2010No8

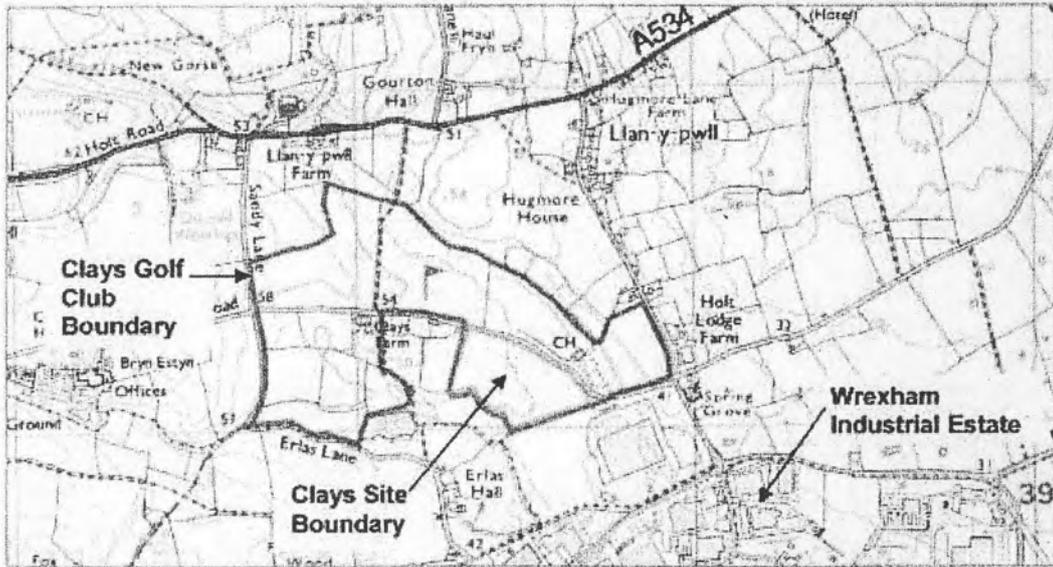


Figure 1.1 Plan of Clays Golf Course and site of the construction works "Clays Site"

Standard rules

Chapter 4, The Environmental Permitting
(England and Wales) Regulations 2010



Standard rules SR2010No8_100Kte Use of waste in construction

Introductory note

This introductory note does not form part of these standard rules.

When referred to in an environmental permit, these standard rules will allow the operator to store and subsequently use waste for the purposes of construction work provided that the waste is suitable for use for the type of construction work required. These standard rules shall not be used for the purposes of land restoration or reclamation. These standard rules are for the recovery of waste only and do not apply to any activities involving disposal. You should ensure that your activity meets the definition of recovery in accordance with Environment Agency guidance before applying for these standard rules.

Permitted wastes do not include hazardous wastes. The total quantity of waste that can be stored and subsequently used at the site under these standard rules shall not exceed 100,000 tonnes.

These standard rules do not permit the burning of any wastes, either in the open, inside buildings or in any form of incinerator.

The activities must not be carried out within 500 metres of a European Site¹, Ramsar site or a Site of Special Scientific Interest (SSSI).

The activities shall also not be within:

- groundwater Source Protection Zones 1 or 2
- 50 metres of any spring or well, or of any borehole not used to supply water for domestic or food production purposes, and
- 250 metres of any borehole used to supply water for domestic or food production.

These standard rules do not allow any point source emissions into surface waters or groundwater.

End of introductory note

¹ A candidate or Special Area of Conservation (cSAC or SAC) and Proposed or Special Protection Area (pSPA or SPA) in England and Wales.

Rules

1 – Management

General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with rule 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in these standard rules shall have convenient access to a copy of them kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

2 – Operations

2.1 Permitted Activities

- 2.1.1 The operator is only authorised to carry out the activities specified in table 2.1 below ("the activities").

Table 2.1 Activities	
Description of activities	Limits of activities
R13: Storage of wastes pending any of the operations numbered R3 and R5	Secure storage and use of wastes listed in table 2.3 for the purposes of the construction work as detailed in the approved waste recovery plan.
R3: Recycling/reclamation of organic substances which are not used as solvents;	The activities shall not be carried out other than in accordance with the approved waste recovery plan.
R5: Recycling or reclamation of other inorganic materials	In any case no more than 100,000 tonnes of waste shall be stored or used under these standard rules.

- 2.1.2 The construction work subject to these standard rules shall be completed in accordance with details provided in the approved waste recovery plan, unless otherwise agreed in writing by the Environment Agency.

Biodegradable

Please state whether the waste is biodegradable (e.g. paper, cardboard).

State

Please enter the physical state of the waste (whether it is solid, powder, sludge, liquid or gas). Please do not use other terms to describe the waste.

Amount

Please give the weight of each specific waste type received from each district of origin and specify units used (e.g., tonnes, kg etc).

Pre-treatment

If you have selected **YES** in the **Municipal source** column and the waste is going to a landfill site, please select one of the options 1–15 from the accompanying list, otherwise leave blank. See Pre-treatment options sheet for a detailed description.

Additional information

For landfill sites

- Tick 'D' if this is the final disposal site for the waste *or*
- Tick 'U' if the waste was used on site (for example bunding, capping or levelling purposes).
- Tick 'F' for waste that has come from another facility, *for example, a transfer station.*

Section 4 Waste removed from site

Before you fill in this section make sure you have a copy of the

- European Waste Catalogue classification codes to be used and
- a list of district/county councils within the UK.

We need to know about each type of waste received at your site.

Please use the continuation sheet WMS3W provided, or a copy of it, if you need to.

Destination

Please enter the district that the waste is going to.

See the list of district/county councils within the UK.

Description of waste

Please enter a written description of the waste or material.

European Waste Catalogue classification code

Please enter the full 6-digit EWC code, as specified in the List of Waste Regulations 2005 (or any subsequent amendments).

Municipal source

Please state whether the waste has arisen from a municipal source. Municipal waste is defined as waste from households and other waste that, because of its nature or composition, is similar to waste from households.

State

Please enter the physical state of the waste (whether it is solid, powder, sludge, liquid or gas). Please do not use other terms to describe the waste.

Amount

Please give the weight of each specific waste type removed to each district and specify the units used (e.g., tonnes, kg etc).

Destination facility type

Please enter the type of facility where the waste will be sent (*for example, incineration, transfer station, landfill, treatment, reprocessing, recycling*).

Sending the form back to us

Send your waste return back to the address printed in the box on page 1 of the form. We need it no later than the date shown in the table below, depending on the return period.

Quarter	Year
1 January – 31 March	1 month after year end
1 April – 30 June	
1 July – 30 September	
1 October – 31 December	
28 days after quarter end	

Further information

For general enquiries please contact your local Environment Agency office or call our general enquiry number 08708 506 506 between 8.00am and 6.00pm.

The Data Protection Act 1998

The information provided by yourselves will be processed by the Environment Agency to deal with your application, to monitor compliance with the licence/permit/registration conditions, to process renewals, and for maintaining the relevant public register(s).

We may also process and/or disclose it in connection with the following:

- offering/providing you with our literature/services relating to environmental matters;
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive Local Authorities, Emergency Services, DEFRA) on environmental issues;
- carrying out statistical analysis, research and development on environmental issues;
- providing public register information to enquirers;
- investigating possible breaches of environmental law and taking any resulting action; preventing breaches of environmental law;
- assessing customer service satisfaction and improving our service; and
- responding to requests for information under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, where the Data Protection Act allows.

We may pass it on to our agents/representatives to do these things on our behalf.

Waste Return Guidance Notes



Asiantaeth yr
Amgylchedd Cymru
Environment
Agency Wales

The Environmental Permitting (England and Wales) Regulations 2007

Landfill Allowance Scheme (Wales) Regulations 2004

List of Wastes Regulations (Wales) 2005

The Waste and Emissions Trading Act 2003

Please read these guidance notes and the whole form carefully before you start to fill it in.

Introduction

We need to know about the types and quantities of controlled waste you have handled at each permitted facility within your site.

Please fill in a copy of the form every

- quarter (i.e. three months) *or*
- year (this option is only applicable to Scrapyards & End of Life Vehicle sites)

as agreed with us.

If you are not sure about this, please contact us.

How to use this form

When you fill in the form, you will also need a copy of the

- European Waste Catalogue (EWC) classification codes
- a list of district/county councils within the UK.

You can get copies of these from your local Environment Agency office if you do not have them.

Continuation sheet, form WMS3W (Wales)

We have sent you a continuation sheet in case you need it. If you need more space for answers 3 and 4, please use a continuation sheet marked clearly with the

- local site licence *or*
- waste management licence number (EAWML number) or permit number
- number of the sheet, *for example 3 of 5.*

You should also tell us how many continuation sheets you are using when you complete the declaration in section 5 of the form.

You can photocopy the form or the continuation sheet if you need another copy.

If you need help and advice

We have made the form as straightforward as possible, but please get in touch with us if you

- need any advice on how to set out the information we need
- have any questions about the waste returns scheme.

Please get in touch with the officer handling your site returns. You will find their name and telephone number at the bottom of the letter that came with these notes and form.

How to fill in the form

Section 2 Operator and site details

Q2.1 Site operator and details

If the site details have been pre-printed please check that they are correct. If they are not correct or not printed please copy the details from your waste management licence or permit.

Q2.2 Type of facility

If the type of facility has been pre-printed please check that it is correct. If it is not correct or not printed please copy the details from your waste management licence or permit.

Q2.3 Was a weighbridge used?

Please say whether you used a weighbridge (either at your facility or a public weighbridge) before deposit. Enter the weighed proportion of waste accepted as a percentage.

Landfill sites only

This section applies to landfill facilities only.

Landfill operators should complete this section as at 31 March in the current year. Please complete question 2.5 even if you are making a 'nil return' which means no waste has been received or removed from the site during the return period.

Q2.5 Remaining void space covered by the licence

Please enter the remaining landfill void space covered by your licence in cubic metres as at 31 March in the current year. 'Void space' is the licensed capacity remaining at your site and this should only include areas that are covered by a waste management licence or permit and planning consent.

Section 3 Waste received on site

Before you fill in this section make sure you have a copy of the

- European Waste Catalogue (EWC) classification codes and
- a list of district/county councils within the UK.

You can get copies of these from your local Environment Agency office if you do not have them.

Please use the continuation sheet WMS3W (Wales) provided, or a copy of it, if you need to.

Origin

Please enter the district where the waste originated.

Description of waste

Please enter a written description of the waste or material.

European Waste Catalogue classification code

Please enter the full 6-digit EWC code, as specified in the List of Waste Regulations 2005 (or any subsequent amendments).

Municipal source

Please state whether the waste has arisen from a municipal source.

Municipal waste is defined as waste from households and other waste that, because of its nature or composition, is similar to waste from households.

Please note that if the waste is from a municipal source and it is going for disposal at a landfill site, you will need to enter an option in the **Pre-treatment column**.

