

DATED 24<sup>th</sup> April 2006

BROADLAND DISTRICT COUNCIL

- AND -

NORFOLK COUNTY COUNCIL

- AND -

SOUTH NORFOLK DEVELOPMENTS LIMITED

- AND -

NATIONAL WESTMINSTER BANK PLC

---

AGREEMENT UNDER SECTION 106  
OF THE TOWN AND COUNTRY PLANNING  
ACT 1990

Relating to the development of land at  
Keys Hill Park Road Wroxham Norfolk

---

THIS AGREEMENT is made the 24<sup>th</sup> day of April 2006

BETWEEN:

BROADLAND DISTRICT COUNCIL of Thorpe Lodge 1 Yarmouth Road Thorpe St Andrew Norwich Norfolk NR7 0DU ("the Council") of the first part

NORFOLK COUNTY COUNCIL of County Hall Martineau Lane Norwich ("the County Council") of the second part

SOUTH NORFOLK DEVELOPMENTS LIMITED ("The Owner") whose registered office is at Unit 31 Europa Way Martineau Lane Norwich NR1 2EN of the third part

NATIONAL WESTMINSTER BANK PLC of 2<sup>nd</sup> Floor Norfolk House Exchange Street Norwich NR2 1DD ("the Mortgagee") of the fourth part

#### 1. INTERPRETATION AND DEFINITIONS

In this Agreement unless the context otherwise requires the following expressions shall have the following meanings:-

"Act"	the Town and Country Planning Act 1990 (as amended)
"Affordable Housing"	housing which is available to meet the needs of those who cannot afford to rent or buy dwellings generally available on the open market to be owned and/or managed by a Registered Social Landlord
"Affordable Housing Units"	five of the Residential Units to be constructed or provided on the Site as part of the Development shown in the area outlined in blue on the Plan annexed hereto



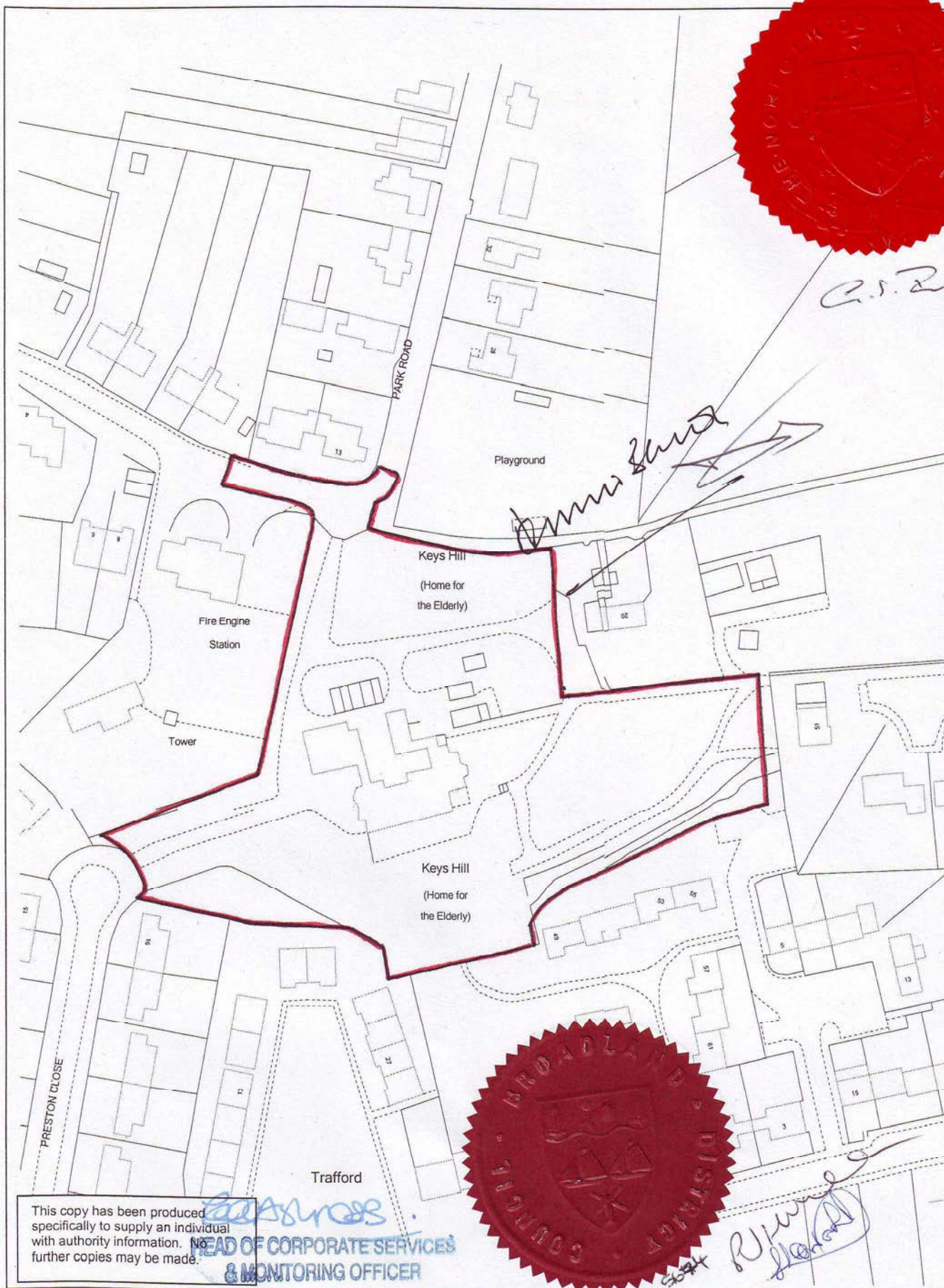
"Affordable Rental Units "	those Affordable Housing Units to be constructed or provided on the Site as part of the Development and to be let for a rent upon either a weekly basis or monthly tenancy basis not exceeding housing corporation target rents (or if such targets cease to be set such other measure of affordable rents as the relevant District Council shall reasonably determine) and to be let by or on behalf of a Registered Social Landlord
"Application"	the detailed application dated 19 <sup>th</sup> September 2005 for planning permission for the conversion of the existing care home to four dwelling units the erection of six three storey dwellings the erection of one two storey dwelling and the erection of five single storey dwellings with restricted occupancy together with associated works including parking and access in accordance with the plans deposited with the Council bearing reference No 20051368
"Commencement Date"	the initiation of the Development by the carrying out on the Site pursuant to the Planning Permission of a material operation within the meaning of Section 56 (4) of the Act (but not including any operations relating to the demolition of any existing buildings or clearance of the Site) and "commence" shall be interpreted in accordance with this definition
"Development"	the development permitted by the Planning Permission

