

HAMBLETON DISTRICT COUNCIL

Report To: Planning Committee
1 March 2012

From: Head of Regulatory Services

Subject: TREE PRESERVATION ORDER NO 2011/4 – KNAYTON

Whitestonecliffe Ward

1.0 PURPOSE AND BACKGROUND:

- 1.1 The purpose of this report is to inform the Committee of an objection to the making of Tree Preservation Order (TPO) No. 2011/4 at Knayton.
- 1.2 In September 2011 North Yorkshire Tree Care on behalf of Mrs McPherson submitted a Notification of Works to trees in Conservation Areas application (11/02021/CAT) for works to a Cedar tree (at The Gables) and a Birch tree (at New Gables) in Knayton. The works to the Birch tree were deemed acceptable and a delegated approval (as part of a split decision) was issued. It was considered that the 25% crown reduction of the Cedar tree would have a harmful impact on the visual amenity of the surrounding Knayton Conservation Area. The tree is located to the front (eastern) elevation of The Gables. As this tree makes a positive contribution to local visual amenity a Tree Preservation Order was served on 26 October 2011
- 1.3 An objection by Mrs McPherson was received on 23 November 2011 referring to additional structural reports, and an arboriculturalist's report. The objection also included an application for works to the Cedar tree. These works are now the subject of an application under reference 12/00391/TPO and propose to prune the tree as per the recommendations of the report by Peter Harris and Associates of 3 November 2011, including crown cleaning to 10%, and lifting of the crown by 15% of its volume in north-west section. It is also proposed by the applicant (but not included within the Peter Harris report) within two years to fell the tree to prevent further damage to the property (The Gables).

2.0 DECISIONS SOUGHT:

- 2.1 To confirm TPO 2011/4 in respect of the Cedar tree following the consideration of the objection received.

3.0 LINK TO CORPORATE PRIORITIES:

- 3.1 There are no links in this case.

4.0 RISK ASSESSMENT

- 4.1 The risk is that if the TPO is not confirmed the tree may be treated in a way that is harmful to the amenities of the Conservation Area.

5.0 FINANCIAL IMPLICATIONS AND EFFICIENCIES:

- 5.1 There are none in this case.

6.0 LEGAL IMPLICATIONS:

- 6.1 The general purpose of a TPO is to protect the character and amenity of the area. A TPO may prohibit the unauthorised cutting down, lopping, uprooting, wilful damage, or wilful destruction of trees.
- 6.2 The effect of confirming a TPO is to make unlawful any actions referred to in the TPO.
- 6.3 Following confirmation of a TPO an application can be made to the Local Authority for consent to carry out works on the tree (including cutting it down). If the Local Authority refuses the application for consent the applicant has a right of appeal to the Secretary of State.
- 6.4 In certain limited circumstances (e.g. where the tree is causing damage to the applicant's property) the applicant may make a claim for compensation for any loss or damage suffered as a result of the refusal to grant consent. This is limited however to damage that was reasonably foreseeable when the application was made.
- 6.5 If the claim for compensation is refused by the Local Authority, or the level of compensation offered is disputed, the applicant has a right to appeal to the Lands Tribunal for determination.

7.0 SECTION 17 CRIME AND DISORDER ACT 1998:

- 7.1 None relevant in this case.

8.0 EQUALITY/DIVERSITY ISSUES:

- 8.1 There are none relevant in this case.

9.0 OBJECTIONS TO THE TPO:

- 9.1 An objection has been received from Mrs A McPherson, the applicant, on 23 November 2011. The objection sets out the background to the works put forward and the issues that the current householder faces. The applicant advises that in August 2011 cracks appeared on the inside of the property, and that a structural engineer commented on the damage concluding that the cracks were most likely caused by the tree. The applicant has also had the tree inspected by Peter Harris Associates who concludes that the most likely cause of the damage is the tree and recommends pruning and longer term management. The applicant also advises that in late October cracks had begun to appear to external walls, the front door has dropped and mortar above this door has fallen out. The structural engineer again visited the property and 'in his opinion the stones above the front door are unstable due to the amount of movement that has occurred'. The applicant goes on to contend that the tree is not native and has low amenity value, and that 'the tree is about one third of its mature size'. Mrs McPherson has also provided further structural reports supporting her objection.
- 9.2 Prior to serving TPO 2011/4 the Local Planning Authority commissioned a report by Elliott Consultancy Ltd. This concluded 'upon reading the report [initially submitted by the applicant – Corbyns Report 1] I would say that no evidence has been provided that the tree is actually causing the damage intimated. The structural reports even states that no serious damage has occurred and other than reducing the tree no recommendations are given, apart from filling the cracks. The tree is definitely worthy of TPO. Its proximity to the house makes it likely that some pruning will be required in the future, however mainly to abate contact of branches with the building. With regards to the works notified about under the conservation area status I do not think that a 25% reduction would be appropriate, especially given that no actual evidence that the tree is causing structural damage to the

property has been provided'. Given the emergence of structural and arboricultural reports submitted with the applicant's objection, the Local Planning Authority has requested a further appraisal of this information, and the schedule of future works proposed.

10.0 RECOMMENDATION:

- 10.1 The visual amenity value of the Cedar specimen is as a result of its size, form and location, considered to be high, and therefore its contribution to the Knayton Conservation Area is significant.
- 10.2 It is recommended that TPO No. 2011/4 to the front of The Gables, Knayton is confirmed.

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Background papers:

- Document 1: Objection: Mrs A McPherson
- Document 2: Arboriculturalist's report (P Harris and Associates, for Mrs McPherson)
- Document 3: Arboriculturalist's report (Elliott Consultancy Ltd, for HDC) – to follow on update list
- Document 4: Corbyns Report 1
- Document 5: Corbyns Report 2
- Document 5: Report by Habitus Surveyors Ltd
- Document 6: Report (and appendix) by Dosser Group
- Document 7: Location Plan

Author ref: AJC

73503

TPO Objection

SCAN.

11/0004/TPO_2

The Gables
Knayton
Thirsk
North Yorkshire
YO7 4AU

Development Manager
Hambledon District Council

23.11.11

HAMBLETON D.C.			
REC'D		23 NOV 2011	
PES	RES	CX	
		ACK	

Dear Sir/Madam,

Provisional TPO No 4

I have been unsuccessful in contacting Mr Cunningham by telephone; however I am aware that he have previously spoken to Mr Duckworth of North Yorkshire Tree Care and Mr Malcolm Clack, local councillor, concerning this matter.

A provisional Tree Preservation Order has been placed on the Cedrus atlantica Glauca tree on my property (hereafter referred to as the tree) and I wish to object to this and provide evidence to support my objection.

You have previously been provided with a structural engineers report from August 2011 and I enclose an updated report. Also you have been provided with a report from Arboriculture Consultant Mr Peter Harris.