17 05 04	soil and stones including chalk other than those mentioned 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
17 05 08	track ballast, soil and stones other than those mentioned in 17 05 07
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION/INDUSTRIAL WASTE
19 08	wastes from waste water treatment plants not otherwise specified
19 08 02	washed sewage grit (waste from desanding) only
19 08 99	stone filter media (if cleaned to remove sewage contamination) only
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, palletising) not otherwise specified
19 12 05	glass
19 12 09	minerals (for example sand, stones)
19 12 12	soil substitutes other than that containing dangerous substances only
19 12 12	treated bottom ash including IBA and slag other than that containing dangerous substances only
19 13	wastes from soil and groundwater remediation
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 02	garden and park wastes (including cemetery waste)
20 02 02	soil and stones

3 – Emissions and monitoring

3.1 Emissions of substances not controlled by emission limits

- 3.1.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this rule if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.1.2 The operator shall:
- if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan;
 - implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.1.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise leakage and spillage from the primary container.

3.2 Odour

- 3.2.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable, to minimise, the odour.

3.2.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan;
- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.3 Noise and vibration

3.3.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan, to prevent or where that is not practicable, to minimise, the noise and vibration.

3.3.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

4 – Information

4.1 Records

4.1.1 All records required to be made by these standard rules shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible or are capable of retrieval; and
- (d) be retained, unless otherwise agreed by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by these standard rules, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by these standard rules to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 Within one month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to each site and the waste accepted and removed from it during the previous quarter.

Table 2.3 Waste types

Exclusions

Wastes having any of the following characteristics shall not be accepted:

- Consisting solely or mainly of dusts, powders or loose fibres
- Hazardous wastes
- Wastes in liquid form

Waste Code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 04	wastes from dry physical and chemical processing of non-metallic minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 02	waste from preparation and processing of meat, fish and other foods of animal origin
02 02 02	shellfish shells from which the soft tissue or flesh has been removed only
02 04	wastes from sugar processing
02 04 01	soil from cleaning and washing beet
10	WASTES FROM THERMAL PROCESSES
10 01	wastes from power stations and other combustion plants (except 19)
10 01 01	bottom ash and slag only
10 01 02	pulverised fuel ash only
10 01 05	gypsum (solid) only
10 01 07	gypsum (sludge) only
10 01 15	bottom ash and slag from co-incineration other than those mentioned in 10 01 14 only
10 02	wastes from the iron and steel industry
10 02 01	waste from the processing of slag
10 02 02	unprocessed slag
10 09	wastes from casting of ferrous pieces
10 09 03	furnace slag
10 10	wastes from casting of non-ferrous pieces
10 10 03	furnace slag
10 12	waste from manufacture of ceramic goods, bricks, tiles and construction products
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 14	waste concrete and concrete sludge
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 03	bituminous mixtures, coal tar and tarred products
17 03 02	road base and road planings only other than those containing coal tar
17 05	soil (including excavated soil from contaminated sites) stones and dredging spoil

- 2.1.3 The operator shall submit to the Environment Agency for approval any revisions to the waste recovery plan and shall implement the approved revised plan in place of the original from the date of approval.
- 2.1.4 The quantities given in the approved recovery plan shall not be exceeded.
- 2.1.5 On completion of the construction work a survey of final waste levels relative to Ordnance Datum shall be submitted to the Environment Agency within one month.

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan attached to the permit.
- 2.2.2 The activities shall not be carried out within:
 - (a) 500 metres of a European Site or a Site of Special Scientific Interest (SSSI);
 - (b) groundwater Source Protection Zones 1 or 2;
 - (c) 50 metres of any spring or well, or of any borehole not used to supply water for domestic or food production purposes; and
 - (d) 250 metres of any spring or well, or any borehole used to supply water for domestic or food production.

2.3 Waste acceptance

- 2.3.1 Waste shall only be accepted if:
 - (a) it is of a type listed in table 2.3 of these standard rules;
 - (b) it has been identified as a suitable waste type in the approved waste recovery plan;
 - (c) it conforms to the description in the documentation supplied by the producer and holder;
 - (d) its chemical, physical and biological characteristics make it suitable for its intended use on the site;
 - (e) any excavated soil from potentially contaminated sites has been shown by prior chemical analysis and assessment to be suitable for the intended use without significant risk of pollution; and
 - (f) it is visually inspected on arrival and at the point of deposit to ensure that it complies with these standard rules.
- 2.3.2 Any waste that does not comply with 2.3.1 shall be rejected and shall be:
 - (a) removed from the site; or
 - (b) moved to a designated quarantine area pending removal.
- 2.3.3 Records demonstrating compliance with rule 2.3 (including analysis and assessment of any excavated soil from potentially contaminated sites) shall be maintained.

4.3 Notifications

- 4.3.1 The Environment Agency shall be notified without delay following the detection of:
- (a) any malfunction, breakdown or failure of equipment or techniques, accident or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
 - (b) the breach of a limit specified in these standard rules; or
 - (c) any significant adverse environmental effects.
- 4.3.2 Written confirmation of actual or potential pollution incidents and breaches of emission limits shall be submitted within 24 hours.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters except where such disclosure is prohibited by Stock Exchange rules:
- a) Where the operator is a registered company:
 - any change in the operator's trading name, registered name or registered office address; and
 - any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
 - b) Where the operator is a corporate body other than a registered company:
 - any change in the operator's name or address; and
 - any steps taken with a view to the dissolution of the operator.
 - c) In any other case:
 - the death of any of the named operators (where the operator consists of more than one named individual);
 - any change in the operator's name(s) or address(es); and
 - any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case them being in a partnership, dissolving the partnership.

4.4 Interpretation

- 4.4.1 In these standard rules the expressions listed below shall have the meaning given.
- 4.4.2 In these standard rules references to reports and notifications mean written reports and notifications, except when reference is being made to notification being made "without delay", in which case it may be provided by telephone.

"accident" means an accident that may result in pollution.

"approved waste recovery plan" means a plan that has been approved by the Environment Agency that justifies and gives evidence that the operation carried out under these standard rules meets the definition of waste recovery, and will continue to do so throughout the duration of the permitted operation.

"authorised officer" means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in Section 108(4) of that Act.

"*construction work*" means the carrying out of any building, civil engineering or engineering work and includes the building, alteration, conversion, repair, upkeep or other maintenance of a structure and the preparation of a site for an intended structure. It includes drainage works. This does not include land restoration or reclamation.

"*dangerous substances*" means any substance that has been or will be classified as dangerous in Directive 67/548/EEC and its subsequent amendments

"*domestic purposes*" has the same meaning as in section 218 of the Water Industry Act 1991.

"*emissions of substances not controlled by emission limits*" means emissions of substances to air, water or land from the activities, either from emission points specified in these standard rules or from other localised or diffuse sources, which are not controlled by an emission limit.

"*European Site*" means Special Area of Conservation or candidate Special Area of Conservation or Special Protection Area or proposed Special Protection Area in England and Wales, within the meaning of Council Directives 79/409/EEC on the conservation of wild birds and 92/43/EEC on the conservation of natural habitats and of wild flora and fauna and the Conservation (Natural Habitats &c) Regulations 1994. Internationally designated Ramsar sites are dealt with in the same way as European sites as a matter of government policy and for the purpose of these rules will be considered as a European Site.

"*food production purposes*" means the manufacturing, processing, preserving or marketing purposes with respect to food or drink for which water supplied to food production premises may be used, and for the purposes of this definition "food production purposes" means premises used for the purposes of a business of preparing food or drink for consumption otherwise than on the premises.

"*groundwater*" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"*groundwater Source Protection Zone*" has the meaning given in the document titled "Groundwater Protection: Policy and Practice" published by the Agency in 2006.

"*IBA*" means incinerator bottom ash derived from the incineration or pyrolysis of waste.

"*pollution*" means emissions as a result of human activity which may—

- (a) be harmful to human health or the quality of the environment,
- (b) cause offence to a human sense,
- (c) result in damage to material property, or
- (d) impair or interfere with amenities and other legitimate uses of the environment.

"*quarter*" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

"*R*" means a recovery operation provided for in Annex IIB of Directive 2006/12/EC of the European Parliament and the Council of 5 April 2006 on waste.

"*secure storage*" means storage where waste cannot escape and members of the public do not have access to it.

"*SSSI*" means Site of Special Scientific Interest within the meaning of the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000).

"*waste code*" means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

"*year*" means calendar year commencing on 1st January.

End of standard rules

3 Waste received on site

Please read the guidance notes 'How to fill in the form', and use the continuation sheet WMS3W provided, or a copy of it, if you need to. In the last column, D = final disposal, U = used on site, F = from another facility, for example a transfer station.

Origin	Description of waste	EWC code	Municipal source (Y/N)	Bio-degradable (Y/N)	State	Amount	Units	Pre-treatment	Additional information		
									(D)	(U)	(F)
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
									<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Total weight in tonnes of material received on site tonnes

4 Waste removed from site

Please read the guidance notes 'How to fill in the form', and use the continuation sheet WMS3W provided, or a copy of it, if you need to. In the last column, facility types could include incinerator, transfer station, landfill, treatment, reprocessing, recycling.

Destination	Description of waste	EWC code	Municipal source (Y/N)	State	Amount	Units	Destination facility type

Total weight in tonnes of material removed from site tonnes

5 Declaration

Please make sure you have filled in all the sections that apply to you before signing this declaration.

I certify that the information in this return is correct to the best of my knowledge and belief.

I enclose WMS3W continuation sheets

Signature

Title	
First name	
Last name	
Position	
Phone	<input style="width: 100%;" type="text"/>
Date (DD MM YYYY)	<input style="width: 100%;" type="text"/>

Notice of transfer with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Mr William Lewis

Clays Site
Bryn Estyn Road
Llan-y-Pwll
Wrexham
Clwyd
LL13 9UB

Transfer application number
EPR/XP3691EG/T002

Permit number
EPR/XP3691EG

Clays Site

Permit number EPR/XP3691EG

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the transfer of an environmental permit to a new operator (the transferee).

This is a full transfer of Standard Rules Permit SR2010No8 to Mr William Lewis.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit		
Description	Date	Comments
Permit determined EPR/XP3691EG	05/10/11	Original permit issued to Clays Farm Golf Centre Limited.
Application EPR/XP3691EG/T002	Duly made 06/11/17	Application to transfer the permit in full to Mr William Lewis.
Additional information received following an informal request information sent on 04/01/18	04/01/18	Information clarifying the main address for Mr William Lewis
Transfer determined EPR/XP3691EG	05/01/18	Full transfer of permit to Mr William Lewis complete.

End of introductory note

Notice of transfer

The Environmental Permitting (England and Wales) Regulations 2016

The Natural Resources Body for Wales (“Natural Resources Wales”) in exercise of its powers under regulation 21 of the Environmental Permitting (England and Wales) Regulations 2016 transfers

permit number
EPR/XP3691EG

to
Mr William Lewis (“the operator”)

of

Bryn Marion
Llansantffraid
SY22 6XP

to operate a regulated facility
at

Clays Site
Bryn Estyn Road
Llan-y-Pwll
Wrexham
Clwyd
LL13 9UB

from Clays Farm Golf Centre Limited

This notice shall take effect from 05/01/2018.