"Director"	the Council's Strategic Director (Community Services) or other officers of the Council acting under his hand
"Inflation Provision"	the increase (if any) in the RICs All In Tender Price Index between August 2003 and the date upon which a payment of money is made pursuant to this Agreement
"Landscape Management Plan"	a plan for the management and maintenance of existing and proposed landscaping on the Site to include protective measures for trees to be retained, new trees to be planted and a programme for hard and soft landscaping to be provided and maintained
"Local Lettings Policy"	the order in which the Affordable Housing Units are to be allocated and which is set out under the title "Local Lettings Policy" at Appendix 1 to this Agreement as amended from time to time
"Off-Site Open Space Contribution"	the sum calculated in accordance with the formula set out in Schedule 1 to this Agreement
"On-Site Access Roads"	the roads shown shaded brown on the Plan annexed hereto
"Open Market Dwellings"	those Residential Units to be constructed on the Site pursuant to the Development which are to be provided and occupied as general market housing
"Plan"	the plan annexed to this Agreement being drawing No 5071 002A



"Planning Permission"	the planning permission to be granted pursuant to the Application
"Qualifying Occupiers"	in relation to any person housed in an Affordable Housing Unit, any person who meets the qualifying criteria as having a total household income at a level which prevents them from obtaining on the open market housing accommodation locally which is reasonably adequate for their needs contained in the Council's policies relating to housing allocation (as amended from time to time and as formulated pursuant to the provisions of the Housing Acts 1985, 1996 and 2004 and the Homelessness Act 2002) and ranked in accordance with the Local Lettings Policy or where such persons have been exhausted any person as nominated by the Council on the Broadland Housing Register that the Registered Social Landlord owning or managing the Affordable Housing Units on the Site is entitled to house within its rules
"Registered Social Landlord"	a registered social landlord in the register kept by the Housing Corporation under Part 1 of the Housing Act 1996 (or any statutory re-enactment or modification thereof) as approved by the Council
"Residential Unit"	a self-contained house bungalow or flat
"Shared Ownership Dwellings"	those Affordable Housing Units to be let on a Shared Ownership Lease





**Application No: 20051368**

**Keys Hill Home, Park Road, Wroxham**

**Scale:**  
**1:1250**

**Date:**  
**17-Nov-05**



This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. (100018156) (2005)



"Shared Ownership Lease" a lease or sub-lease of a Shared Ownership Dwelling granted at a premium whereby up to a maximum of 50% (fifty per cent) on first purchase of the equitable interest in the Shared Ownership Dwelling is paid by the tenant upon completion of such lease or raised by mortgage or charge from a bank or building society

"Site" the land at Keys Hill Park Road Wroxham Norfolk shown for the purposes of identification only edged red on the Plan

In this Agreement unless the context otherwise requires:

- (i) references to any party shall include the successors in title and assigns of that party
- (ii) references to clauses and schedules are references to clauses in and schedules to this Agreement
- (iii) any mention herein of any Act or of any Section Regulation or Statutory Instrument shall be deemed to refer to the same source as at any time amended and where such Act Section Regulation or Statutory Instrument has been replaced consolidated or re-enacted with or without amendment such mention shall be deemed to refer to the relevant provision of the updating consolidating or re-enacting Act or Section or Regulation or Statutory Instrument
- (iv) headings in this Agreement shall not form part of or affect its construction

## W H E R E A S:

- A. The Council is the Local Planning Authority for the purposes of the Act for the area within which the Site is situated
- B. The County Council is the highway authority within the meaning of the Highways Act 1980 for the area within which the Site is situated
- C. The Owner is the freehold owner of the Site with title absolute registered at Kingston upon Hull District Land Registry with title number NK 317038 and the Mortgagee has a mortgage over the Site
- D. The Owner has submitted the Application
- E. The Council has resolved to approve the Application subject to the completion of this Agreement

## 2. GENERAL PROVISIONS APPLICABLE TO THIS AGREEMENT

- 2.1 This Agreement is made under Section 106 of the Act, Section 111 of the Local Government Act 1972 and any other enabling powers
- 2.2 The obligations of the Owner hereunder are planning obligations enforceable by the Council and the County Council against the Owner and its successors in title and assigns
- 2.3 Save for the covenants in Schedule 2 of this Agreement which shall continue to bind the Affordable Housing Units no person shall be liable for any breach of the covenants restrictions or obligations contained in this Agreement occurring after he has parted with the interest in the Land or the part of the Land in respect of which such breach occurs but without prejudice to liability for any subsisting breach which occurs prior to parting with such interest in the Land or any part thereof in respect of which any such breach has taken place



2.4 The provisions of this Agreement shall have immediate effect upon completion of this Agreement

2.5 This Agreement shall cease to have effect if:

2.5.1 the Planning Permission shall be quashed revoked or otherwise withdrawn

2.5.2 the Planning Permission shall expire prior to the Commencement Date

2.6 This Agreement shall be registered as a charge in the Council's Register of Local Land Charges

### 3. Agreements and Declarations

IT IS HEREBY AGREED AND DECLARED as follows:

#### 3.1 No Fetter of Discretion

Save insofar as legally or equitably permitted nothing contained or implied in this Agreement shall prejudice or affect the rights powers duties and obligations of the Council or the County Council in the exercise of their respective functions as Local Planning Authority and Highway Authority and the rights powers duties and obligations under all public and private bylaws and regulations may be as fully and effectively exercised as if the Council or the County Council were not a party to this Agreement

#### 3.2 Invalidity or Unenforceability of any of the Terms of this Agreement

If any provision in this Agreement shall be held to be invalid illegal or unenforceable the validity legality and enforceability of the remaining provisions hereof shall not in any way be deemed thereby to be affected or impaired

### 3.3 No Waiver

No waiver (whether express or implied) by the Council or the County Council of any breach or default by the Owner in performing or observing any of the covenants in this Agreement shall constitute a continuing waiver and no such waiver shall prevent the Council or the County Council from enforcing any of the covenants or from acting upon any subsequent breach or default in respect thereof

## 4. Notices

4.1 Any notice document or other correspondence required to be served or given under the provisions of this Agreement shall be in writing and delivered personally or sent by pre-paid letter or facsimile

4.2 The address for any notice or other written communication in the case of each party to this Agreement shall be as follows:-

The Council	The Strategic Director (Community Services) Thorpe Lodge Yarmouth Road Thorpe St Andrew Norwich
-------------	---

The County Council	County Hall Martineau Lane Norwich
--------------------	------------------------------------

The Owner	Unit 31 Europa Way Martineau Lane Norwich NR1 2EN
-----------	--

The Mortgagee	2 <sup>nd</sup> Floor Norfolk House Exchange Street Norwich NR2 1DD
---------------	--

4.3 Any notice or other written communication to be given by the Council or County Council shall be deemed to be valid and effective if on its face it is signed on behalf of the Council or County Council by a duly authorised officer



5. Third Parties

- 5.1 The Contracts (Rights of Third Parties) Act 1999 shall not apply to this Agreement and no person who is not a party to this Agreement (other than a successor in title to one of the original parties) shall be entitled in that person's own right to enforce any provisions of this Agreement pursuant to the provisions of the said Act

6. Costs

- 6.1 The Owner shall on completion of this Agreement pay the Council's and County Council's legal and administrative costs incurred in the preparation negotiation and completion of this Agreement

7. Payment Of Interest

- 7.1 The Owner shall pay interest at the rate of 4% above HSBC Bank base rate for the time being in force on any monies due under the provisions of this Agreement in the event of late payment for the period from the date the monies should have been paid to the date the money is received