Background:

The current householder purchased the property in September 2006. Because of the very poor state of the property and the serious cracks in the eternal walls of the property the vendor (Mr Bucknall) commissioned a report from the Dossier Group to report on the cracks and how these might be fixed and a reason to their cause. Their two reports are enclosed along with photographs and comments made by N.R.R. Butler for Habitus Surveyors Ltd who surveyed the property for our mortgage company.

All repairs were completed in line with the engineers report upon the purchase of the property. At the same time permission was sought from Hambledon Council to prune the tree, this permission was granted and the works undertaken.

Because much of the pointing on the property had been incorrectly pointed with cement, over the next couple of years (between 2006 and 2008) the entire external walls of the house have been scrapped out and re-pointed with lime mortar.

Current issues

In August 2011 cracks appeared on the inside of the property, with three in the hallway, one up the stairs and three in the downstairs loo. A structural engineer was called in to comment on the damage and you have this report, he concluded that the cracks were most likely caused by the tree.

This damage has been repaired, Christmas with its inevitable visitors is close and I do not wish to live with cracks.

An application was sent to Hambledon District Council following the structural engineer's recommendation requesting that the tree be pruned, this was refused and a provisional TPO placed on the tree.

Arboriculture Consultant Mr Peter Harris visited the property and his report has already been made available to you. He does conclude that the most likely cause of the damage is the tree and recommends pruning and longer term management of the tree. He recommends that pruning is carried out to ensure branches near the roof line do not damage the roof in the coming winter.

By late October cracks had begun to appear to the external walls of the property, 2 cracks are evident the full length of the property either side of the front door, at a distance of approx 8 feet away. The front door dropped making one of the locks unusable and mortar has fallen out above the front door.

The structural engineer was called in again and a second report is enclosed. In his opinion the stones above the front door are unstable due to the amount of movement that has occurred.

All of the experts, two structural engineers, once surveyor and one arboriculture consultant agree that the damage is most likely caused by the tree. Therefore under section 3.31 I put this forward as an objection to the TPO.

Amenity value

The tree is not native and has low amenity value. The house pre dates the tree by 100 years, the house was built in 1836, and the tree has been calculated as being 80 years old.

The tree is about one third of its mature size and should it be allowed to grow to full size and continue to damage this property it will literally bring the house down.

The Parish council had no comments to make regarding permission to prune the tree.

The Future


All the experts conclude this property is being damaged and the culprit is the tree, to this end and given the rapid progression of the damage I am asking to prune the tree as a matter of urgency and to fell the tree in a managed programme over the next couple of years. An application for this is enclosed.

It is unrealistic to expect anyone to live in a property continually threatened by damage and I consider the tree a nuisance, it is causing an immense amount of stress and I believe I have the right to live without the threat of damage to my own home.

Conclusion

I have borne the cost of internal repair. The cost of the external repairs is estimated to be £2000. Should permission be refused I hold Hambledon Council responsible for this and all future repairs, for any damages to person should stones from the front door fall on and injure any person and to any roof damage from branches hitting the roof.

Yours faithfully


Mrs Allison McPherson



Our Ref.: PHA2012-33

Your Ref.:

3rd November 2011

F.A.O.:

Mrs A. McPherson,
The Gables,
Knayton, Thirsk,
North Yorkshire, YO7 4AU

4 ROSEHILL WAY
STOKESLEY
NORTH YORKSHIRE
TS9 5NX

TEL: 01642 712296

Dear Sirs,

**Re: Tree Preservation Order 2011/004,
The Gables, Knayton.**

Further to the verbal instructions of Mrs McPherson I attended the above property on the 2nd November 2011 and set out below my findings in regards to adjacent tree, potential root influence and the placement of such subjects within a Tree Preservation Order.

Overview.

The tree inspected is 4.40 metres south of the property The Gables and growing within lawned area with a gravel drive 2.50 metres south of the tree.

It is understood that the subject inspected is within a Conservation Area and that requested works targeted at reducing root influence have resulted in the application of a Tree Preservation Order status.

The Consulting Engineers Messrs Corbyns have reported upon the property and its distress of internal and external cracking, indicating the advised necessity to reduce the volume of the tree by 25%. Such inspection did not include geotechnical investigation to discover the degree of desiccation or the placement of any monitoring tags to appraise seasonal movement.

It is understood that the property was re pointed approximately 4 years ago and that external cracking can be noted to the single storey entrance section with door displacement, internal cracking being repaired and re painted at the time of my inspection.

I further understand that the drains were CCTV checked a number of years ago, and at my inspection of the chamber which is 1.40 metres in depth water was flowing satisfactorily.

Tree Detail.

1. Cedrus atlantica glauca Blue Cedar
Height 15.50 metres. Diameter Breast Height 670mm. Crown spread 5.60 metres north, 6.70 east, 6.80 south and 5.50 west.
Estimated present root zone 11.00 metres radius.
Estimated age 80 years.
Water demand Moderate.

This mid life subject bifurcates at 2.00 metres above ground level into twin leaders and would be appraised as being in a good physical condition with no evidence of major disease or physical defect.

Note was made that the north western sections of the crown are at present overhanging the roof line and in due course such limbs could strike the building and its roof, thereby necessitating removal.

The mature state of such a tree would be considered to be in excess of 20.00 metres in height and therefore this subject is in very close proximity to this mature property understood to have been constructed in the early 1800's. Therefore any foundations would not be considered to relate to modern specifications.

It would be note that evergreen subject draw moisture throughout the whole year although to a lesser degree during winter.

Discussion.

It would appear that there is a high probability from the information available that the root system of the Blue Cedar could be having an adverse influence upon the structure which at present has been indicated by internal / external cracking in the vicinity of the southern entrance.

Therefore a degree of crown management may minimise root extension and water abstraction, but under the circumstance of the Tree Preservation Order which is targeted at preserving the amenity of the area this would have to be undertaken to ensure that the perceived amenity was retained.

Recommendations.

Overall crown clean thinning by 10% of the crown volume to include dead wood and snags.

Lift the crown to the north west section to clear the building which would remove approximately 15% of the overall crown volume.

Conclusion.

It is my opinion that this large Blue Cedar will have a root potential to influence the property The Gables and that a degree of crown management will be necessary to restrict present and future moisture abstraction. Such works will be required on a cyclical basis throughout the life of the tree.

I would further indicate that in my opinion management control of this tree could have been dealt with under the existing Conservation Area conditions.

I shall be pleased if I can assist further in any of the above matters.