Name	Date
Louise Bailey	05/01/2018

Authorised on behalf of Natural Resources Wales



Company Secretary
Clays Farm Golf Centre Limited
3 Vicarage Court
Holt
Wrexham
Clwyd
LL13 9AL

Our ref: SR2010 No08: Use of waste in
construction <100,000 tpa

Date: 27 July 2017

Dear Permit holder,

Changes to Natural Resources Wales Standard Rule Sets

Permit reference: **EPR/XP3691EG**
Permit holder: **Clays Farm Golf Centre Limited**
Facility reference: **Clays Site**
Rule set held: **SR2010 No08: Use of waste in construction <100,000 tpa**

What's happening?

Following our standard rule permit consultation in autumn 2016, we have made changes the standard rule set (environmental permit) you hold.

Your rule set will be withdrawn on the first of August 2017. It will no longer be available to new applicants.

Please do not worry. **Your permit will remain in force, and you can carry on with your activity.** You must continue to operate in line with the conditions in your standard rule set permit.

What do you need to do?

You don't need to do anything right now. We will contact you soon to talk about your options.

You may want to look at the new standard rule permit option, which may be suitable for your activity: Standard rule 'SR2017 Number 1: Use of waste in a deposit for recovery activity (construction, restoration, reclamation, or improvement of land other than by mobile plant)'.

You can find the new standard rule set option and the accompanying generic risk assessment on our website, from the first of August at <http://naturalresources.wales/permits-and-permissions/waste/waste-permits/apply-for-a-new-standard-permit-for-waste-operations/?lang=en>

For further information, please contact your site compliance officer.



**Cyfoeth
Naturiol
Cymru
Natural
Resources
Wales**

In the future, we would like to send you correspondence about your permit directly to you via email. Please send us a contact email address along with your permit reference to wasteconsultations@cyfoethnaturiolcymru.gov.uk.

Yours sincerely

**Rebecca Favager
SUW Strategy Manager Wales**

Appendix D - permit EPR/XP/3691EG supporting Waste Recovery Plan

R&J Engineering

CLAYS SITE
BRYN ESTYN ROAD
LLAN Y PWLL
WREXHAM
LL13 9UB

WASTE RECOVERY PLAN FOR CONSTRUCTION OF NEW GOLF FACILITIES

**CLAYS SITE
BRYN ESTYN ROAD
LLAN Y PWLL
WREXHAM
LL13 9UB**

**WASTE RECOVERY PLAN FOR CONSTRUCTION OF
NEW GOLF FACILITIES**

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APPENDICES

APPENDIX A	-	<i>Planning Permission HOL P-2005-0326</i>
APPENDIX B	-	<i>Waste types that may be suitable in typical waste recovery to land uses.</i>
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APPENDIX D	-	<i>Response to EA RvD Advice Letter</i>

1.0 Introduction

- 1.1 R & J Engineering were instructed by Clays Golf Club Ltd to undertake a Waste Recovery Plan as part of a permit application to transition from a Paragraph 19 Exemption that the site has been operating under since 2006, depositing inert wastes for the construction of new golf facilities as part of the extension of the existing golf club at Clays Site, Bryn Estyn Road, Llan Y Pwll, Wrexham see Figure 1.1



Figure 1.1 Plan of Clays Golf Course and site of the construction works “Clays Site”

- 1.2 Whether an activity constitutes disposal or recovery depends on a legal test derived from the Waste Framework Directive and European case law. This sets out our understanding of the test and this Waste Recovery Plan has been prepared in accordance with the Environment Agency Guidance and Methodology¹.

2.0 Clays Site

- 2.1 The principal objective of the operation at Clays Site (Figure 1.1) is to construct new golf facilities including;

1. Short game academy
2. 9 hole par 3 course
3. 2 new holes for main course

In conjunction with facilities at Clays Golf club

4. Construction of 24 No. new driving bays
5. New shop
6. New greenkeepers accommodation / stores
7. Internal alterations
8. New short course
9. Modifications to existing entrance.

- 2.2 All these works described above have been granted planning permission by Wrexham County Borough Council (WCBC). Note works 1, 4, 5, 6 & 7 are complete and functional.
- 2.3 Planning was granted on 17/05/2005 Ref HOL P/2005/0326 for the construction of new golf facilities. These works utilise inert waste to construct the new golf facilities described in paragraph 2.1 above.
- 2.4 A copy of the planning permission issued by WCBC is provided in Appendix A
- 2.5 In accordance with EPR 13, (Defining waste recovery: Permanent deposits of waste on land) the proposed operation best fits the code R5 (Recycling / reclamation of other inorganic materials) as described the Annexes of Waste Frame Work Directive; 2006/12/EC on waste, Annex II Bⁱⁱ

3.0 Establishing whether the activity is recovery or disposal?

3.1 Is there a clear benefit from the activity?

- 3.1.1 The activity of constructing new golf facilities as described in paragraph 2.1 is detailed in the granted planning application HOL P/2005/0326
- 3.1.2 The benefit derived from the scheme is extension of the existing golf course, including the replacement of lost golf facilities resulting from the new alignment of the WCBC's Wrexham Industrial Estate Access Road.
- 3.1.3 The proposed works has been ongoing since Jun 2006. The quantity of material remaining after 01/10/2011 will be up to 100,000 tonnes to achieve the design levels of the new golf facilities.

3.2 Is the recovered waste material suitable for it intended use?

- 3.2.1 The intended use of the waste is to construct the new golf facilities as identified in the Clays Site planning application using imported inert materials. The waste types permitted for this operation are detailed in Table 3.2.1 that were previously identified and agreed in previous Paragraph 19 Exemptions applications.ⁱⁱⁱ

Waste Types and uses			
Waste Code	Description	Typical Uses (See key*)	Additional Notes
01 04 08	Waste gravel, crushed rocks other than those mentioned in 01 04 07.	A,B,E,F	
01 04 09	Waste sand and clays.	A,B,E,F	
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06.	A,B,D	
17 03 02	Road base and road plannings	D	4
17 05 04	Soil and stones other than those mentioned in 17 05 03.	A,B,E,F	3
19 12 09	Minerals (for example sand stones.)	A,B	7
20 02 02	Soil, stones and top soil.	A,B,E,F	

Table 3.2.1 Waste types that are permitted for engineering purposes for waste recovery at Clays Site. *for key see Appendix B

- 3.2.2 These are confirmed to be suitable for the intended use by a combination of sampling and chemical testing before the waste is brought to the site and on site control

system / procedure when the material is brought to site which is described in the Clays Site Method of Works Statement.

3.3 Is the minimum amount of waste being used to achieve the intended benefit?

3.3.1 The planning application drawings in plan and sections detail the ground profiles required to create the size, form and type of features of the new golf course to replace and enhance the golfing facilities lost to the new alignment of the Wrexham Industrial Estate Access Road.

3.4 Is the waste being used as a substitute for a non-waste material?

3.4.1 The waste is being used as a substitute for a non-waste material as the need for the proposal is clear as detailed in the Clays Site Planning Application HOL P/2005/0326 and the use of waste achieves all that non waste could have done.

3.5 Will the proposal be completed to an appropriate standard?

3.5.1 The proposal will be constructed in accordance with the planning application drawing and to the high standards required to meet the performance criteria of a golf course in terms of aesthetics, maintainability of mowing slopes, soil profiles for rough grass / shrub areas, fairways and greens etc.

References

ⁱ *Defining Waste Recovery: Permanent Deposit of Waste on Land*, Regulatory Guidance Series, No EPR 13 (2010) Environment Agency

ⁱⁱ *Directive 2006/12/EC Of The European Parliament And Of The Council*, (2006), Office Journal of the European Union

ⁱⁱⁱ *Waste Management Licensing Regulations 1994, Paragraph 19, (Use of waste in construction) Schedule 3*

Appendix A – Planning Permission HOL P-2005-0326

In pursuance of its powers under the Acts and Orders referred to below, the County Borough Council as Local Planning Authority, hereby determines your application in accordance with the particulars and plans comprising the application

6
Expiry Date: 18/05/2005
Decision Notice Sent:
17/05/2005
Grid Reference:
E 337636
N 351250



Applicant	Clays Golf Club	Code Number	HOL P/2005/0326
Agent	Miles Design Ltd Mr S H Miles 7 Chapel Street Holt Wrexham LL13 9QJ	Date Received	23/03/2005
		Decision Date	17/05/2005

Town and Country Planning Act, 1990

Location of application

Land off Bryn Estyn Road Wrexham

Description of application

New golf facilities to include short game academy, 9 hole par 3 course and 2 new holes for main course

In reaching this decision the Council has had regard to the relevant policies in the Wrexham Unitary Development Plan which are as follows:-

EC1	Green Barriers
EC4	Hedgerows, Trees and Woodland
EC6	Biodiversity Conservation
GDP1	Development objectives
PS1	Settlement limits
PS2	Development and the environment

Particulars of decision that permission be GRANTED

Subject to the following:-

Condition(s)

1. The development hereby permitted shall be begun before the expiry of five years from the date of this permission.

Applicant	Clays Golf Club	Code Number	HOL P/2005/0326
Agent	Miles Design Ltd Mr S H Miles 7 Chapel Street Holt Wrexham LL13 9QJ	Date Received	23/03/2005 17/05/2005
		Decision Date	



2. Development shall only be carried out in strict accordance with the approved plans or with any amendments thereto approved in writing by the Local Planning Authority
3. Visibility splays from the existing field access to the proposed development shall be maintained being a minimum of 4.5 metres x 70 metres to the north west and 4.5 metres x 120 metres to the east measured to the nearside edge of the adjoining highway in which there shall be no obstruction in excess of 1.05 metres.
4. The surface of the access shall be paved using bound materials for a minimum distance of 10 metres behind the highway boundary before the development is brought into use.
5. Visibility to the north west at the junction of Bryn Estyn Road and Hugmore Lane shall be maximised by the removal of trees/vegetation on the corner of this junction.
6. Before the development is brought into use a footway link shall be provided between the existing car park and field access to the proposed development.
7. A report detailing a scheme of mitigation measure for Great Crested Newts and other amphibians within the site shall be submitted to and approved by the Local Planning Authority. Any mitigation measures required shall be implemented in accordance with time scales to be agreed as part of the measures before development commences on site.
8. No part of the development hereby permitted shall be commenced until full details of both hard and soft landscape works for the site have been submitted to and approved in writing by the Local Planning Authority. The works shall be implemented in accordance with a timescale to be approved in conjunction with the scheme of details.
9. No trees shall be lopped, topped, felled or uprooted without the prior written permission of the Local Planning Authority, nor shall any trees be wilfully damaged.

Reason(s)

1. To comply with Section 91(3) of the Town and Country Planning Act, 1990.
2. To ensure that the development fully complies with the appropriate policies and standards.
3. To provide for parking of vehicles clear of the public highway.
4. To ensure that no deleterious material is carried onto the highway.
5. to ensure that adequate visibility is provided at this junction.
6. In the interest of pedestrian safety.
7. In order to protect wildlife interests, which are afforded special protection.
8. To ensure a satisfactory standard of appearance of the development in the interests of the visual amenities of the area.
9. To protect trees which are of significant amenity value to the area.