8. Vat

- 8.1 All consideration given in accordance with the terms of this Agreement shall be exclusive of any VAT properly payable
- 8.2 If at any time VAT is or becomes chargeable in respect of any supply made in accordance with the terms of this Agreement, then to the extent that VAT has not previously been charged in respect of that supply the person making the supply shall have the right to issue a VAT invoice to the person to whom the supply was made and the VAT shall be paid accordingly

9. Jurisdiction

9.1 This Agreement is to be governed by and interpreted in accordance with the law of England and Wales

10. The Owner agrees that any rights to claim compensation arising from any limitations or restrictions on the planning use of the Land under the terms of the Agreement are hereby waived

11. PLANNING OBLIGATIONS

The Owner hereby covenants with the Council as follows:

11.1 Within fourteen days of the Commencement Date to pay to the Council the Off-Site Open Space Contribution as increased by the Inflation Provision

11.2 To carry out and comply with the obligations and restrictions set out in Schedule 2 to this Agreement

11.3 Not to Commence the Development until it has prepared and secured the written approval of the Council to a Landscape Management Plan

11.4 The Landscape Management Plan will cover (inter alia) the measures and objectives set out in the Landscape Regeneration Strategy at Appendix 2 to this Agreement and upon approval the said Landscape Management Plan approved by the Council shall be deemed to be incorporated into the provisions of this Agreement

11.5 Following the Commencement Date to implement the provisions of the Landscape Management Plan approved by the Council pursuant to Clauses 11.3 and 11.4 hereof



## 12. PLANNING OBLIGATIONS

The Owner hereby covenants with the County Council and Council as follows:-

- 12.1 that the Owner shall not require or procure by any means that the On-Site Access Roads shall become highway maintainable at public expense

## 13. The Council's Obligations

- 13.1 The Council agrees with the Owner that the Off-Site Open Space Contribution shall be applied towards the provision of new open space in the Parish of Wroxham or towards the improvement and maintenance of existing open space in the Parish of Wroxham

## 14. The Mortgagee's Obligations

- 14.1 The Mortgagee hereby consents to the completion of this Agreement and acknowledges that from the date this Agreement comes into effect that the Site over which it has a legal charge shall be bound by the restrictions and obligations contained herein

## SCHEDULE 1

For each 1 bedroom dwelling comprised in the Development	£2,354
For each 2 bedroom dwelling comprised in the Development	£2,354
For each 3 bedroom dwelling comprised in the Development	£3,530
For each 4 bedroom dwelling comprised in the Development	£3,530
For each 5 or more bedroom dwelling comprised in the Development	£4,707

## SCHEDULE 2

### 1. AFFORDABLE HOUSING

- 1.1 Not to commence development on the Site pursuant to the Permission until a scheme for the provision and long-term management of the Affordable Housing Units has been submitted to and approved by the Strategic Director (Community Services) of the Council ("the Affordable Housing Scheme") which Scheme for the avoidance of doubt shall deal with and include the location of the Affordable Housing within the Site, the percentage breakdown of Affordable Rental Units and Shared Ownership Dwellings to be provided and a restriction on occupation of the Units to those aged over 55 only and upon approval such Scheme shall be deemed to be incorporated into the provisions of this Agreement
- 1.2 Upon approval of the Affordable Housing Scheme by the Council to implement the Affordable Housing Scheme as approved and in accordance with the provisions contained in the Affordable Housing Scheme
- 1.3 Not to occupy or allow to be occupied any Open Market Dwellings on the Site until such time as the Affordable Housing Scheme has been fully implemented and all of the Affordable Housing Units comprised within the Development have been constructed and are ready for occupation and have been transferred to a Registered Social Landlord
- 1.4 Not to use the Affordable Housing Units for any purpose other than for Affordable Housing
- 1.5 The Affordable Housing Units shall not be occupied other than by Qualifying Occupiers




- 1.6 The Registered Social Landlord shall not dispose of its interest in the freehold of the Affordable Housing Units or any part thereof (except by way of mortgage) other than to any other Registered Social Landlord
- 1.7 Paragraphs 1.4 1.5 and 1.6 above shall not be binding upon any mortgage in possession of the Affordable Housing Units or part thereof nor any receiver or manager (including an administrative receiver) for such mortgagee and shall cease to apply to any of the Affordable Housing Units where the Registered Social Landlord shall be required to dispose of such Units pursuant to a right to buy under Part 5 of the Housing Act 1985 or Section 16 of the Housing Act 1996 or any similar or substitute right applicable or shall be required to sell a further and/or final tranche of equity to a tenant pursuant to the terms of any Shared Ownership Lease granted in respect of such Unit
- 1.8 Under the transfer of an Affordable Housing Unit to the Registered Social Landlord such transfer shall be free from encumbrances and shall contain (inter alia) the following provisions:-

A grant in favour of the Registered Social Landlord of all rights of access and passage of services and other rights reasonably necessary for the beneficial enjoyment of the Affordable Housing Units and reservations of all rights of access and passage of services and rights of entry reasonably necessary for the purposes of the Development

EXECUTED by the parties hereto as a deed on the date written above

THE COMMON SEAL of )  
BROADLAND DISTRICT COUNCIL )  
was hereunto affixed in the presence of )



  
Head of Corporate Services .  
and Monitoring Officer

THE COMMON SEAL of )  
NORFOLK COUNTY COUNCIL )  
was hereunto affixed in the present of )

*C. S. Reel*



authorised to sign  
on behalf of: Head of Law

THE COMMON SEAL of )  
SOUTH NORFOLK DEVELOPMENTS LIMITED )  
was hereunto affixed in the presence of )

*Annith*  
*[Signature]*

THE COMMON SEAL of )  
NATIONAL WESTMINSTER BANK PLC )  
was hereunto affixed in the presence of )

Signed and Delivered as a deed  
For and on behalf of )  
The National Westminster Bank PLC )  
By a duly authorised Attorney )

In the presence of

*PJ Hughes*  
PAMELA JANE HUGHES  
TEAM MANAGER  
CREDIT DOCUMENTATION

*[Signature]*  
Witness' Signature-Bank employee



## APPENDIX 1 LOCAL LETTINGS POLICY

### 1. Nominations Rights Policy

- 1.1 The Policy will apply to all categories of properties on the basis of 100% of all lettings for the first 80 years.
- 1.2 The Council and the Association are both committed to eradicating double scrutiny of nominated households for general needs accommodation. They are also agreed on the move away from a pool nomination system to a direct nomination system where a maximum of 2 households will be nominated in priority order for any letting other than those designated as hard to let where a maximum of 3 households will be nominated.

### 2. Criteria for Selecting Nominations

In the case of general needs accommodation the Council will attempt to make nominations in line with its current allocation priorities to need exercising the following criteria:

There is a restriction on occupation of the affordable units on this site to those aged 55 years and over.