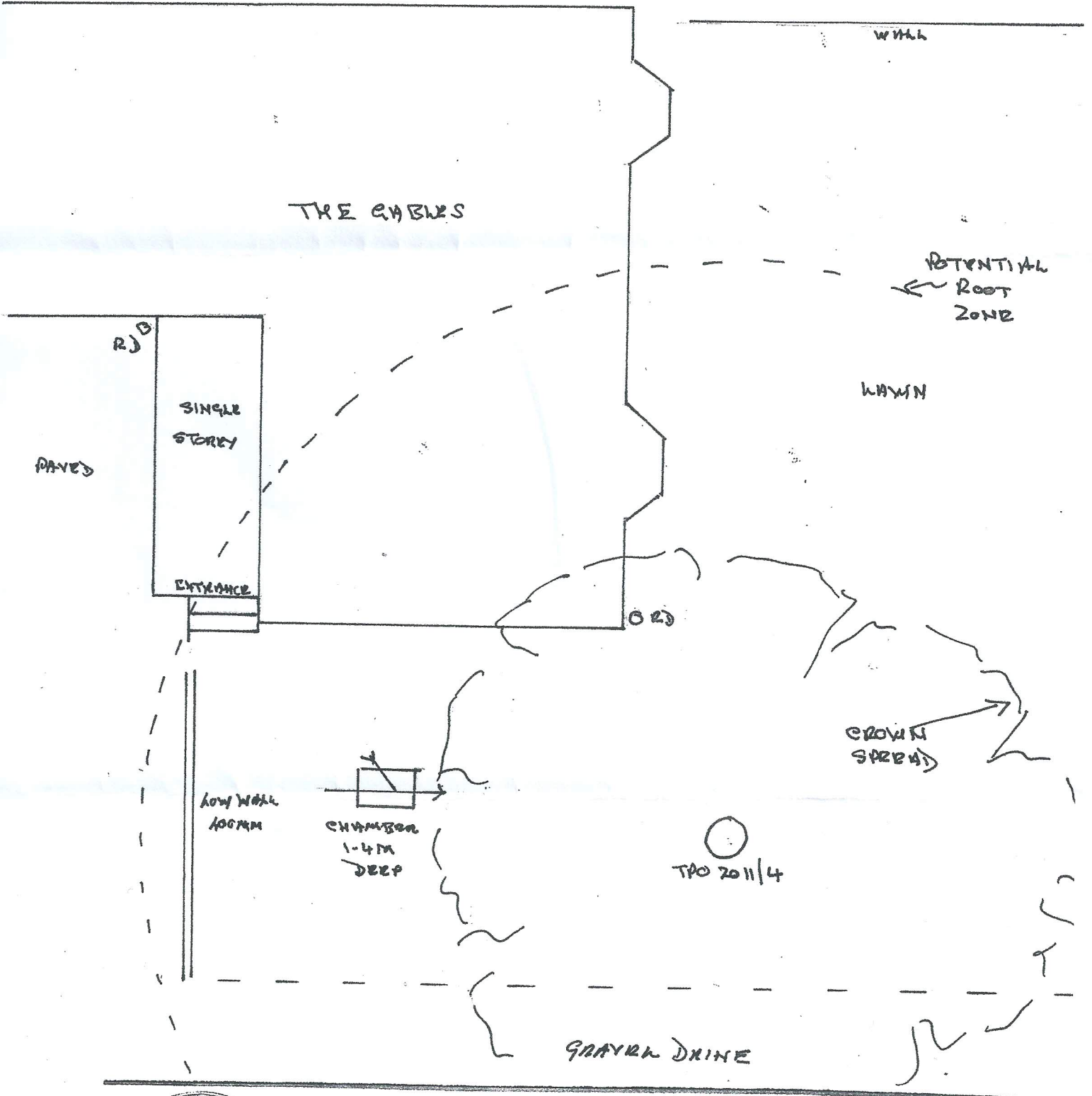
Yours faithfully,

A handwritten signature in black ink, appearing to read "Peter Harris", with a long horizontal flourish extending to the right.

Peter Harris.

Enc: Drawing PHA2012-033

Cc: Martin Duckworth



Drawing #	PHM 2012-033	Sub-division	
Property	THE CABLES, KNAYTON		
Scale	1:100 SKETCH	Drawn By	PH
Date	3/11/2011	TREE & ROOT ZONE	

CORBYNS Consulting Civil and Structural Engineers

Structural Surveys and Reports Insurance Claims Calculations and Designs Project Managers

Local Offices and Local Engineers throughout England

MID WYND HOUSE YARM on TEES TS15 9AA

Tel: 0800 0234 066 Temp Email: corbynsengineers@gmail.com

Mrs A McPherson
The Gables
KNAYTON
YO7 4AU

11/08/11

Dear Mrs McPherson

THE GABLES KNAYTON YO7 4AU

Thank you for your instructions and I confirm visiting the property during the afternoon of 10/08/11

REPORT

PROPERTY

The property is an older style 2 storey detached stone built house under a pitched tiled roof. A cellar exists beneath the rear part of the property. The property has recently been extensively modernised and upgraded. Other buildings exist to the rear of the main house.

The property is situated on generally level ground within a rural area.

CIRCUMSTANCES

The owners of the property are concerned by recent cracking in some of the internal plaster finishes at ground floor level.



Photo 1 – Front Elevation



Photo 2 – Side Elevation

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REC'D 15 SEP 2011		
PES	RES	CX
		ACK

CONDITIONS

The report is not a full survey of the property and therefore restricted to the specific areas of concern and the conditions overleaf. No site investigations, destructive investigations, trial holes, drainage surveys, sample testing or design checks have been undertaken or requested.

GROUND CONDITIONS

The ground conditions beneath the property are unknown but it is likely the solid geology is overlain with varying depths of drift deposits. These materials generally consist of cohesive clays and silts or non-cohesive sands and gravels that were deposited by water and glacial action.

Drift deposits are usually only affected by root activity if they have a shrinkable clay content but can be locally eroded by flowing water if they have a high sand content.

EXTERNAL AREAS

The property is accessed from the front along a driveway and through a garden laid mainly to lawn with some shrub borders.

Mature and semi-mature vegetation of mixed species exists around and in close proximity of the property. Two 5 metre high maturing Cypress trees exist along the front RH boundary within the neighbours' garden. An approximately 12 metre high Cedar tree exists within the front lawn adjacent to the LH corner of the main house.

It is never advisable to allow any vegetation to mature close to a building since root activity can adversely affect the foundations causing cracks to occur in the walls of the building.

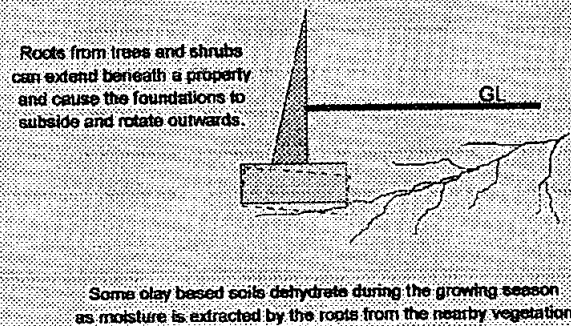


Figure 1

Roots can infiltrate into the clay soil beneath the foundations

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REC'D 15 SEP 2011		
PES	RES	CX
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Cedar trees are slow growing ornamental Conifer trees that overtime can reach a height of 38 metres with a girth of 6 metres. They have a greater water demand than most other Conifers and a life expectancy of up to 200 years.