Applicant	Clays Golf Club	Code Number	HOL P/2005/0326
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Note(s) to applicant

The scheme of landscaping referred to in the above conditions shall include any changes to ground levels (shown by existing and proposed contours/levels) and any existing vegetation (showing that to be retained) and proposed planting. In addition, any of the following which apply to the particular site must be included:- means of enclosure, car parking layout, access and circulation areas, materials for hard surfaced areas, any minor structures (e.g. refuse stores, lamp columns, play equipment) location of services, and any historic landscape features to be retained/improved.

Your attention is drawn to Highway Supplementary Notes Numbered 1, 3, 4 and 5 on the enclosed "Applicants' Rights and General Information".

Public Footpath number 4 runs close to the site and you must consult with Wrexham County Borough Council's Rights of Way section to discuss your proposals and any possible link between the existing course and proposed development.

You are advised to contact the Council's Landscape Officer regarding Condition 08 (telephone number 01978 292527).

You are advised to contact the Council's landscape Officer regarding Condition 07 (telephone number 01978 292517).

Any fertiliser storage facilities must be sited in property constructed bunded areas of sufficient capacity to avoid contamination of any watercourse, surface water drains or water source in the event of spillage.

Agrichemicals and pesticides should be stored and used in such a manner so that pollution of surface or groundwater cannot occur.

The application does not show any new water features. However, if it proposed to modify any existing ponds, or install new ponds, the Regulatory Water Resources Department **must** be contacted **prior** to the commencement of any work.

Under the terms of the Water Resources Act 1991, an Impounding Licence may be required from the Agency for the impounding of any watercourse, ditch or stream (eg. by dam, weir etc.) and an Abstraction Licence may be required from the Agency for the abstraction of water from any inland water or underground strata. This is dependent on water resource availability and may not be granted.

Applicant	Clays Golf Club	Code Number	HOL P/2005/0326
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It is the responsibility of the applicant to ensure that the development will not affect any existing legal water interests in the area.

The construction of any dam, weir or other like structure which affects the flow in a watercourse requires the prior formal Consent of the Agency's Flood Defence Department.

Measures for the avoidance of damage to the water environment during construction projects are set out in the document entitled "Special Requirements of the Environment Agency" (a copy has been forwarded to the developer).

The applicant should be advised that any site investigations undertaken should be sufficiently comprehensive so that if any material is to be disposed of to a licenced landfill site no further analysis, specific to that landfill site, will be required - ie total and soluble chemical analysis.

Any waste excavation material or building waste generated in the course of the development must be disposed of satisfactorily and in accordance with Section 34 of the Environmental Protection Act 1990.

If during construction/excavation works any contaminated material is revealed then the movement of such material either on or off site should be in consultation with the Agency.

Movements of Special Waste from the site must be accompanied by Special Waste consignment notes.

Carriers transporting waste from the site must be registered waste carriers.

The activity of importing waste into the site for use as, for example hardcore, must be registered by the Environment Agency Wales as an exempt activity under the Waste Management Licencing Regulations 1994.

If controlled wastes are to be utilised for construction purposes the developer must register the activity with the Environment Agency Wales. The Duty of Care Regulations apply to all movements of controlled waste.

No material is to be deposited within 10 metres of any watercourse,ditch or spring.

Applicant Clays Golf Club

Code HOL P/2005/0326

Agent Miles Design Ltd
Mr S H Miles
7
Chapel Street
Holt
Wrexham
LL13 9QJ

Number

Date 23/03/2005

Received 17/05/2005

Decision

Date



Officer Appointed for this purpose

Refer to the Statement of Applicant's Rights and General Information Enclosed

Chief Planning Officer, Lambpit Street, P O Box 1290, Wrexham, LL11 1WL.

Appendix B – Waste types that may be suitable in typical waste recovery to land uses.

i

**Environmental Permitting Regulations (England and
Wales) 2010**

enhancing... improving... cleaning... restoring...
changing... tackling... protecting... reducing...
creating a better place... influencing...
inspiring... advising... managing... adapting...

Regulatory Guidance Series, No EPR 13

**Defining Waste Recovery: Permanent
Deposit of Waste on Land.**

Version 1.0

17 03 02	road base and road planings other than those containing coal tar	D	4
17 05	soil (including excavated soil from contaminated sites) stones and dredging spoil		
17 05 04	soil and stones	A,B,E,F	3
17 05 06	dredging spoil (unless it contains dangerous substances)	B	6
17 05 08	track ballast, soil and stones other than those containing dangerous substances	A,B,D	5
19 01	wastes from incineration or pyrolysis of waste		
19 01 12	bottom ash and slag(incinerator bottom ash)	A	8
19 08	wastes from waste water treatment plants not otherwise specified		
19 08 02	washed sewage grit (waste from desanding) only	E,F	
19 08 99	stone filter media (if cleaned to remove sewage contamination) only	A, B, D	
19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified		
19 12 05	Glass	A	
19 12 09	minerals (for example sand, stones)	A,B	7
19 12 12	soil substitutes other than that containing dangerous substances only	E, F	
19 12 12	treated bottom ash including IBA and slag other than that containing dangerous substances only	A	
19 13	Wastes from soil and groundwater remediation		
19 13 02	solid wastes from soil remediation other than those containing dangerous substances	B	3
20 02	Garden and park wastes(including cemetery waste)		
20 02 02	soil and stones	A,B,E,F	

Key to Table Codes

- A. Structural fill for building, stabilising ramps, drainage, road construction.
- B. Construction of noise bunds, screening bunds, flood defence bunds, containment bunds, golf courses. Landscaping associated with construction work. Restoration of mineral workings. General fill material.
- C. Surface treatment of roads, tracks etc. Drainage.
- D. Road/track construction and repair, hard surfacing, car parks etc.
- E. Agricultural Improvement schemes.
- F. Ecological improvements, wetland schemes, lakes

1. Only shellfish shells from which the soft tissue or flesh has been removed.

2. Pulverised fuel ash (PFA) and Furnace bottom ash (FBA) must be tested to confirm that they are not hazardous and do not exceed the limits in Appendix F of the WRAP /Environment Agency Technical report on Manufacture of products from PFA and FBA (See link below).

http://www.environment-agency.gov.uk/static/documents/Business/QP_PFAFBA_TechnicalReport.pdf

The PFA/ FBA must also be suitable for the end use and comply with the standard BS EN 13242:2002 aggregates for unbound and hydraulically bound material for use in civil engineering work and road construction.

Appendix C – Environment Agency Advice Email and RvD Advice Letter

(no subject)

2 messages

Andrew, Samuel O <samuel.andrew@environment-agency.gov.uk>

9 June 2011 at 10:42

To: gwenmrf@googlemail.com

Cc: "Connah, Sally" <sally.connah@environment-agency.wales.gov.uk>

Mr Lewis,

Please find attached an advice record regarding your submission of a Waste Recovery Plan for the Clays Site Golf Course, Llan Pwll, Wrexham.

If you would like to discuss any of the advice, please give me a call on the number below.

Regards
Sam

Help to improve our service! Please click on the link below to complete our Customer Survey.

<https://www.questback.com/theenvironmentagency/nps2011>

Samuel Andrew
Permitting Officer (Waste)

National Permitting Service Warrington
Part of National Operations

(Internal: 721 2935

(External: 01925 542935

* e mail: samuel.andrew@environment-agency.gov.uk

* address: Richard Fairclough House, Knutsford Road, Warrington Cheshire, WA4 1HT

P Please consider the Environment before printing this email.

Information in this message may be confidential and may be legally privileged. If you have received this message by mistake, please notify the sender immediately, delete it and do not copy it to anyone else.

We have checked this email and its attachments for viruses. But you should still check any attachment before opening it.

We may have to make this message and any reply to it public if asked to under the Freedom of Information Act, Data Protection Act or for litigation. Email messages and attachments sent to or from any Environment Agency address may also be accessed by someone other than the sender or recipient, for business purposes.

If we have sent you information and you wish to use it please read our terms and conditions which you can get by calling us on 08708 506 506. Find out more about the Environment Agency at www.environment-agency.gov.uk



EAWML 102738 RvD advice.doc

54K

Recovery v Disposal Advice record

Name and contact details of Officer giving the advice	Samuel Andrew samuel.andrew@environment-agency.gov.uk
Name of the proposed operator	R & J Engineering
Name of the site	Clays Site, Bryn Estyn Road, Llan Y Pwll, Wrexham, LL13 9UB
Document reference for the submitted waste recovery plan	Waste recovery plan for construction of new golf facilities and Planning Permission - Document Reference: HOL P/2005/0326
Outline of the proposals for waste recovery including the main issues permitting officer considered:	
<ol style="list-style-type: none"> 1) The Waste Recovery Plan states that approximately 100,000 tonnes of waste will be used as fill material. However, details have not been provided regarding how this figure has been calculated. Also, detailed scheme drawings showing original and final ground levels so that we can assess the volume of waste to be used, have not been supplied. 2) The Waste Recovery Plan states that the scheme has been designed "to the high standards required to meet the performance criteria of a golf course in terms of aesthetics, maintainability of mowing slopes, soil profiles for rough grass / shrub areas, fairways and greens etc." However, details regarding the engineering design and construction techniques employed to ensure that the structure will be effective, stable and permanent have not been provided. 3) The Waste Recovery Plan states that the waste is being used as a substitute for a non waste material "as the need for the proposal is clear as detailed in the Clay Site Planning Application HOL P/2005/0326" However, the planning permission does not reference this or details any non waste materials such as virgin quarried soil and stone as an alternative to waste soil. 4) The waste types and uses table indicates that waste code '17 03 02 - Road base and road plannings' will be used to construct the facilities. This waste type is specific to road construction/repair, hard standing and car parks, it is unsuitable for general fill and must not be used at a depth of greater than 2 metres. The recovery plan does not indicate where this waste type will be deposited. 	
Advice given to the Applicant:	
The operator should provide us with the following information:	
<ol style="list-style-type: none"> 1) a) A description of how the total quantity of waste required to complete the proposed activity has been calculated, including the conversion factor to be used to convert cubic metres into tonnes. <li style="padding-left: 20px;">b) Detailed scheme drawing/s showing original and final ground levels (such as cross sections). The drawings must be provided at a scale appropriate to the size of the project and should be sufficiently detailed so that they can clearly be understood and checked on site. 2) Evidence that the scheme has been properly designed and will be completed to the appropriate standard to give an effective and lasting benefit. This should include details of the engineering design (stability, drainage etc), construction techniques to be employed and the means by which the works will be adequately finished off. 3) Justification for using waste materials rather than virgin materials for the completion of the scheme, such as non waste soil and stone. 4) Details of where waste code '17 03 02 - Road base and road plannings' will be deposited in the site. 	
Date advice given: 09/06/11	
Time Spent (minutes): 165	

Appendix D – Response to EA RvD Advice Letter

M. R. F.

Material Recycling Facility

**BRYN MARIAN, LLANSANTFFRAID,
POWYS. SY22 6XP**

**TEL: 01691 828890 Mobile: 07 803 281 306
or email: gwenmrf@googlemail.com**

20th June, 2011.