- 2.1 Allocations will be made to people living in Wroxham, working in Wroxham or with a need to move to Wroxham in order to give or receive support;
- 2.2 Priority will then be given to people living in, working in, or with a need to move to the following areas in order to give or receive support:
  - Salhouse
  - Belaugh
  - Horstead with Stanninghall
  - Croswick
  - Rackheath
- 2.3 Priority will then be given to people living in, working in, or with a need to move to the following areas in order to give or receive support:
  - Beeston St Andrews
  - Spixworth
  - Frettenham
  - Coltishall
  - Woodbastwick
  - Great and Little Plumstead



- 2.4 Priority will then be given to people living in, working in or with a need to move to any other Parish within Broadland District for the purpose of giving or receiving support.
- 2.5 The Council will consult the Association in the event of considering changes to its relevant priorities. However it is accepted that the ability to maintain these priorities will be largely dependent on the type of Housing Association property that becomes available.
- 2.6 In the case of designated special needs accommodation (the designation of which will be agreed between the Council and the Association) the Council will seek to make nominations in line with its relevant allocation programme priorities. However it is accepted by the Associations that the Council is only obliged to ensure that the nominated household is an appropriate nomination for the type of property.

### 3. Administrative Procedure for nominations

The administrative procedure for nominations shall be in accordance with the operational procedures of the Common Housing Register as amended from time to time or in accordance with such alternative procedures as the Council and the Association shall agree between them.



## SECTION II: LANDSCAPE REGENERATION STRATEGY

*A Comprehensive Tree And Landscape Management Plan To Ensure The Long Term Sustainability And Enhancement Of This Wooded Garden*

### Contents

1. Introduction
2. Primary Objectives
3. Management Of Retained Trees
4. Renewal Of Woodland Areas
5. Replanting Proposals
6. Measures To Promote Biodiversity
7. Details Of Hard And Soft Landscaping
8. Tree Protection During Construction
9. Summary

### Drawings to be read with The Text

Coloured Landscape Plan at A3 dated Sept 2005

- 5071/23      Landscaping & Replanting Strategy Site Layout As Proposed.  
Site Layout Showing Tree Protection Zones And The Line Of Temporary  
Protective Fencing Needed To Form Exclusion Zones Around Retained Trees.
- 5071/25      Shrub and Soft Planting Beds Layout With Soft Landscape Refs

### Appendices

Appendix No.	Title	Prepared by
1	Arboricultural Impact Assessment	A. T. Coombes NDF MICFor
2	Tree Protection Strategy including a Method Statement and Time Table for introduction of tree protection works	A. T. Coombes NDF MICFor
3	Tree Planting Specification.	A. T. Coombes NDF MICFor
4	Shrub and Planting Specification	A van Poortvliet



## Summary

The proposals set out in this document ensure that the landscape of small woods specimen trees and formal garden that currently exists on site will be largely preserved and substantially enhanced.

Action is needed to arrest the slow decline in the tree cover on the site and this Strategy offers a long-term solution. It is only in the context of a development, such the one that is proposed, that funding for such a comprehensive and wide-ranging package of measures is likely to be obtained.

### 1. Introduction

The restoration of the Victorian Keys Hill House and development of the grounds will serve as a catalyst for the rationalisation and renewal of tree cover on the site. A Landscape Regeneration and Management Strategy has been developed, reflecting the Applicant's intention to improve and enhance the current planting to add to the woodland setting of the existing building. By means of judicious positioning and selection of species, the visual impact of the new buildings both within the site, and when viewed from it's surroundings, will be minimised.

The Arboricultural Impact Assessment (Appendix 1) has identified the important trees in the landscape and set out how these can be protected. The Assessment also gives recommendations for tree planting to replace trees that are to be removed. The replanting proposals have been carefully designed to take full account of the historic setting using species that would have featured in a Victorian country house garden.

The Landscape Regeneration Strategy expands the principals described in the Arboricultural Impact Assessment, develops details of smaller scale planting, and sets out the designation of hard and soft landscaping areas.

### 2. Primary Objectives

The main aims of the Strategy are:

- To prolong the life of the existing trees through active management.
- To introduce measures to enrich and regenerate the neglected woodland areas by introducing a new generation of trees to address the decline of those nearing the end of their natural lifecycle.
- Extensive re-planting of root-balled and extra heavy standard containerised trees to provide an immediate landscape contribution.
- Adding to the bio-diversity of the site, considerably increasing the range of tree species and creating new wildlife habitats.
- To ensure that the smaller scale hard and soft landscaping blends with the existing and proposed tree cover, addresses the historical context of the site and forms a harmonious blend of woodland and formal gardens.
- To protect all retained trees during the construction phase in line with recommendations set out in BS5837: 1991 "A guide for trees in relation to construction"
- The Regeneration Strategy and on-going management will be privately funded by legally binding agreements entered into by the private residents of the site.



### 3. Management of Retained Trees

No recent arboricultural management has been carried out on site and many of the trees to be retained are in poor condition and in need of tree work. Details of work required for each tree is set out the Arboricultural Impact Assessment that forms Appendix 1. Work includes cleaning out crowns of trees with dead wood or broken branches, removal or reduction of ivy and reduction of crowns to favour adjoining trees. It is proposed to implement the proposals in full to ensure the proper development and continued good health of all retained trees. All work will comply with the recommendations for tree work contained in BS 3998.

All tree details will be logged on a database and a system of annual inspections both to ensure health and safety and the proper development of the trees will be introduced.

### 4. Renewal of Woodland Areas

The wooded sections of the site particularly the northern tree belt consist predominately of mature broadleaves with a thin under storey of mainly Sycamore regeneration. The mature trees are beginning to decline and enrichment planting with shade bearing species such as bay and holly in gaps in the canopy will ensure that the woodland feature is sustainable in the long term.

It will be necessary to gradually thin the mature tree trees to allow proper development of the enrichment planting. A five-year Tree and Woodland Management Plan will be agreed with the Local Authority to ensure the areas receive on- going management. In addition, annual inspection of specific trees has been noted in the table of tree data in Appendix 1

### 5. Replanting Proposals

The replanting of trees felled for development purposes on a one for one basis will have the effect of concentrating a much higher density of tree cover on a smaller area. The increase in the range of species and the inclusion of specimens chosen both for seasonal interest and their historical resonances will substantially improve the landscape amenity of the site for new residents and existing neighbours alike. Drawing 437.41A shows the layout of the new tree planting detailed in Appendix 1. The use of extra heavy standard broadleaved trees will make an immediate landscape impact and provide screening to soften the impact of the new buildings. A specification for the tree works forms Appendix 3.

### 6. Measures to Promote Biodiversity

The increase in the range of species will produce new habitats for wild life, in particular areas of dense cover for nesting birds.

In the course of the felling and tree work, as much stem and branch wood will be retained on site as possible. In the case of the branch wood this will be in the form of conservation piles. Where practicable, trees to be felled on health and safety grounds away from buildings, will be cut back to conservation stumps 3 to 5m in height to provide a valuable standing dead wood habitat.



Sycamore regeneration will be cleared from the woodland areas and treated with glyphosate to prevent re-growth. Any natural regeneration of native species that occurs will be managed by re-spacing and will be protected as required.