Some species are planted in gardens that are too small to accommodate their eventual size and therefore are frequently associated with subsidence. It is likely that roots from this tree extend under most of the main house.

Unfortunately, Cedars do not tolerate heavy pruning when mature and can rapidly decay. However, young trees can be controlled by regular and careful trimming.

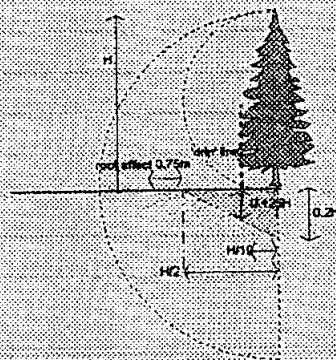


Figure 3

Typical proportions of a Cedar tree. However, the root zone will depend on the type of soil, the health of the tree and the climate.

Root activity is rarely troublesome in non - cohesive soils such as sands and gravels.

Foul and surface drains exist at intervals around the property. The condition and route of these drains is not known. However, it is possible that roots from the nearby Cedar tree have penetrated into the drains causing them to leak.

Water escaping from a defect within 1.50m of a building can soften a local area of a cohesive soil or gradually erode away a non - cohesive soil from beneath the foundations.

INSPECTION

The foundations beneath the main house and rear extension are unknown but considering their age they are likely to be of shallow corbelled construction.

The presence of a cellar beneath part of the property suggests the perimeter and possibly some of the internal loadbearing walls within the cellar are acting as deep foundations beneath that part of the property.

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REC'D		15 SEP 2011	
PES	RES	CX	
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Vertical and radial cracks up to about 3mm wide exist in some of the internal plaster finishes at ground floor level towards the front of the property. The cracks generally taper in width along their length. The cracks have appeared within the last 12 months and appear to be increasing in magnitude and extent.

All buildings move differentially over time particularly older buildings with foundations that bear onto ground that would not be considered adequate by today's standards.

The newly exposed edges of fresh cracks are usually 'bright' in appearance but over a period of time these edges darken. The cracks here are recent in origin.

Subsidence is a downward movement of the foundations beneath the wall of a property. Damage due to subsidence is typified by recent diagonal cracks that are wider at one end than the other and usually taper upwards from the area of movement. The damage here is suggestive of this type of movement.

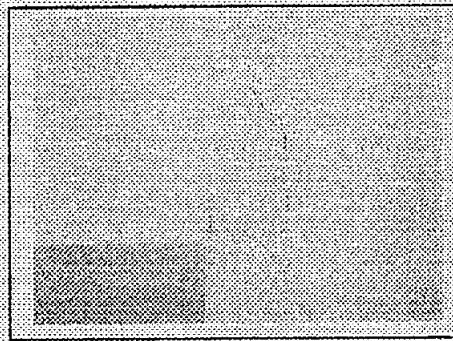


Photo 3 - Typical Internal Damage

CONCLUSION

The property is an older style residential house. The damage under consideration affects the some of the internal plastered walls of the property.

The most likely cause of the damage is due to the effects of root activity from the nearby Cedar tree. The damage is minor and the stability and serviceability of the property have not been affected. No major structural repairs are required.

However, to reduce the water demands of the tree about 25% of the branches should be removed. It would be prudent to consult an arboriculturist to advise on the management of the tree to maintain its shape and avoid the tree decaying. The management should be undertaken by a qualified and experienced tree surgeon.

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Once the management has been undertaken the cracks should not be repaired for at least 2 years to allow the ground to recover and the cracks to close. The cracks can then be filled with a flexible filler during the course of future redecoration.

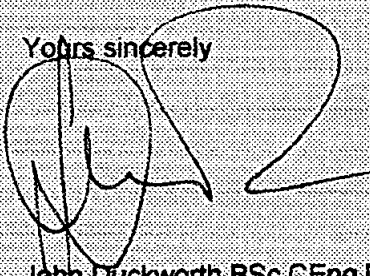
However, it is possible further damage may occur after about 10 years as the tree continues to mature. Continued pruning of the tree may not be possible and it may subsequently be necessary for the tree to be felled.

It would also be prudent to commission a CCTV survey of the nearby drains to ensure that any roots from the tree that have penetrated into the drains are not causing water to escape into the ground and affect the performance of the foundations in the future.

The Cypress trees along the RH side boundary of the front garden are not mature enough to be affecting the property at this time but some management of these trees may be necessary within the next 10 years to prevent their roots affecting the foundations.

I trust my comments are satisfactory for your purpose but please do not hesitate to contact me if I can be of any further assistance.

Yours sincerely



John Duckworth BSc CEng MICE MIStructE FFB
Mobile 07960 491264

HAMBLETON D.C.		
REC'D		15 SEP 2011
PES	RES	CX
		ACK

CORBYNS Consulting Civil and Structural Engineers

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Local Offices and Local Engineers throughout England

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Tel: 0800 0234 066 Temp Email: corbynsengineers@gmail.com

Mrs A McPherson
The Gables
KNAYTON
YO7 4AU

16/11/11

Dear Mrs McPherson

THE GABLES KNAYTON YO7 4AU

Thank you for your instructions and I confirm visiting the property during the afternoon of 07/11/11.

REPORT.2

CIRCUMSTANCES

In August 2011 the owners of the property were concerned by recent cracking in some areas of the internal plasterwork towards the LH side of the main house. The damage has now been decorated over.

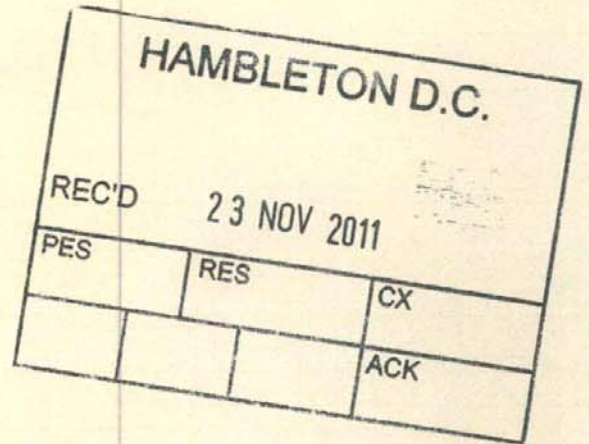
However, the owners are now concerned by cracking in the external stonework to the LH side walls of the main house that has occurred since August.



Photo 1 - Front Elevation



Photo 2 - Side Elevation



CONDITIONS

The report is supplementary to the inspection undertaken on 10/08/11 and restricted to the specific areas of concern and the conditions overleaf.

EXTERNAL AREAS

The external areas of the property have not changed since the previous inspection.

INSPECTION

Vertical and radial cracks up to about 3mm wide exist in some of the external stonework towards the LH side of the main house. The cracks generally taper in width along their length and extend for over 2 metres in length to the underside of the roof eaves.. The cracks have appeared within the last 3 months and appear to be increasing in magnitude and extent.