Case Reference: **EPR/XP3691EG/A001**

Reply to Samuel Andrew's email about permit.

1a.

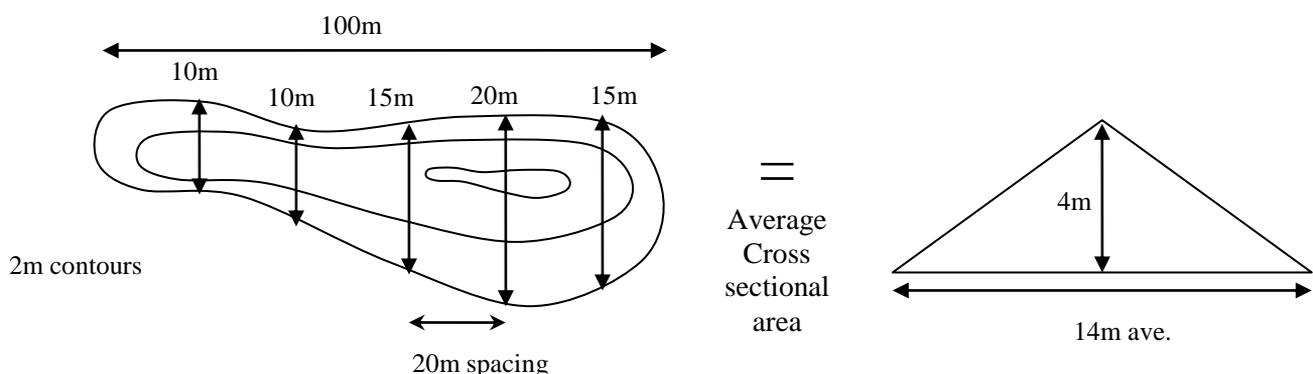
The Landscape Consultant's drawing "New Golf facilities, Detailed Layout and Landscaping Proposals" plan shows what the new land form of the new golf facility would be. From these plans it estimated that the site would require approximately 223,194m³ of inert waste materials to carry out the works, totaling 334,791 tonnes using a conversion of 1.5 m³ = 1 tonne.

The methodology behind the 223,194m³ is as follows:

Site area = 23 acre, 3 acre is deducted as the ground profile will not be raised directly up to the site perimeter.

20 acre = 80937m² with 2m lift across the site = **161,880m³**

The cross sectional area of each new mound was calculated by taking an average cross section through the narrowest axis applied over length of the mound. The highest contour was ignored, average width taken at 20m spacing



Area of triangle = $\frac{1}{2}bh = 0.5 \times 4 \times 14 = 200\text{m}^2$ Ave.

Volume of mound = Average Cross Sectional x Length Mound = $200 \times 100 = 20,000\text{m}^3$

This was repeated for each mound

Total material required for mounds = **61,314 m³ = 91,971 tonnes**

Total material required to construct works = **334,791 tonnes**

We estimate that we have at least 70% of this tonnage on site with June, July, August and September still left on our exemption before we would start on the 100,000 tonne limit of the new permit which would complete the contract.

1b.

We sent a plan with our recovery application. Please find enclosed another copy.

2

Golf Course design

The course has been designed by the landscape consultant Arwel Griffith, and is detailed on drawing “New Golf Facilities, Detailed Layout and Landscaping Proposals”.

New Mound Design

The imported fill will comprise of granular and cohesive materials. The slopes of the mounds will be formed at no greater than 1v in 2h (26.6°) for cohesive materials and 1v 1½ h (33. 7°) for granular materials, to maintain long term stability. To improve the stability of the new mounds constructed of cohesive materials, granular fill will be deposited on the outer margins of the mounds.

Topsoil, seeding and is to be carried out to establish adequate cover of vegetation to mitigate surface erosion.

Soil Reinstatement

All soil to be reinstated in dry conditions on appropriately contoured and prepared ground as specified on the drawing. They will be replaced in correct sequence; subsoils first and then topsoils to the depth required. Care will be taken to avoid soil losses or contamination with other materials.

On completion of reinstatement soil will be thoroughly loosened to remove any compaction and the area shall not be traversed by machinery (unless absolutely necessary) or used for storage purposes.

The depth of topsoil spread shall not normally exceed 300 mm. Suitable (loosened) subsoil shall provide the remainder of the minimum rooting depth. The minimum rooting depth shall be normally 450 mm for grass, 600 mm for shrubs and 900 mm for trees¹.

Fairways

- Subsoil to be placed at a depth of 500mm – consisting of a granular nature to be placed under the extent of the fairways.
- Topsoil to be placed at a depth of 300mm – consisting of existing topsoil.

Subsoil Ripping will be carried out to a depth of 600mm at spacing 900 to 1000m

New Putting Greens and Tees

To allow the grass on the Greens to be propagated, and cut at several millimetres high to maintain a dense sward and maintain free draining surface the following construction form is required.

- Sub- grade (Imported cohesive /granular fill) to required level
- Drainage- positive drain to soak-way (Clean, open stone)
- Gravel blanket (300mm -350mm)
- Intermediate layer – (non woven Terram)
- Root zone (Coarse sand topsoil blend) (300mm)
- Laid Turf (for Greens)

¹ BS 3882:2007 Specification for topsoil and requirements for use: Part 5.6

This construction form is developed from the United States Golf Association (USGA) “Recommendations For a Method of Putting Green Construction” and “Building the USGA Green: Tips for Success”

New mounds

- Subsoil to be placed at a depth of 500mm to 600mm – consisting of existing subsoil
- Topsoil to be placed at a depth of 200mm to 300mm – consisting of existing topsoil.

These depths vary depending on the mass tree planting as detailed on the Landscaping Proposals

Construction Methodology

Positions of new mounds, proposed levels, and profiles are set out on site.

Topsoil and subsoil is stripped and stored on site for reuse.

These incoming waste streams will be segregated to cohesive and granular and spread out to build up ground levels of the fairways and new mounds as shown on “Detailed Layout and Landscaping Proposals” drawing .

Mound Construction

As the waste streams will be segregated, this allows the appropriate material to be selected for the required slope profile details on the “Detailed Layout and Landscaping Proposals” drawing.

These materials will be spread in 150mm layers, and heavily trafficked by a tracked bulldozer to form the mounds. The final profiles will be formed using an excavator, guided by profile boards and levels.

After soil restoration is completed drainage will be constructed adjacent to be the base of the new mounds to drain the slopes in the form of rubble drains as required.

Fairways, Greens and Tees

On reaching the level of the base of the required subsoil layers for the new landforms, soil reinstatement (detailed above) for the described landforms will be carried out. On completion of this, seeding and planting as detailed on the “Detailed Layout and Landscaping Proposals” drawing.

3

Wrexham County Borough Council (WCBC) granted the planning application on 17/05/05. An application was made to the Environment Agency for a Waste Management License Exemption, which is Waste Management Licensing Regulation 1994, Schedule 3, Paragraph 19A.

It is proposed that the engineering works utilise secondary aggregates as a construction material. In line with UK national policy, this application for registration of an exempt activity, is made in-line with the following statutory regulations and guidance notes.

It is considered the proposed works meet the requirements of Paragraph 19, Schedule 3 (activities that are exempt from Waste Management Licensing).

This application was granted and the site is working as an exempt activity until the new Permitting System comes into force on the 1st October, 2011. The work has been recognized as an exempt activity since 2005, and should be still recognized as one under the new Permitting System as a recovery operation.

In addition to this, the need for the works described in the planning application is a direct result of the proposed WCBC Wrexham Industrial Estate Access Road, which compromises the Clays Golf Club facilities. The golf club works would have been constructed with non-waste materials funded by the WCBC due to the new access road land take, impacting on the golf club.

4

E.W.C. 17 03 02 - Road Base & Road Plannings. We use road base on our site for the haul road, but

we do not use road plannings. Road base are lumps of tarmac that have been dug up from a road but are still in their basic rolled form. Road plannings are produced by scarifying tarmac roads before re surfacing. Scarifying produces a tarmac stone grit which in large amounts can cause contamination. Unfortunately the E.W.C. 17 03 02 put them both together.

If you require further information, please do not hesitate to contact us on gwenmrf@googlemail.com

Thank you.

Yours Sincerely,

W.M. Lewis.

Appendix E - WCBC planning permission

In pursuance of its powers under the Acts and Orders referred to below, the County Borough Council as Local Planning Authority, hereby determines your application in accordance with the particulars and plans comprising the application

6
Expiry Date: 18/05/2005
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17/05/2005
Grid Reference:
E 337636
N 351250



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		Decision Date	17/05/2005

Town and Country Planning Act, 1990

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EC4	Hedgerows, Trees and Woodland
EC6	Biodiversity Conservation
GDP1	Development objectives
PS1	Settlement limits
PS2	Development and the environment

Particulars of decision that permission be GRANTED

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Condition(s)

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Agent	Miles Design Ltd Mr S H Miles 7 Chapel Street Holt Wrexham LL13 9QJ	Number	
		Date	23/03/2005
		Received	17/05/2005
		Decision	
		Date	



2. Development shall only be carried out in strict accordance with the approved plans or with any amendments thereto approved in writing by the Local Planning Authority
3. Visibility splays from the existing field access to the proposed development shall be maintained being a minimum of 4.5 metres x 70 metres to the north west and 4.5 metres x 120 metres to the east measured to the nearside edge of the adjoining highway in which there shall be no obstruction in excess of 1.05 metres.
4. The surface of the access shall be paved using bound materials for a minimum distance of 10 metres behind the highway boundary before the development is brought into use.
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Reason(s)

1. To comply with Section 91(3) of the Town and Country Planning Act, 1990.
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3. To provide for parking of vehicles clear of the public highway.
4. To ensure that no deleterious material is carried onto the highway.
5. to ensure that adequate visibility is provided at this junction.
6. In the interest of pedestrian safety.
7. In order to protect wildlife interests, which are afforded special protection.
8. To ensure a satisfactory standard of appearance of the development in the interests of the visual amenities of the area.
9. To protect trees which are of significant amenity value to the area.

Applicant	Clays Golf Club	Code Number	HOL P/2005/0326
Agent	Miles Design Ltd Mr S H Miles 7 Chapel Street Holt Wrexham LL13 9QJ	Date Received	23/03/2005 17/05/2005
		Decision Date	



Note(s) to applicant

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You are advised to contact the Council's landscape Officer regarding Condition 07 (telephone number 01978 292517).

Any fertiliser storage facilities must be sited in property constructed bunded areas of sufficient capacity to avoid contamination of any watercourse, surface water drains or water source in the event of spillage.

Agrichemicals and pesticides should be stored and used in such a manner so that pollution of surface or groundwater cannot occur.

The application does not show any new water features. However, if it proposed to modify any existing ponds, or install new ponds, the Regulatory Water Resources Department **must** be contacted **prior** to the commencement of any work.

Under the terms of the Water Resources Act 1991, an Impounding Licence may be required from the Agency for the impounding of any watercourse, ditch or stream (eg. by dam, weir etc.) and an Abstraction Licence may be required from the Agency for the abstraction of water from any inland water or underground strata. This is dependent on water resource availability and may not be granted.