All work will be timed to avoid the bird-nesting season between 1<sup>st</sup> March and 30<sup>th</sup> June in any year.

## 7. Details Of Smaller-Scale Hard And Soft Landscaping

The majority of the tree and shrub planting species have been chosen to be contemporary with the period between 1860 and 1930 when the house and subsequent hotel were in their prime. Modern introductions and cultivars may be incorporated with the new build and away from the existing house. Drawing 437.45 shows the layout of the planting beds referred to in appendix 4, Shrubs and Planting Specification.

The original setting of the House when viewed from the South will remain mostly unchanged: the House sitting on a gravel terrace with steps down onto a large lawn area. The existing diagonal rustic timber fence at the edge of the gravel terrace will be reinstated where lost. The bank down to the lawn will be planted with low to medium height shrubs to suit a hot sunny situation such as Rosemary, Lavender and Rockroses. The bay trees will provide a formal element.

The main lawn will be planted with additional trees such as Crab Apple and Whitebeam. Lawson Cypress have been positioned to close any views to the South West towards the modern housing outside the site. The new Red Oak and Holm Oak along the Southern boundary will provide a visual link to the existing large trees on the South boundary and to reinforce the screening at this point. This will also address the loss of the original garden that extended as tennis courts to the south. The grass path connecting the western edge of the main lawn with the drive will remain with new shrub planting on the bank on the north side. The existing shrubs on the south side will be pruned as required, and the seedling sycamores removed. The Summer House will form a focal point at the base of the bank.

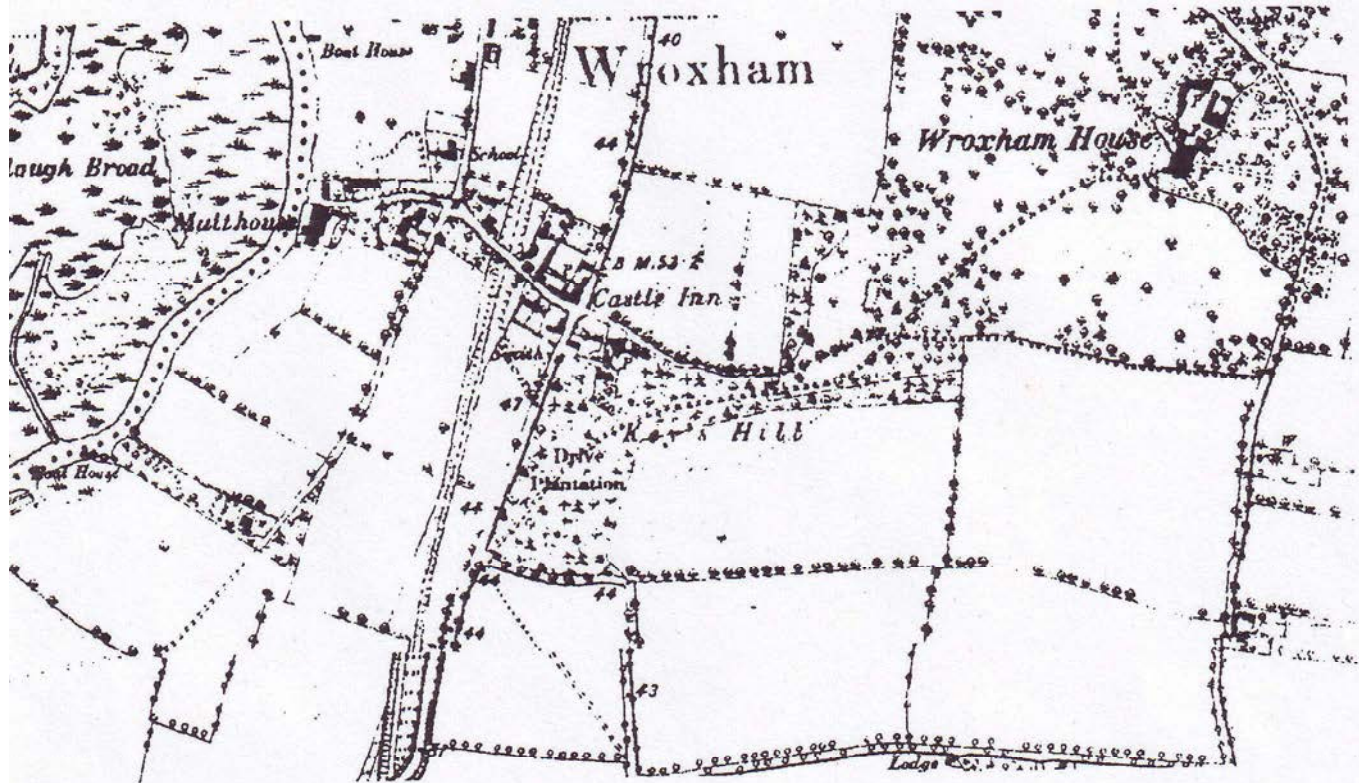
The central open space area East of the original House will be referred to as The Green. The access drive will link the three levels of the building terraces taking account of the natural falls across the site (North to South, and from West to East). The new Building 8 forms the upper terrace and retaining walls support its front gardens adjacent to the Woodland. The original Keys Hill House sits on the second (middle) terrace. The lower terrace consists of Buildings No 9, 10 and 11 which face onto the 'Green' and the new Arbour. The 'Green' is defined by specimen trees. The Tulip Tree ultimately forming a large tree and, the focal point for this space.

## 8. Tree Protection

A site-specific Tree Protection Strategy forms Appendix 2 that outlines all measures required to comply with BS5837. This should be read in conjunction with the A3 Appendices of the Arboricultural Impact Assessment that shows the protection zones of retained trees and the line of the temporary fencing necessary to form exclusion zones around the retained trees. All aspects of the strategy will be implemented to ensure that retained trees remain undamaged and suffer no subsequent negative impact as a result of the construction works