The newly exposed edges of fresh cracks are usually 'bright' in appearance but over a period of time these edges darken. The cracks here are recent in origin.

The front door frame and head have become distorted since the August inspection and the door now binds within the frame. Some of the stonework above the frame has become displaced.

The damage is suggestive of further movement due to a minor case of subsidence movement.



Photo 3 – Typical Damage to External Stonework

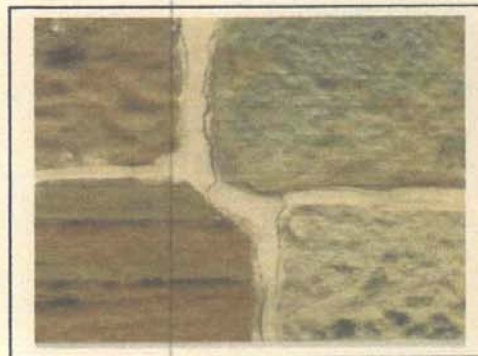


Photo 4 – Typical Damage to External Stonework



Photo 5 – Distortion to Entrance Door

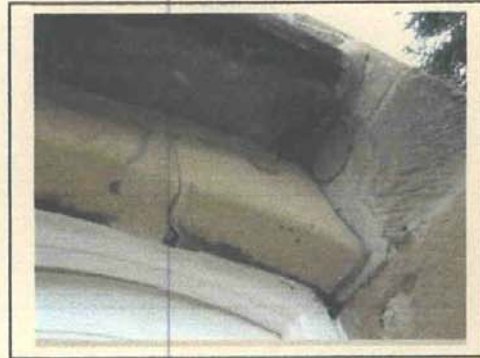


Photo 6 – Displaced Stonework above Door Head

CONCLUSION

The property is an older style residential house. The recent damage to the external stonework is minor although the displacement of the stonework above the front entrance door frame could cause some of the stones to fall away. The nature and disposition of the movement suggests it is most likely due to continuing root activity from the nearby tree although no major structural repairs are required at this time.

However, it is important to appropriately manage the tree during its current dormant growing period and prior to the bird nesting season when re-growth commences.

If the tree is left unattended then further root activity is likely to cause further damage to the external stonework and the internal finishes next year.

Once the appropriate management has been undertaken the cracks should not be repaired for at least 2 years to allow the ground to recover and the cracks to close. The cracks can then be suitably repaired.

I trust my comments are satisfactory for your purpose but please do not hesitate to contact me if I can be of any further assistance.

Yours sincerely

A handwritten signature in black ink, appearing to read 'John Duckworth', written over the typed name.

John Duckworth BSc CEng MICE MStructE FFB
Mobile 07960 491264

LEVEL 3 CONDITION STATEMENT

settlement between the front and side elevations of the property. In addition, the crack to the right-hand side Gable wall was considered to be exacerbated by the lack of tying between the masonry of the chimney and the Gable wall. Further cracking noted to the front elevation, notably the middle bedroom front wall was considered to be consistent with slight movement following the addition of the new Bay window.

The recommendations were to stitch the cracks to both the Gable walls, using stainless steel ties as per the diagram contained within their report.

Laboratory analysis of the soil taken from trial pits indicated that the soil is firm to stiff slightly friable orange brown and grey sandy clay, with some inclusions of topsoil and some fine gravel with rare fine roots. This type of ground was considered to provide medium shrinkage potential, i.e. there is some possibility of settlement to foundations.

Following further inspection of the first floor by the lifting of floorboards, it was confirmed that the stud wall at first floor level was well supported and no remedial repairs were required.

It was observed from the trial pits that the foundations at 300 mm deep, are less than that recommended from modern properties but that many older properties have footings of similar depths and continue to perform satisfactorily.

Following the investigations, Messrs Dossors concluded that there was no need to improve the foundations to the property, but that it was important to manage the moisture demand from the nearby trees as mentioned in their initial report. They made particular reference to a large Cedar tree which is located approximately 4 metres to the side of the left hand Gable wall, and which, at the time of the report, was estimated as being approximately 11 metres in height. There are also conifer trees to the front right hand side boundary, close to the right hand side gable wall.

From my discussions with the vendor's agent, none of the recommended work has been carried out to date.



**Structural
Elements**

Foundations

As advised, subsoil investigations and opening up work to the foundations were not undertaken in our inspection. In consequence we are unable to comment specifically on the type and extent of any foundations provided or of any sub-soil conditions, which may exist.

We have drawn upon the information provided by Messrs. Dossors and our own knowledge of the type of foundations likely to be employed in a property of this type and age, and do not consider that there has been any material change of circumstances since their inspection approximately 18 months ago.



Cracked render to bay window lower wall



Left hand side gable with cracked lintel and cracking to wall

from Woolwich Survey AUG 2006.
House when purchased.



Detailed view of right hand gable crack



Right hand side chimney-stack leaning, and cracked and poor render

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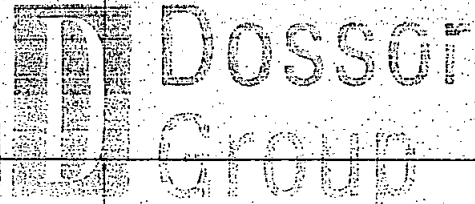
REC'D 23 NOV 2011

PES	RES	CX
		ACK

Very ref:

Our ref:

Date:



CONSULTING ENGINEERS & SURVEYORS

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RICHARD BUCKNALL

SURVEY: THE GABLES

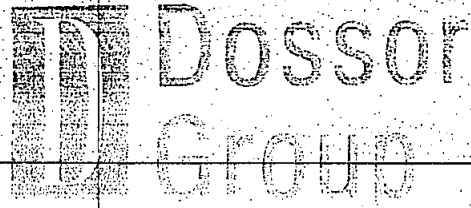
KNAYTON

REPORT NO. 4921

John Dossor & Partners Ltd. Established 1944

Registered Office: Heworth House, Metrosegate, Heworth, York, YO31 0RP
Registered in England No. 01235256





Your ref.

Our ref. **RT/DB/MS/2005 7059**

Date **3rd January 2006**

Richard Bucknall
75 St Julian's Farm Road
London
SE27 0RJ

CONSULTING ENGINEERS & SURVEYORS

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Melrosegate
Heworth
York YO31 0RP
Tel: (01904) 438005
Fax: (01904) 435388
Web: www.dossor.co.uk
E Mail: dossor@dossor.co.uk

Report No. 4921

Dear Mr Bucknall:

Survey: The Gables, Knayton

In accordance with your instructions we record having inspected the above property on the 29th November 2005 and we now have pleasure in reporting as follows:

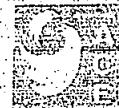
REPORT

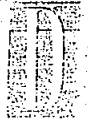
1. INTRODUCTION

- 1.1 A structural inspection has been requested following a valuation survey which noted internal and external cracking to the property.
- 1.2 The property is of traditional construction comprising solid stone walls beneath a slate roof.
- 1.3 No tests of any connected supply of water or electricity were made.
- 1.4 No inspection of connected drains was made.
- 1.5 The external elements of the property were inspected from ground level.