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Agent	Miles Design Ltd Mr S H Miles 7 Chapel Street Holt Wrexham LL13 9QJ	Date Received	23/03/2005 17/05/2005
		Decision Date	



It is the responsibility of the applicant to ensure that the development will not affect any existing legal water interests in the area.

The construction of any dam, weir or other like structure which affects the flow in a watercourse requires the prior formal Consent of the Agency's Flood Defence Department.

Measures for the avoidance of damage to the water environment during construction projects are set out in the document entitled "Special Requirements of the Environment Agency" (a copy has been forwarded to the developer).

The applicant should be advised that any site investigations undertaken should be sufficiently comprehensive so that if any material is to be disposed of to a licenced landfill site no further analysis, specific to that landfill site, will be required - ie total and soluble chemical analysis.

Any waste excavation material or building waste generated in the course of the development must be disposed of satisfactorily and in accordance with Section 34 of the Environmental Protection Act 1990.

If during construction/excavation works any contaminated material is revealed then the movement of such material either on or off site should be in consultation with the Agency.

Movements of Special Waste from the site must be accompanied by Special Waste consignment notes.

Carriers transporting waste from the site must be registered waste carriers.

The activity of importing waste into the site for use as, for example hardcore, must be registered by the Environment Agency Wales as an exempt activity under the Waste Management Licencing Regulations 1994.

If controlled wastes are to be utilised for construction purposes the developer must register the activity with the Environment Agency Wales. The Duty of Care Regulations apply to all movements of controlled waste.

No material is to be deposited within 10 metres of any watercourse,ditch or spring.

Applicant Clays Golf Club

Code HOL P/2005/0326

Agent Miles Design Ltd
Mr S H Miles
7
Chapel Street
Holt
Wrexham
LL13 9QJ

Number

Date 23/03/2005

Received 17/05/2005

Decision

Date



Officer Appointed for this purpose

Refer to the Statement of Applicant's Rights and General Information Enclosed

Chief Planning Officer, Lambpit Street, P O Box 1290, Wrexham, LL11 1WL.

Appendix F - Wrexham Ind Est Access Road Map North

Drawing Reference 2754/D/ 602 B



This drawing is the property of Wrexham County Borough Council and is not to be used for any other purpose without the written permission of the Council. It is the responsibility of the user to ensure that the drawing is used in accordance with the intended purpose. The Council does not accept any liability for any loss or damage arising from the use of this drawing.

The Planning boundary (red line) is based on the scheme design which has been developed from Topographic survey data. Minor discrepancies may exist between the Topographic survey and the Ordnance Survey mapping on which this drawing is produced.

DRAWING NUMBER: 02754/D/602 B



WREXHAM COUNTY BOROUGH COUNCIL
 CROWN BUILDINGS,
 WREXHAM LL13 8BG.
 MARTIN WRIGHT BSc(Hons) MRICS Tel. (01978) 297102
 CHIEF TRANSPORTATION AND ASSET MANAGEMENT OFFICER Fax. (01978) 297103

JOB NUMBER: TE 02754	SCALES: NTS	AMENDMENTS:	DATE
DACDIV GROUP: DESIGN			
DRAWN BY: RT	NATIONAL GRID REF:		
CHECKED BY: AIS		A Original Drawing 18/09/2007	
APPROVED BY:		B Re-application 17/11/2008	
	STATUS:	Planning	

SCHEME TITLE: Wrexham Industrial Estate Access Road Northern Access
DRAWING TITLE: General Arrangement
DRAWING NUMBER: 02754/D/602 B

Appendix G – Method used to quantify quantity of materials

G0.1 Total quantity of material required to complete the proposed activity has been calculated by the following methods as per the 2011 WRP, see extract below.

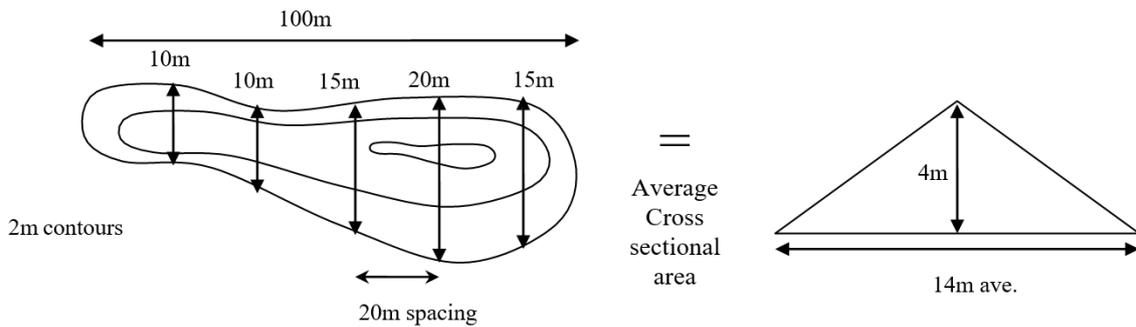
G1.0 **Proposed Golf Facilities**

G1.1 The Landscape Consultant’s drawing “New Golf facilities, Detailed Layout and Landscaping Proposals” plan shows what the new land form of the new golf facility would be. From these plans it estimated that the site would require approximately 223,194m³ of inert waste materials to carry out the works.

G1.2 The methodology behind the 223,194m³ is as follows:

- Site area = 23 acre, 3 acre is deducted as the ground profile will not be raised directly up to the site perimeter.
- 20 acre = 80937m² with 2m lift across the site = 161,880m³

G1.3 The cross sectional area of each new mound was calculated by taking an average cross section through the narrowest axis applied over length of the mound. The highest contour was ignored, average width taken at 20m spacing.



Area of triangle = $\frac{1}{2} bh = 0.5 \times 4 \times 14 = 200\text{m}^2$ Ave.

Volume of mound = Average Cross Sectional x Length Mound = $200 \times 100 = 20,000\text{m}^3$ This was repeated for each mound.

Total material required for mounds = 61,314 m³

Total material required to construct works = **223,194m³**

G2.0 Remaining volume of material required to construct new golf course facilities

G2.1 The method of volume calculations uses 3D modelling by comparing the original site survey in December 2005 and the current site survey in July 2018. Drawings summarised in the table below.

Drawing Number	Title	Year
455:500:1:2	LAND SURVEY CLAYS GOLF CLUB	2005
455:500:2:2	LAND SURVEY CLAYS GOLF CLUB	2005
GCI-CLA-CIV-DRG-0001 A01	TOPOGRAPHICAL SURVEY - JULY 2018	2018
GCI-CLA-CIV-DRG-0002 A01	VOLUME CALCULATION ANALYSIS	2018

The output from this volume calculation is shown on drawing GCI-CLA-CIV-DRG-0002 A01 and is summarised as:

- Total volume of waste material deposited on Clays Site to date **170,868m³**

G2.2 Total volume of to be material to be deposited on Clays Site to complete the new golf course facilities =
 (Total volume of material required to construct works) – (Total volume of waste material deposited to date)
 $223,194\text{m}^3 - 170,868\text{m}^3 = \mathbf{52,326\text{m}^3}$

G3.0 Waste and Non-Waste required on site.

G3.1 The new golf course facilities are to be constructed from waste and non-waste materials. Waste is to be used to form the underlying new topography up to the underside of the subsoil strata.

G3.2 Hills and mounds features are to use existing sub and top soil.

G3.3 The Fairways, Tees and Putting Greens upper strata are to be made up of non-waste materials as per the specifications detailed in Section 3.10.

G3.4 The volume of non-waste products are considered to be part of the total volume material required to construct works.

G3.5 Volume of product materials required

G3.6 The calculation is based on the planning drawing GCI-CLA-CIV-DRG-0005 C01, using 2D areas assessment of the Fairways, Tees and Putting Greens, drawing GCI-CLA-CIV-DRG-0006 A01 and specifications in section 3.10. Detail of which are summarised below:

G3.7 Green and Fairway Construction Materials

Material	Depth
Sub- grade (granular fill)	200mm
Gravel blanket	300mm
Root zone	300mm
Total	800mm

G3.8 Drainage – French drain

Material	Depth	Width	Extent
Clean Stone	500mm	1000mm	3,773m

G3.9 Golf Course Features

Golf Course Features	Area / Extent
Green & Fairways	18,151m ²
Tees	996m ²
Bottom of Mound Drainage	3,773m ²

The areas and respective construction depths are multiplied to obtain the volumes

G3.10 Summary Product Materials Volume table

Golf Course Features	Volumes
Green & Fairways	14,521m ³
Tees	797m ³
Bottom of Mound Drainage	1,886m ³
Total	17,204m³

Total volume of product materials = **17,204m³**

G4.0 Volume of Waste required:

G4.1 The original 2011 WRP stated that 223,194 m³ is required to complete the works as noted in G1.0 above

G4.2 The volume calculations in G2.1 above conclude that 170,868 m³ of waste has been deposited.

G4.3 This equates a difference of 52,326 m³ which is required to complete the work, which is split between 35,122m³ of waste and 17,204 m³ of quality products (non-waste).

G4.4 It is this remaining volume that is the reason for varying the existing permit and WRP, as more waste is required than applied for under the Standard Rules permit SR 2010 No.08 in 2011 to occupy this volume.

Contributory factors for this include

- In 2011, the waste recovery plan stated. *"We estimate that we have at least 70% of this tonnage on site with June, July, August and September still left on our exemption before we would start on the 100,000 tonne limit of the new permit which would complete the contract."* This estimate was not based on 3D modelling software that was not available at the time.
- The conversion factor placed density of waste, cubic metres to tonnage used in the 2011 WRP was 1.5. A higher value of place density of waste could have been achieved via compaction or consolidation, see commentary below.

G5.0 Tonnage of Waste:

G5.1 The tonnage of waste that can be deposited in this volume depends on placed density of the waste (tonnes/m³)

G5.2 This "placed density" of waste is the "conversion factor" used in the original WRP, 1.5 t/m³ a value that is widely used by local authorities in waste strategies for reporting tonnages placed in inert landfills etc.

- G5.3 The placed density of the waste can vary depending on the characteristics of waste such as particle density, size distribution, moisture content, compaction methods from spreading and tracking by plant movements, consolidation over time.
- G5.4 For example the density of materials such as those references by WRAP Net Waste Tool, Guide to Reference Data** ^{viii}Appendix 1 Densities Dataset Inert Materials see extract below.