# APPENDICES



Full planning permission  
application for Key's Hill  
House, Wroxham

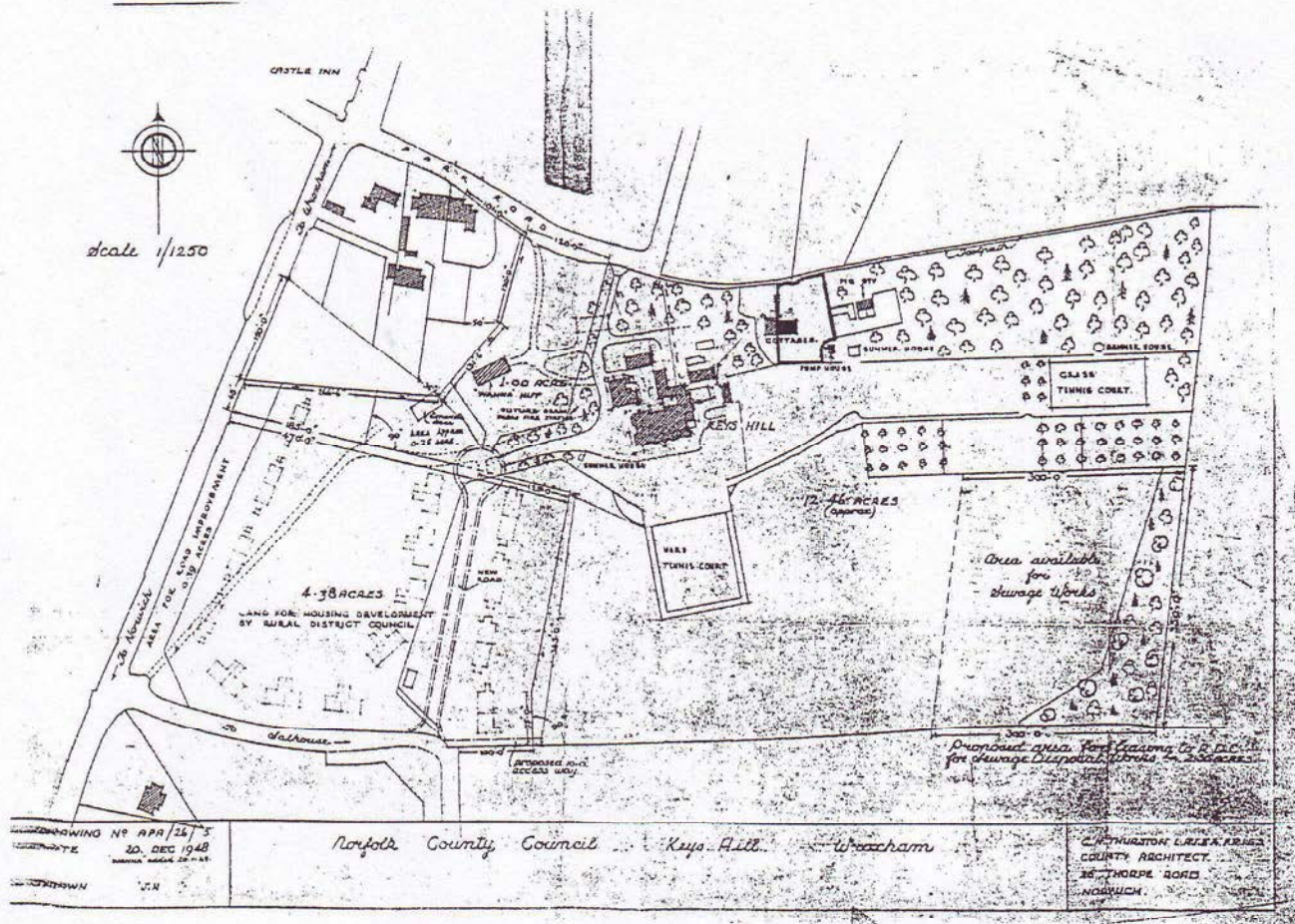
5071 Sept 2005



Orchard Pyghtle  
Thwaite Common, Erpingham  
Norwich, NR11 2GG  
Telephone (01263) 768155

## Appendix A Pre-1895 Map of Part of Wroxham





Full planning permission  
application for Key's Hill  
House, Wroxham

5071 Sept 2005



Orchard Pyghtle  
Thwaite Common, Erpingham  
Norwich, NR11 7QG  
Telephone (01263) 768155

APPENDIX 1

ARBORICULTURAL IMPACT ASSESSMENT BY ANDREW COOMBES

Provided as separate bound document



## APPENDIX 2

### TREE PROTECTION STRATEGY - KEYS HILL WROXHAM

Following the finalisation of the design to be submitted to Broadland District Council for planning approval, the tree protection measures set out in the Arboricultural Impact Assessment (Appendix 1). Have been revised and finalised into a Method Statement and Timetable for implementation of the works.

#### Method Statement

##### **1. Tree Works**

All tree felling and other tree works will conform to BS3998. Extreme care will be taken to avoid damage to retained trees during the course of the works. Where necessary trees will be climbed and felled in sections rather than risk damage to adjoining trees.

Lop and top to be chipped and removed from site. A proportion of the stem wood will be retained on site in conservation piles.

##### **2. Temporary Fencing**

Temporary fencing will be along the edges of the tree protection zones. The fencing to be as illustrated in BS5837, constructed using a scaffold pole framework supporting chestnut pail fencing, chainlink or heras fencing panels. The fence will exclude all access to the protection zones.

Signs will be erected on the fence stating "Tree Protection Zone - No Access". Two signs will be used on each separate exclusion zone.

Fencing will be maintained throughout the construction works, ensuring that access is denied throughout the process.

Protective fencing will be removed only when all construction work is completed.

##### **3. Arboricultural Supervision and Consultation**

Supervision will be carried out throughout the construction phase by a qualified forester or arborist.

When necessary, the forester or arborist supervising the works will be responsible for consultation with Broadland District Council.



#### 4. General Protection Measures in Accordance with BS5837

The following General Protection Measures will be implemented throughout the Construction period:

- No cement, oil, bitumen or any other products likely to be detrimental to tree growth will be stored within 10m of the trunk of any tree, or materials of any type stored within 10m.
- Concrete mixing will not be carried out within 10m of any tree.
- No fires will be lit within 20m of any tree.
- Hydraulic cranes, forklifts, excavators or piling rigs will not be used within 5m of the crowns of any of the trees.

#### 5. Service Trenches

The route of service trenches will, as far as practicable, avoid the root plate of trees. If it is necessary to have a trench close to any of the trees then hand digging will be employed to minimise disturbance.

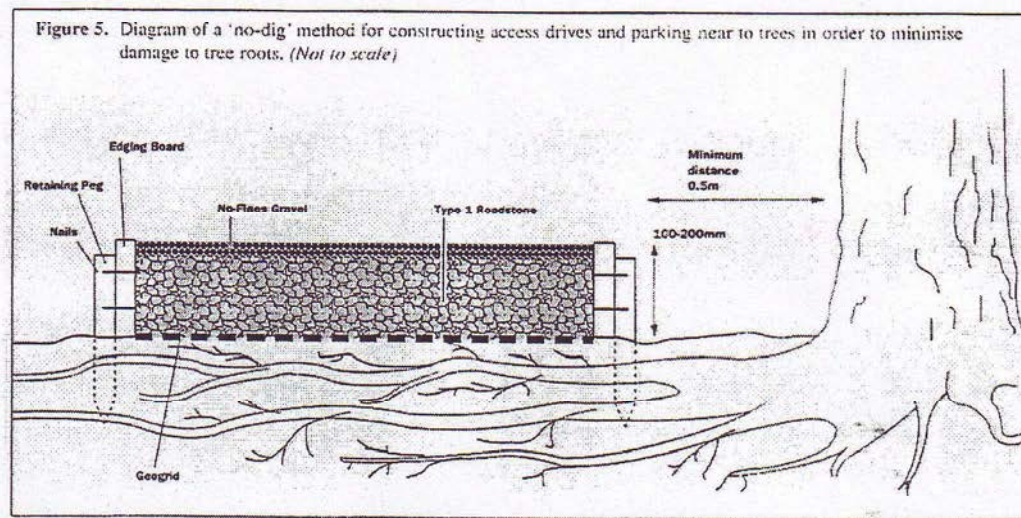
Full guidance will be sought from the National Joint Utilities Group Publication number 10, "Guidelines for the Planning and Installation and Maintenance of Utility Services in Proximity to Trees".