John Dossor & Partners Ltd. Established 1944

Registered Office at Heworth House, Melrosegate, Heworth, York YO31 0RP
Registered in England No. 2009584





Survey: The Gables, Knayton

1.6 This report is to be used in conjunction with the enclosed drawing 2005 7059/SK1

2. INSPECTION

External

Front Elevation

- 2.1 The front elevation is double fronted with bay windows at ground floor level to each side of a central entrance door.
- 2.2 The ground stonework is visible plumb with no cracking or distortion to the mortar bed joints.
- 2.3 The ridge line to the roof is even.
- 2.4 There is loose capping and render on the right hand gable chimney stack.
- 2.5 The left hand stone chimney stack is lead flashed into the slate roof.
- 2.6 The front elevation has been part re-pointed using a cement rich mortar.

Left Hand Gable

- 2.7 This elevation features a single window at first floor level on the left of the elevation and two windows at ground floor level.
- 2.8 The stone lintel above the ground floor right hand window has cracked.
- 2.9 The crack continues above the lintel following bed and perpendicular joints in the stonework in a stepped vertical pattern up to the hinge line of the roof.
- 2.10 The stone lintel above the left hand ground floor lintel has been renewed in the past. There is hairline cracking in a stepped triangular pattern above the lintel.
- 2.11 At 4m from the right hand corner of the gable wall is a Cyprus fir tree. The spread of the tree reached the house. The tree is judged to be approximately 11m in height.
- 2.12 There is some local weathering of the stonework centrally on the gable wall.

Right Hand Gable

Survey: The Gables, Knayton



- 2.13 This wall features single windows at ground and first floor level within the right hand half of the wall
- 2.14 Within the left hand half of the wall is a stepped vertical crack following bed and perpend joints from ground to roof level.
- 2.15 The crack has been repointed in the past and has cracked again.

Rear Off Shoot

- 2.16 To the right hand side of the right hand gable wall is the right hand side wall of the rear offshoot. This wall is constructed from coursed stonework.
- 2.17 The stonework above the small ground floor window is built directly off the window frame. Above the top right hand corner of the window is a stepped hairline crack running upwards and to the left.
- 2.18 The left hand side wall of the rear offshoot contains a dormer window at first floor level and the side entrance to the property at ground level.

Internal

Roof

- 2.19 The roof is of traditional construction comprising four main king post trusses supporting purlins and rafters. There is sarking felt beneath the roofing battens.
- 2.20 Viewing the right hand gable wall from within the roof space the central section of wall is constructed from brickwork forming the chimney breast. To each side of the chimney breast the wall is constructed from stonework.
- 2.21 The junction between the brick and stone is poorly bonded and effectively forms a straight vertical joint.
- 2.22 There is insulation between the ceiling joists.
- 2.23 The ceiling plaster is of modern plasterboard construction.

Landing Area

- 2.24 There is a vertical hairline crack above the top right hand corner of the window overlooking the rear elevation.



Survey: The Gables, Knayton

2.25 To the right of the window is a vertical hairline crack corresponding with the return wall to the rear off shoot.

2.26 Viewing the internal partition wall between the landing and the middle bedroom there is a horizontal crack running from the top right hand corner of the doorway into the bedroom.

2.27 The doorway into the end left hand bedroom has distorted and with the left hand side of the door having settled relative to the right.

Middle Bedroom

2.28 There is a vertical hairline crack in the partition wall to the left hand bedroom.

2.29 Above the top left hand corner of the doorway is a horizontal crack which has been filled in the past and has cracked again.

2.30 Viewing the front wall of the bedroom at the bottom right hand side there is a diagonal hairline crack upwards and to the right where it meets the partition wall with bedroom 1.

Right Hand Bedroom

2.31 There is disturbance to the paper finished above the front window.

2.32 The gable end wall is dry lined with plasterboard.

Ground Floor

Dining Room

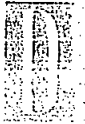
2.33 The dining room is contained within the right half of the property. There is no disturbance to decorative finishes.

2.34 There is a downstand beam below the line of the landing wall and an open fireplace on the gable wall.

Living Room

2.35 There is no cracking or disturbance to decorative finishes.

2.36 There is change in the line of the ceiling beneath the cross wall between the bedrooms above.



Survey: The Gables, Knayton

3. OPINION

We are of the opinion that:

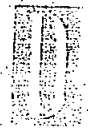
- 3.1 The vertical crack on the left hand gable wall is consistent with slight differential settlement between the front and side elevations of the property.
- 3.2 The vertical crack on the right hand gable wall is consistent with slight differential settlement between the front and side elevations of the property exacerbated by lack of tying between the masonry of the chimney breast and the main gable wall.
- 3.3 The zone of influence of the cedar tree in the garden 4m from the front left hand corner of the property is close to the corner of the property assuring ground of medium shrinkage potential.
- 3.4 The cracking to internal walls at first floor level is consistent with past alterations at ground floor level within the property. There is no cracking at ground floor ceiling to indicate any movement of the supporting first floor.
- 3.5 The left hand bay window on the front elevation is a later addition to the property.
- 3.6 The cracking internally in the middle bedroom front wall is consistent with slight movement when the new bay window was introduced.

4. RECOMMENDATIONS

We recommend that:

- 4.1 Floor boards are lifted at first floor level to confirm the adequate support of the wall between the landing and middle bedroom.
- 4.2 The stonework to each gable wall is stitch repaired using stainless steel bars resin bonded into the mortar bed joints across the vertical crack and then repointed using a matching lime mortar.
- 4.3 The cedar tree is pruned and maintained at a height of approximately 10m to keep its zone of influence away from the corner of the property.
- 4.4 Other hairline cracking within the property can be filled and decorated as part of normal maintenance.