Appendix 1 Densities Dataset

Densities (tonnes/m³) by Material Type		
Inert materials		
Bricks & Blocks		Density
	Aerated concrete block	0.6
	Cavity block	1.4
	Lightweight concrete block	1.4
	Facing bricks	1.7
	Common bricks	1.7
	Dense concrete block	1.8
	Dense cavity block	1.8
	Engineering bricks	1.9
	(Ground) Beam & block flooring	2.5
	(Upper floor) Beam & block flooring	2.7
Aggregates		Density
	Reclaimed blast furnace slag	0.96
	Rock fill	1.3
	Unbound mixtures	1.3
	Capping (general)	1.4
	General fill	1.4
	General granular fill	1.7
	Landscape fill	1.6
	Hardcore	2.0
	Filter drains	2.2
	Sub-base hardcore	2.4
Tiles & ceramics		Density
	Clay tile cladding	1.83
	Ceramic tiles	2.0
	Plain clay tiles	2.0
	Terracotta cladding	2.0
	Welsh slate cladding	2.5
	Granite ashlar	2.69
Concrete		Density
	Sand/cement screed	1.2
	Pre-cast	2.1
	Concrete tiles	2.1
	Reinforced in-situ C25 or lower	2.1

^{viii} <http://nwtool.wrap.org.uk/Documents/WRAP%20NW%20Tool%20Data%20Report.pdf>

- G5.5 The densities and proportions of these materials present in the waste will change the achievable placed density of the waste on site.
- G5.6 The placed density of waste used the WRP is to remain the same as the 2011 WRP of of 1.5t/m³ (conversion factor 1 cubic metre =1.5 tonnes) for the deposit of waste as a recovery operation.
- G5.7 The tonnage of waste can be derived as follows using the volumes calculated in section G4.0:
- Total volume of waste deposited to date = 170,868 m³. Using a conversion factor of 1 cubic metre = 1.5 tonnes,

170,868 x 1.5 = 256,302 tonnes

256,302 tonnes deposited under Paragraph 19 Exemption and the standard rules permit EPR/XP/3691EG, SR 2010 No.08, (100,000 tonnes)
 - Total tonnage of material required by the design drawings 223,194 m³ to complete the work including waste and non-waste. Using a conversion factor of 1 cubic metre = 1.5 tonnes,

223,194 x 1.5 = 334,791 tonnes
 - Tonnage of waste required to complete works = tonnage of material required by the design drawings - tonnage of waste deposited to date.

334,791 - 256,302 = 78,489 tonnes
- G5.7 This equates to 78,489 tonnes which is required to complete the work, which is split between 52,683 tonnes of waste and 25,806 tonnes of quality products (non-waste).
- G5.8 Considering the application of the waste operations permit under a bespoke permit varied from the existing standard rules permit (SRP) EPR/XP/3691E. The total amount of waste required to complete the work under the SRP and bespoke permit will include 152,683 tonnes of waste (100,000 tonnes from SRP + 52,683 tonnes required to complete the work. This bespoke permit will only allow a further 52,683 tonnes of waste to be deposited at Clays Site.

RL 10/06/18 Tees, Fairways & Green areas GCI-CLA-CIV-DRG-0006 A01.dwg



KEY GOLF FEATURE IN PLAN	
Green & Fairways	18,151m ²
Tees	996m ²
Bottom of Mound Drainage	3,773m

General Notes

KEY

- TEES
- GREENS
- FAIRWAYS
- BOTTOM OF MOUND DRAINS

No.	Revision/Issue	Date
A1	FIRST ISSUE	10/06/18

Client:
 GOLF COURSE INVESTMENT LTD.
 CLAYS GOLF CLUB
 BURN ESTYME ROAD
 LAN-Y-PWLL
 WIREHAM
 LL39 9UB

Project:
 CLAYS SITE - NEW GOLF COURSE FACILITIES

Title:
 TEES, GREENS, FAIRWAYS AND DRAINAGE MATERIAL AREA / EXTENT REVIEW

Drawing No: GCI-CLA-CIV-DRG-0006 A01	Sheet
Date: JUNE 2018	1 OF 1
Scale: NTS	Surv:
Sh. Size: A3	Drawn: RL

R.E.A.S.C. LTD
 1 STATION BUILDINGS, STATION ROAD, GORBOWN,
 SHROPSHIRE, SY11 3LX
 Tel: 01797 699764
 Email:



General Notes

Volume Calculation Output

December 2005 Survey compared to the June 2018 Survey

Total Cut = 1,050m³
 Total Fill = 171,918m³
 Resultant Fill = 170,868m³

A1	FIRST ISSUE	08/07/18
No.	Revision/Issue	Date

Client: GOLF COURSE INVESTMENT LTD.
 CLAYS GOLF CLUB
 BRYN ESTYN ROAD
 LLAN-Y-PWLL
 WREXHAM
 LL13 9UB

Project: CLAYS SITE - NEW GOLF COURSE FACILITIES

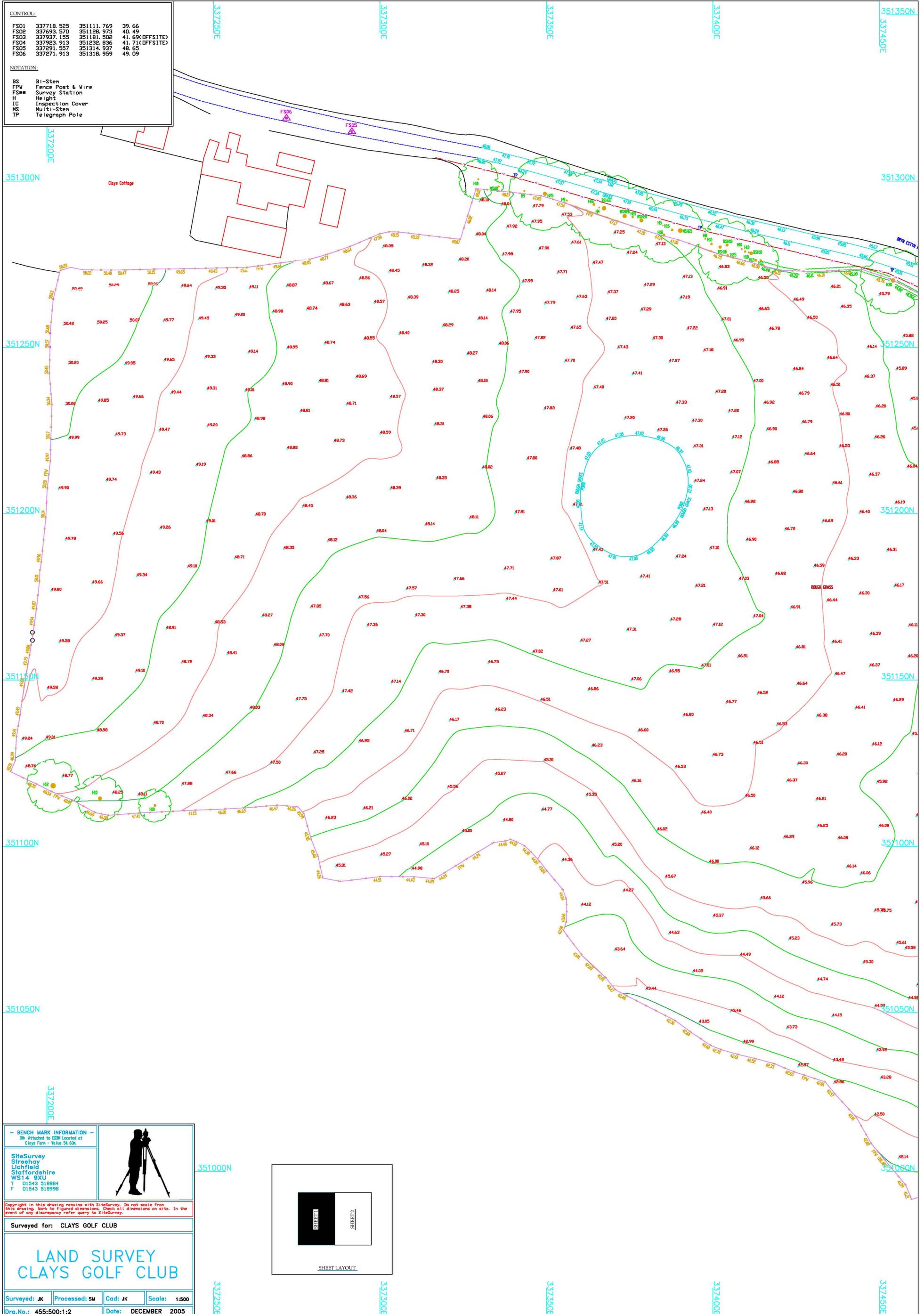
Title: VOLUME CALCULATION ANALYSIS

Drawing No: GCL-CLA-CIV-DRG-0002 A01	Sheet 1 OF 1
Date: JULY 2018	
Scale: 1:750	Surv: JL
Sht. Size: A1	Drawn: gL

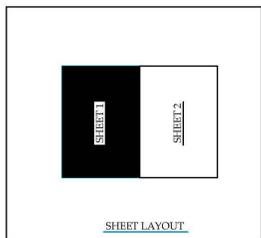
R.E.A.S.C. LTD
 1 STATION BUILDINGS, STATION ROAD, GOBOWEN, SHROPSHIRE, SY11 3UX
 Tel: 017377 699764
 Email:

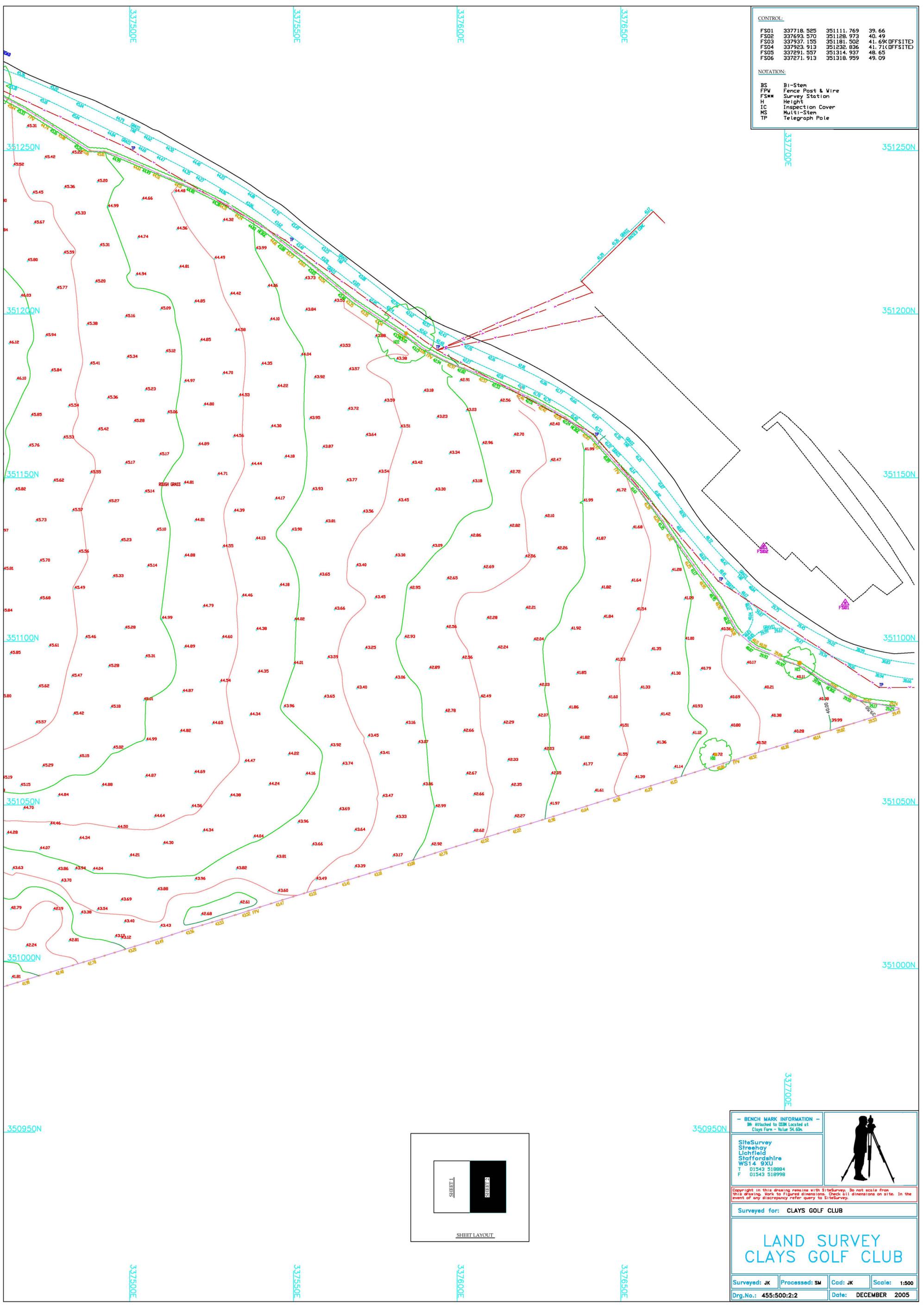
CONTROL:			
FS01	337718.525	351111.769	39.66
FS02	337693.570	351128.973	40.49
FS03	337937.155	351181.502	41.69< (OFFSITE)
FS04	337923.913	351232.036	41.71< (OFFSITE)
FS05	337291.557	351314.937	48.65
FS06	337271.913	351318.959	49.09