#### 6. Access

No excavation will be carried out on the main drive running through the site. Any agreed works to hard landscaping will be constructed using a "No Dig" surface as set out in Arboricultural Practice Note APN 1. This will involve laying a geogrid on the surface over which will be set a layer of type 1 road stone supported by edging boards. This finish will be used for works access to be finished at the end of the construction period with a fine stone or brick pavior finish. The attached copy of an illustration from APN 1 shows the method of construction required.



Extract From APN1



\* For example, Tensar SS30, manufactured by Neflon Ltd, New Wellington Street, Blackburn, BB2 4PJ, UK.

† Care must be taken to select a herbicide which does not damage the roots of desirable vegetation that may be in the treated area. Always read the product label before use.



# TIMETABLE FOR TREE PROTECTION WORKS AT KEYS HILL, WROXHAM

Item	Operation *	Before Commencing Construction works	During Construction Works	On Completion
1	Obtain the services of an expert to carry out a survey of the site to assess whether bats are present within the site.	X		
2	Carry out any recommended tree works. Carry out any special measures required following the results of the Bat survey.	X		
3	Erect Protective Fencing on edge of Protection zone including surfaced areas.	X		
4	Erect warning signs stating "No access Tree Protection Zone". Two signs will be used on each separate exclusion zone.	X		
5	Construct "No-dig" surface with a rough top surface for construction access.	X		
6	Excavate footings outside protection zone.		X	
7	Maintain Protective fences and signs in good condition.		X	
8	Arboricultural supervision and advice including site visits during the course of the works to check the integrity of the protection zone and liaison with NNDC.	X	X	X
9	Apply a final top surface to the "No-dig" access routes.			X
10	Remove protective fencing.			X
11	Check condition of tree and consider remedial works if necessary.			X
	* All work to comply with the attached Tree Protection Strategy and BS5837: 19991 Guide for trees in relation to construction			



### APPENDIX 3

#### TREE PLANTING SPECIFICATION

##### 1. Quality of planting stock

All stock to be well grown and disease free. Trees to be either rootballed or container grown. Container grown stock to have a well developed fibrous root system with no spiralling roots present. All plants to conform to BS5837.

##### 2. Plant Handling

Plants to be planted as soon as possible after delivery. If there is a delay in planting roots should be protected from frost. Watering should be carried out in dry periods and prevented from drying out. Any small broken branches in transit to be pruned back.

##### 3. Planting Methods

All plants to be pit planted in holes suitable for the container or root ball allowing 300mm clearance for back filling in all directions between the edge of the hole or container. Plants to be set at the same planting depth as grown in the nursery. At the time of planting two supporting stakes to be driven each side of the container or rootball before the hole is filled in. The back fill should be firmed into place using the foot or heel.

##### 4. Plant Support

All trees to be supported by two machine turned treated soft wood stakes 1.8 m x 75mm.

##### 5. Plant Protection

Trees to be protected from possible rabbit, vole or strimmer damage by individual spiral tree guards (600mm x 50mm)

##### 6. Maintenance

For three years after planting, a weed free area of 1m around the tree will be maintained, using carefully applied Glyphosate. Any failures will be replaced ensuring full stocking.



# APPENDIX 4

## Shrub and Planting Specification – KEYS HILL, WROXHAM

Bed No.	Ref.	Plant No.	Name	Spacing mm	Size/ Height (cm)	Pot lt/ bare root
A1	Ber	30	Bergenia cordifolia	500	20-30	2
	Euon S	22	Euonymus fort. Silver Queen	600	20-30	3
	Mah	16	Mahonia aquif. Apollo	600	20-30	3
	Vib d	15	Viburnum davidii	700	30-40	3
A2	Ber	15	Bergenia cordifolia	500	20-30	2
	Euon S	22	Euonymus fort. Silver Queen	600	20-30	3
	Mah	8	Mahonia aquif. Apollo	600	20-30	3
	Vib d	15	Viburnum davidii	700	30-40	3
A3	Cis. SP	14	Cistus Silver Pink	600	30-40	3
	Lav. H	8	Lavendula Hidcote	500	15-20	3
	Lav. v	24	Lavendula vera	500	20-30	3
A4	Amel	2	Amelanchier		Std 6-8cm	15
	Pru O	16	Prunus Otto Lukyn	600	30-40	3
	Sen.	12	Brachyglottis Sunshine	700	30-40	3
	Vib EP	26	Viburnum Eve Price	700	30-40	3
A5	Cis. SP	12	Cistus Silver Pink	600	30-40	3
	Deut.	16	Deutzia rosea	750	40-60	3
	Lau.	3	Laurus nobilis	1000	50-60	7.5
	Lav. H	20	Lavendula Hidcote	500	15-20	3
	Ros.	7	Rosmarinus officinalis	750	40-60	3
	PV	1	Parthenocissus tr. Veitchii		60-80	3
A6	Cis. SP	14+14	Cistus Silver Pink	600	30-40	3
	Deut.	14	Deutzia rosea	750	30-40	3
	Lav. H	56	Lavendula Hidcote	500	15-20	3
	Ros.	16	Rosmarinus officinalis	750	40-60	3
A7	Lau.	11	Laurus nobilis	1000	50-60	7.5
	Lav. H	16	Lavendula Hidcote	500	15-20	3
	Lav. v	24	Lavendula vera	500	20-30	3
	Ros.	12	Rosmarinus officinalis	750	40-60	3
	Vib EP	24	Viburnum Eve Price	700	30-40	3
A8	Lav. H	18	Lavendula Hidcote	500	15-20	3
A9	Lav. H	14	Lavendula Hidcote	500	15-20	3
	PV	1	Parthenocissus tr. Veitchii		60-80	3
A10	Auc.	18	Aucuba japonica	900	30-40	3
	Cot. L	46	Cotoneaster lacteus	900	40-60	3
	Euon S	20	Euonymus fort. Silver Queen	600	20-30	3
	Heb. r	50	Hebe rakaiensis	600	20-30	3
	Vib EP	16	Viburnum Eve Price	700		