Survey: The Gables, Knayton



Yours sincerely,

R Thew BSc, PhD, CEng, MStructE
for Dessor Group

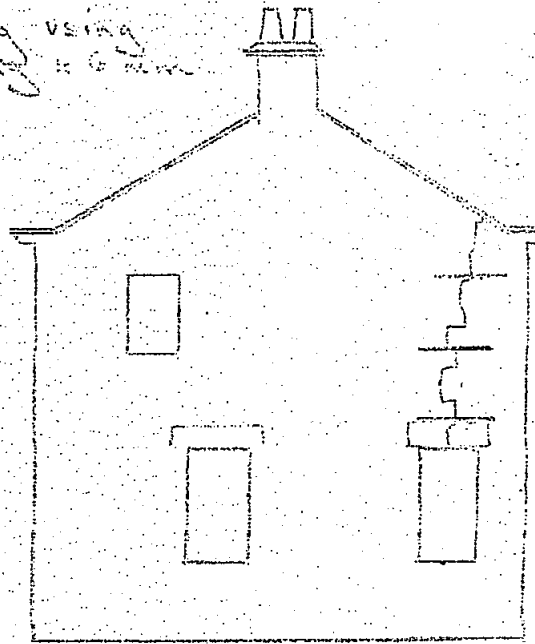


PROJECT No. 200 87089	SHEET No. SK 1
PREPARED By RT	DATE 4.01.06
CHECKED By	DATE

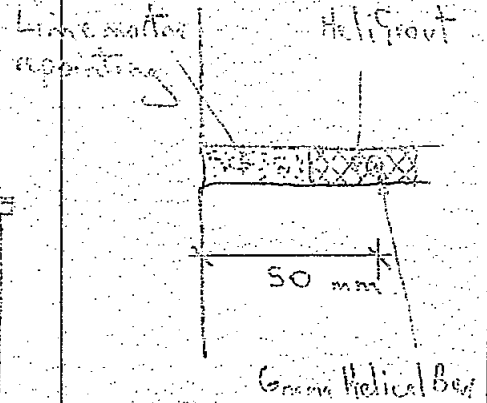
TRE GABLES KNAYTON

LEFT HAND GABLE

Crack stitching using
3 No. 1m long 6mm
stainless steel
Helical Bars.



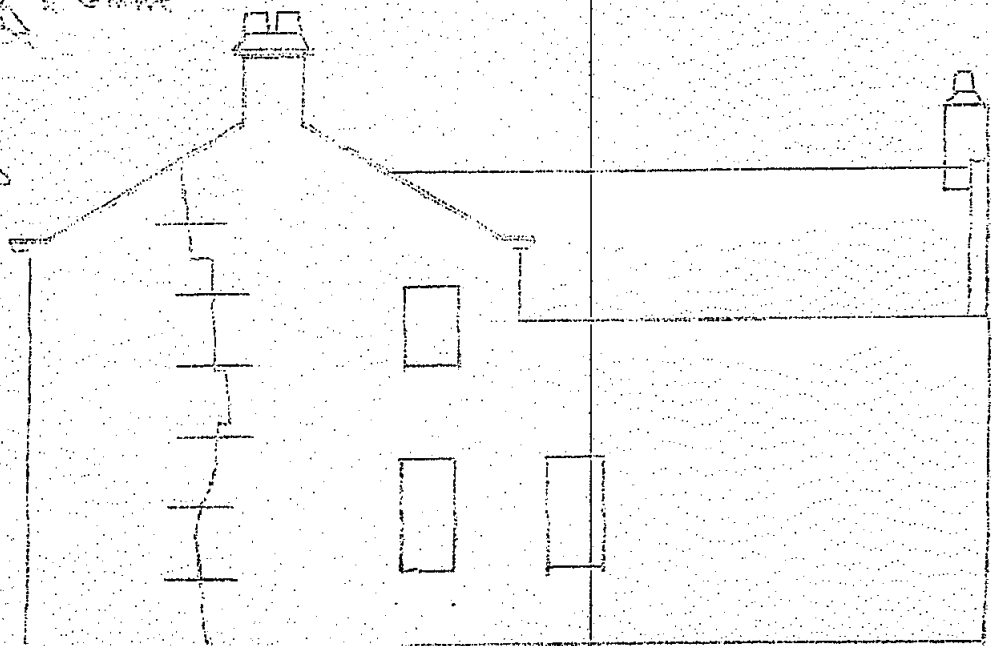
SECTION DETAIL

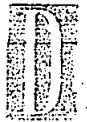


RIGHT HAND GABLE

Crack stitching using
6 No. 1m long 6mm
stainless steel
Helical Bars

Remove existing
cement mortar
along crack
and repoint
with lime
mortar after
stitch repairs.





Appendix A

Laboratory Analysis Results

Unit 14D Perry Avenue
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Tel: 01642 762705
Fax: 01642 762721
E-mail: info@hymas.co.uk
Web site: www.hymas.co.uk

26 April 2006

GMA8000.05

Dossor Group
Heworth Hall
Melrosegate
Heworth
YORK
YO31 0RP

Your ref. RT/DB/MS/2005 7059

Dear Sirs,

LABORATORY ANALYSIS: THE CABLES - KNAYTON - THIRSK

Please find enclosed the result of the Atterberg limit test carried out on the sample of deposits delivered to our laboratory and addressed as from the above location with the results of the Atterberg limit and 425um sieve analysis being as follows:

BOREHOLE NUMBER	DEPTH m	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT %	% PASSING 425UM	PLASTICITY INDEX	CASAGRANDE CLASSIFICATION
1	0.40	41	21	19[20]	95	20	CI

CI = Inorganic CLAYS of medium plasticity

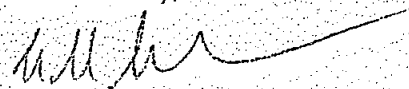
The Atterberg limit test was carried out in accordance with BS 1377: Part 2: 1990 - Test 4.4 (one point cone penetrometer method), with the plastic limit test being carried out in accordance with Test 5 of BS 1377: Part 2: 1990.

The results in Brackets () indicate the corrected equivalent moisture content values, as in accordance with BS 1377: Part 2: 1990, section 3.2.4, and allows for the percentage of the test specimen retained on the 425um sieve during sample preparation. The retained material being assumed to be of a non shrinkable nature with insignificant individual moisture content when compared with the whole sample.

Comparison of corrected moisture content against corresponding plastic limit values shows the moisture contents to be below the plastic limit values indicate apparent drying shrinkage

The sample was visually identified as firm to stiff slightly friable orange brown and grey sandy CLAY with some inclusions of topsoil and some fine gravel with rare fine roots (MADE GROUND), based on presence of topsoil inclusions.

Yours faithfully,



G.M. ANDERSON
HYMAS SITE SERVICES LIMITED

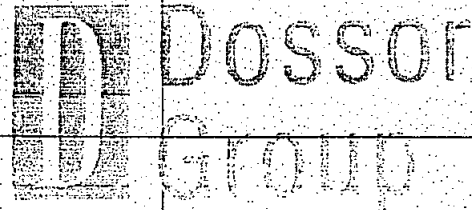
Directors: G.M. ANDERSON

Registered Office: 14D Perry Avenue, Teesside Industrial Estate, Thornaby, TS17 9LN
Company Registration Number: 2641472 Val Registration Number: 601 8507 66

HAMBLETON D.C.