NOTATION:	
BS	Bull-Stop
FPW	Fence Post & Wire
FS	Survey Station
H	Height
IC	Inspection Cover
MS	Multi-Stop
TP	Telegraph Pole



- BENCH MARK INFORMATION - BM Attached to OSBM Located at Clays Farm - Value 34.60m.	
	
SiteSurvey Streeby Lichfield Staffordshire WS14 9XU T 01543 518884 F 01543 518998	
Copyright in this drawing remains with SiteSurvey. Do not scale from this drawing. Work to figures dimensions. Check all dimensions on site. In the event of any discrepancy refer query to SiteSurvey.	
Surveyed for: CLAYS GOLF CLUB	
<h1>LAND SURVEY</h1> <h2>CLAYS GOLF CLUB</h2>	
Surveyed: JK	Processed: SM
Cad: JK	Scale: 1:500
Drg.No.: 455:500:1:2	Date: DECEMBER 2005



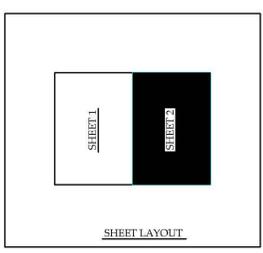


CONTROL:

FSD1	337718.525	351111.769	39.66
FSD2	337693.570	351128.973	40.49
FSD3	337937.195	351181.502	41.69 (OFFSITE)
FSD4	337928.913	351238.836	41.71 (OFFSITE)
FSD5	337291.557	351314.937	48.65
FSD6	337271.913	351318.959	49.09

NOTATION:

BS	Bi-STEM
FPV	Fence Post & Wire
FS**	Survey Station
H	Height
IC	Inspection Cover
MS	Multi-STEM
TP	Telegraph Pole



- BENCH MARK INFORMATION -
 BM Attached to OSM Located at Clays Farm - Value 54.60m

SiteSurvey
 Streechay
 Lichfield
 Staffordshire
 WS14 9XU
 T 01543 518884
 F 01543 518998

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Surveyed for: **CLAYS GOLF CLUB**

LAND SURVEY CLAYS GOLF CLUB

Surveyed: JK	Processed: SM	Cad: JK	Scale: 1:500
Drg.No.: 455:500:2:2	Date: DECEMBER 2005		

Appendix H Survey - July 2018 - GCI-CLA-CIV-DRG-0001_A01



General Notes

Co-ordinates: OSGB36, National Grid
 Levels: Ordnance Datum Newlyn (ODN)

A1	FIRST ISSUE	08/07/18
No.	Revision/Issue	Date

Client: GOLF COURSE INVESTMENT LTD.
 CLAYS GOLF CLUB
 BRYN ESTYN ROAD
 LIAN-Y-PWLL
 WREXHAM
 LL13 9UB

Project: CLAYS SITE - NEW GOLF COURSE FACILITIES

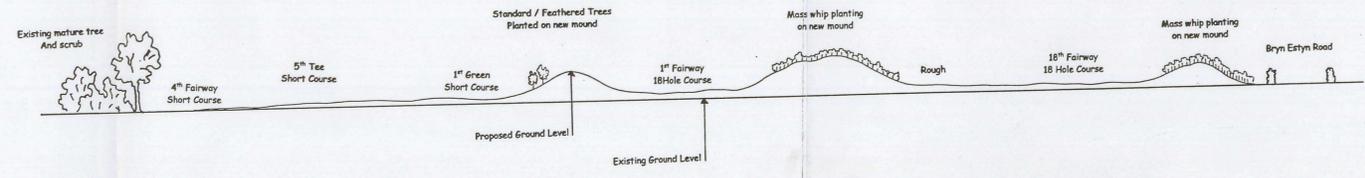
Title: TOPOGRAPHICAL SURVEY - JULY 2018

Drawing No: GCI-CLA-CIV-DRG-0001 A01	Sheet
Date: JULY 2018	1 OF 1
Scale: 1:750	
Sht. Size: A1	

R.E.A.S.C. LTD
 1 STATION BUILDINGS, STATION ROAD, GOBOWEN, SHROPSHIRE, SY11 3LX
 TEL:01773 809784
 Email:

RL

REVISION A - 07/06/06.
 EXISTING AND PROPOSED LEVELS INSERTED
 + 48.00 EXISTING
 • 50.00 PROPOSED
 R. J. Griffith



TYPICAL CROSS SECTION A - A @ 1:500



Existing Trees retained and protected - New fencing will be outside the canopy of retained trees and will limit the working area so that no work is undertaken in the proximity of retained trees

Existing hedgerow retained - protected from works by new fencing being at least 2m away from hedgerow and defining the working area.

LEGEND

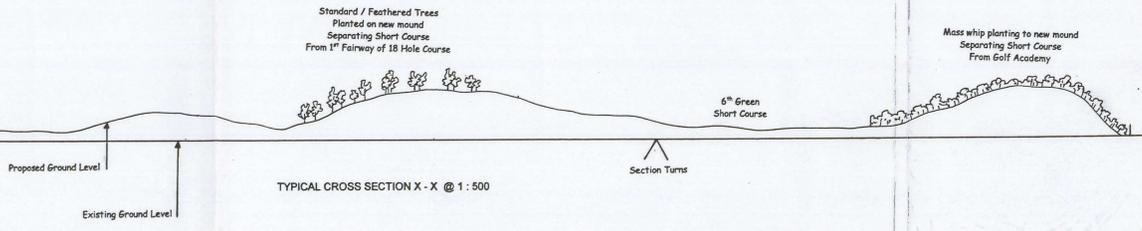
- T1. Golf Tee
- G1. Golf Green
- Golf Fairway
- Mass tree planting - 46/60 cm bare rooted whips planted at 1.5m centres. Species to include - alder, birch, rowan, oak, ash, hazel, hawthorn, blackthorn, elder, holly.
- Standard / Feathered trees - planted in groups within the golf fairways and rough. Species to include - alder, birch, rowan, oak, ash planted as 1800cm feathers or 12-14cm standards with stake and tie.
- Stone pathways
- Timber close boarded fence to secure golf academy with turnstile type gate for access.

GENERAL

Existing topsoil will be stripped to a depth of approx 500mm and stockpiled for further use. Inert porous material will be imported to create new landform and to improve drainage. New landform is indicated on drawing by contour lines at 2m intervals and the Typical Cross Section. Stripped topsoil will be re-laid to new landform and seeding, turfing and planting will then be implemented.

All existing trees and hedgerows will be retained (with the exception of two lengths of hedgerow to allow access to site on completion). Any gaps in the existing hedgerow along Bryn Estyn Road will be planted. A new hedgerow will be planted along the Southern boundary of the Golf Academy.

The areas of mass planting will be maintained by herbicide ring spraying to individual trees with the weed growth between cut twice each year. Once established these areas will have minimal management and will form areas for wildlife. The Standard / Feathered trees will be managed as part of the golf course.



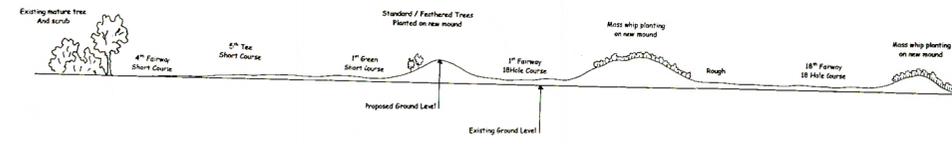
TYPICAL CROSS SECTION X - X @ 1:500

WREXHAM COUNTY COUNCIL
 18 MAY 2006
 PLANNING DEPARTMENT

CLIENT: CLAYS GOLF CLUB, WREXHAM	
TITLE: NEW GOLF FACILITIES DETAILED LAYOUT AND LANDSCAPING PROPOSALS	
DRAWN BY: ARWEL J GRIFFITH	
DATE: MARCH 2005	SCALE 1 TO 500
arwel j griffith LANDSCAPE CONSULTANT	
PLAS MARCHOG, RHOSCEFNHIR, YNYS MńN, LL75 8YU TEL/FAX 01248 450371 arwel.jg@virgin.net	

DRAWING No.
 GCI-CLA-CIV-DRG-0005 C01

REVISIONS A. 07/20/20
 EXISTING AND PROPOSED LEVELS INDICATED
 + 10.00 EXISTING
 = 20.00 PROPOSED



TYPICAL CROSS SECTION A - A @ 1:500

Existing Trees retained and protected - New fencing will be outside the canopy of retained trees and will limit the working area so that no work is undertaken in the proximity of retained trees

Existing hedgerow retained - protected from new fencing being at least 2m away from hedgerow and defining the working area.

LEGEND

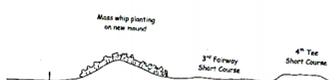
- T.1. Golf Tee
- G.1. Golf Green
- Golf Fairway
- Mass tree planting - 46/60 cm bore rooted whips planted at 1.5m centres. Species to include - alder, birch, rowan, oak, ash, hazel, hawthorn, blackthorn, elder, holly.
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GENERAL

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All existing trees and hedgerows will be retained (with the exception of two lengths of hedgerow to allow access to site on completion). Any gaps in the existing hedgerow along Bryn Esby Road will be planted. A new hedgerow will be planted along the Southern boundary of the Golf Academy.

The areas of mass planting will be maintained by herbicide ring spraying to individual trees with the weed growth between cut twice each year. Once established these areas will have minimal management and will form areas for wildlife. The Standard / Feathered trees will be managed as part of the golf course.



Proposed Ground Level

CLAYS GOLF CLUB
 CROSS SECTION
 LOCATIONS
 SCALE 1:500