REC'D 23 NOV 2011

PES	RES	CX
		ACK



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RICHARD BUCKNALL
SURVEY: THE CABLES
KNAYTON

ADDENDUM TO REPORT NO. 4921

John Dossor & Partners Ltd. Established 1944

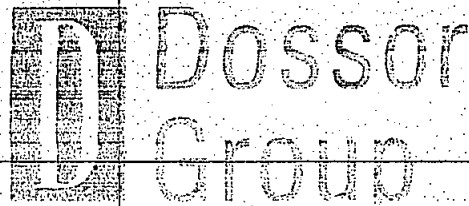
Registered Office at Heworth House, Melrosegate, Heworth, York, YO31 3RP
Registered in England No. 011438258



Your ref

Ref: RT/DB/MS/2005 7059

Date: 19th May 2006



CONSULTING ENGINEERS & SURVEYORS

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Web: www.dossor.co.uk
E-Mail: dossor@dossor.co.uk

Report No. 4921A

Dear Mr Bucknall,

Survey: The Cables, Knayton

In accordance with your instructions we record having inspected the above property on 13th April 2006 and we now have pleasure in reporting as follows:

REPORT

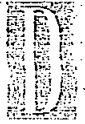
1. INTRODUCTION

1.1 This report is to be read in conjunction with our earlier report number 4921 dated 3rd January 2006.

1.2 A supplementary structural inspection has been requested to answer two questions raised in our earlier report namely:

- i) The floor boards are lifted at first floor level to confirm the adequacy of support to the stud wall between the landing and middle bedroom.
- ii) A trial hole is excavated to confirm the shrinkage potential of the underlying ground.





Survey: The Gables, Knayton

2. INSPECTION

Internal

- 2.1 The floor boards on the landing were lifted to reveal the stud wall well supported on joists and counter battens.

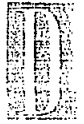
External

- 2.2 A trial hole was excavated on the front elevation of the property to reveal stone foundations at 300mm below ground level on a firm sandy clay.
- 2.3 The stone foundation projects 40mm from the face of the building.
- 2.4 A sample of the clay was sent for laboratory analysis to obtain its classification for shrinkage potential.
- 2.5 The results of the laboratory analysis are given in Appendix 1.

3. OPINION

We are of the opinion that:

- 3.1 The stud wall at first floor level between the landing and bedroom is well supported and no remedial repairs are required.
- 3.2 The underlying ground has a medium shrinkage potential as assumed in our original report.
- 3.3 Whilst the depth of foundation at 300mm is below that recommended for modern properties many older properties have similar depth footing and continue to perform satisfactorily.
- 3.4 There is no need to improve the foundations to the property but it is important to manage the moisture demand from nearby trees as mentioned in our earlier report.



Survey: The Gables, Knayton

4. RECOMMENDATIONS

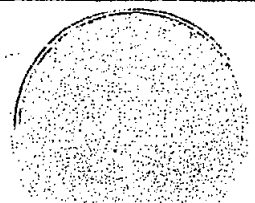
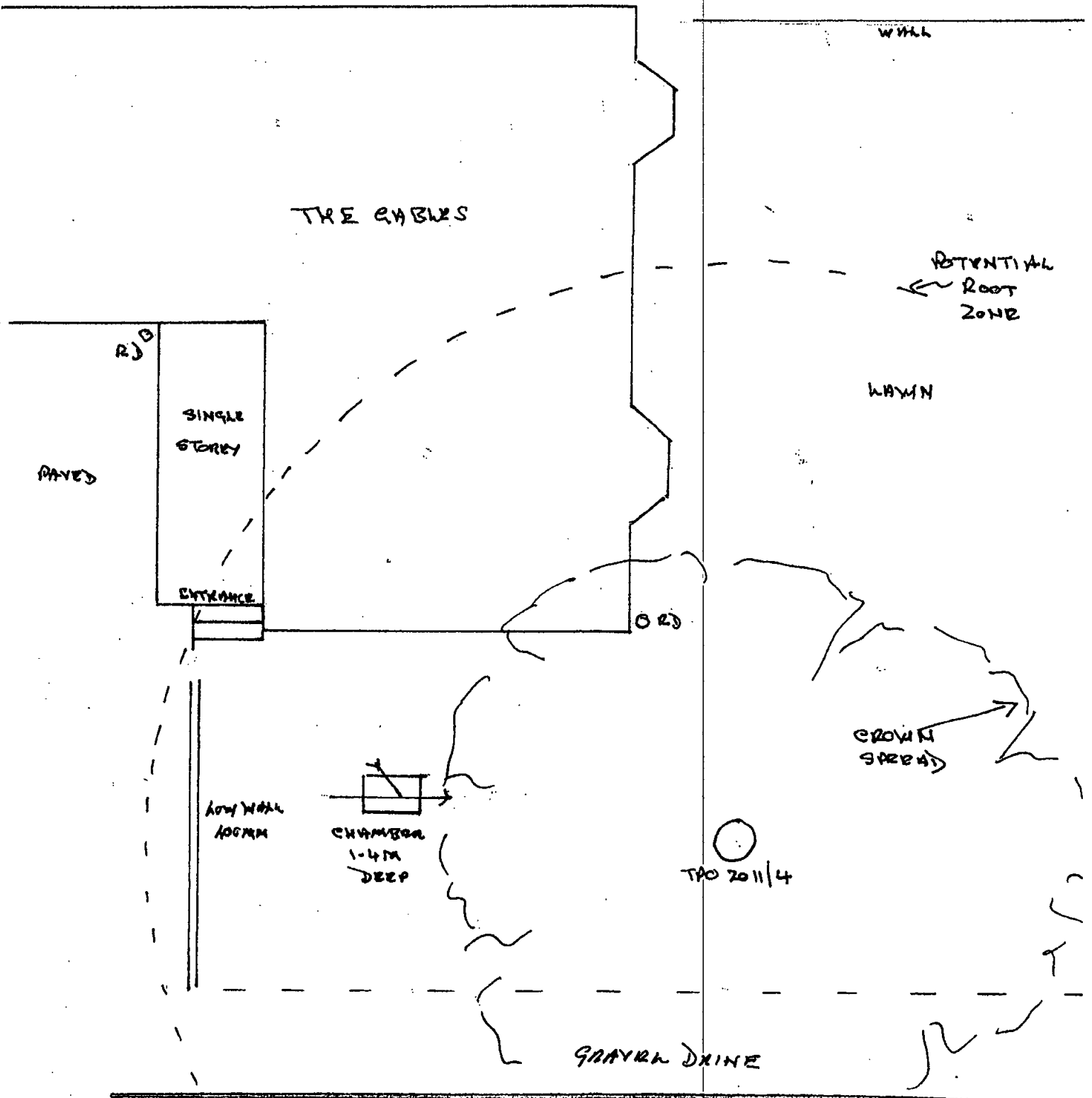
We recommend that:

- 4.1 The recommendations 4.2, 4.3 and 4.4 in our earlier report are completed.

Yours sincerely,

R Thew BSc, PhD, CEng, MStructE
for **Dossor Group**

Cedrus atlantica Glawca



Drawing#	PHA 2012-033	Sub-division	
Property	THE GABLES, KNAYTON		
Scale	1:100 SKETCH	Drawn By	PH
Date			