APPENDIX 4

Shrub and Planting Specification – KEYS HILL, WROXHAM

Bed No.	Ref.	Plant No.	Name	Spacing mm	Size/ Height (cm)	Pot It/ bare root
A11	Prun	15	Prunus lauro. Rotundifolia	900	40-60	3
B1	Heb. r	14	Hebe rakaiensis	600	20-30	3
B1	PV	2	Parthenocissus tr. Veitchii		60-80	3
B2	Euon S	37	Euonymus fort. Silver Queen	600	20-30	3
	Lav. H	66	Lavendula Hidcote	500	15-20	3
	Vib EP	16	Viburnum Eve Price	700	30-40	3
C	Euon S	42	Euonymus fort. Silver Queen	700	20-30	3
	Lav. H	20	Lavendula Hidcote	500	15-20	3
D	Sen.		Brachyglottis Sunshine	700	30-40	3
	PV		Parthenocissus tr. Veitchii		60-80	3
G1	Osm.	18	Osmarea burkwoodii	900	30-40	3
	Pru O	20	Prunus Otto Lukyn	600	30-40	3
G2	Auc.C	6	Aucuba jap. Crotonifolia	900	30-40	3
	Ol. H	16	Olearia haastii	750	30-40	3
	Lav. H	46	Lavendula Hidcote	500	15-20	3
G3	Auc.C	9	Aucuba jap. Crotonifolia	900	30-40	3
	Lav. H	46	Lavendula Hidcote	500	15-20	3
	Ol. H	20	Olearia haastii	750	30-40	3
	Sen.	15	Brachyglottis Sunshine	700	30-40	3
	Pru O	24	Prunus Otto Lukyn	600	30-40	3
R1	Sor.	1	Sorbus discolor	tree	8-10cm	15
	Heb. A	6	Hebe albicans	600	20-30	3
	Pru O	15	Prunus Otto Lukyn	700	30-40	3
	Sp. GM	12	Spiraea Gold Mound	600	20-30	3
	Euon.	10	Euonymus f. Emerald Gaiety	600	20-30	3
	Heb. S	5	Hebe Midsummer Beauty	700	30-40	3
R2	Ros.	3	Rosmarinus officinalis	750	40-60	3
	Sen.	3	Brachyglottis Sunshine	700	30-40	3
	Heb. S	3	Hebe Midsummer Beauty	700	30-40	3
	Euon.	8	Euonymus f. Emerald Gaiety	600	20-30	3
R3	Heb. S	3	Hebe Midsummer Beauty	700	30-40	3
	Cis. SP	7	Cistus Silver Pink	600	30-40	3
	Euon.	12	Euonymus f. Emerald Gaiety	600	20-30	3
	Ros.	12	Rosmarinus officinalis	750	40-60	3
S1	Pho.	5	Phormium tenax purpureum	750	60-90	5
	Euon.	24	Euonymus f. Emerald Gaiety	600	20-30	3



# APPENDIX 4

## Shrub and Planting Specification – KEYS HILL, WROXHAM

Bed No.	Ref.	Plant No.	Name	Spacing mm	Size/ Height (cm)	Pot lt/ bare root
S2	Heb. r	5	Hebe albicans	600	20-30	3
	Heb. r	10	Hebe rakaiensis	600	20-30	3
	Sen.	4	Brachyglottis Sunshine	700	30-40	3
	Auc.C	5	Aucuba jap. Crotonifolia	900	30-40	3
S3	Sant.	10	Santolina cham. nana	600	20-30	3
	Vib EP	16	Viburnum Eve Price	700	30-40	3
T1	Sor.	1	Sorbus discolor	tree	8-10cm	15
	Auc.C	3	Aucuba jap. Crotonifolia	900	30-40	3
	Mah	6	Mahonia aquif. Apollo	600	20-30	3
	Lav. v	3	Lavendula vera	500	20-30	3
T2	Lav. v	3	Lavendula vera	500	20-30	3
	Sp. GM	3	Spiraea Gold Mound	600		
	Ros.	3	Rosmarinus officinalis	750	40-60	3
T3	Ros.	3	Rosmarinus officinalis	750	40-60	3
	Heb.M	3	Hebe Marjorie	700	30-40	3
	Heb.RE	10	Hebe Red Edge	600	20-30	3
T4	Heb.M	3	Hebe Marjorie	700	30-40	3
	Cis. SP	6	Cistus Silver Pink	600	30-40	3
	Ros.	3	Rosmarinus officinalis	750	40-60	3

### Planting Requirements:

#### 1. Plant pit

Excavate a planting pit 150mm wider and deeper than the size of the container or root spread. Loosen the sides and bottom of the pit with a fork.

#### 2. Compost, fertiliser, and soil additives.

Apply Ficote 180 or similar slow release fertiliser and Kelplant soil conditioner, both at manufactures recommended rates to the excavated soil from the planting pits.

Also spread 10lt of non- peat based organic compost and thoroughly mix with the excavated soil and compost etc. Remove all debris, and stones over 75mm diam.

#### 3. Planting

Back fill the planting pit with the mixed excavated soil, placing the plant root (minus the container) in the centre of the pit, and gently firm the soil round it. The finished height of the plant stem out of the ground should be at the same level or lower than it was previously in the container or in the ground.

#### 4. Mulching

Dig back soil to ensure that there is a strongly defined edge, 75mm below adjoining surfaces; paving, curbs, grass, etc. Rake over and level soil in planting areas, and spread bark mulch 75mm deep.

#### 5. Maintenance

All planing areas shall be kept weed free.

#### 6. Replacements

Any shrubs which die or are in poor health within 12 months of planting shall be replaced.



## APPENDIX 4

### Shrub and Planting Specification – KEYS HILL, WROXHAM

#### Boundary and Internal Hedges

Beech Hedges Total length: 252m

North & West Boundary and links to Building G

Hedge (1) : 59m      (2) : 40m

South West Boundary

Hedge (3) : 43m

Building 8. North garden enclosure

Hedge (4) : 29m      (5) : 10m

East Boundary

Hedge (6) : 35m

Dividing Hedge

Hedge (7) : 36m

Beech, *Fagus sylvatica*, mock-planted in a double row, 300mm between rows, 2 plants per linear metre.

233m	Beech	504	<i>Fagus sylvatica</i>	500	40-60	BR

#### Open spaces under trees

W1 North Access, West verge.

Leave undisturbed, existing vegetation; Ivy, Grasses, Alexanders.

Mow/trim as required.

W2 Shaded Area, West of Building G.

Rake over to make good soil levels following the removal of laurels, using ONLY HANDWORK. No work to take place beyond laurel, except for planting the beech hedge. Allow existing ivy to colonise cleared areas. Remove Tarmac surface, level and firm down remaining hoggins base and cover with bark mulch, 75mm deep.

W3 West Access, North verge.

Leave undisturbed, existing vegetation; Allium, Arum, Alexanders, Blue Bells, Ivy, and Grasses. Mow/trim as required.

W4 Wooded Area, East of Building F

Existing dense cover of Allium, leave undisturbed.

W5 Shaded Area, East of Building C

Allow natural regeneration of ground flora, mainly Ivy, rake level any areas of disturbed soil, HAND WORK ONLY. Use existing beechmast to surface informal paths, add wood chip mulch if required.



Shrub and Planting Specification- KEYS HILL WROXHAM

Plant Specification

CONTENTS

A. Sizes and specification	1
B. Plant handling	2
C. Planting	4
D. Planting season	7
E. Aftercare, maintenance and protection	7
F. Replacement of failures	9

1. This specification is to be read in conjunction with drawing no: 5071.1, 2, 3, 5, 6, 11, 13, 15, 17, 20, 21, 23, 24, 25
2. All plants and planting methods are to conform with BS3936, Parts 1-11, 1990.
3. Reference to be made to "Plant Handling" guidelines, issued by the Committee for Plant Supply and Establishment, available from the Horticultural Trades Association, 19 High Street, Theale, Reading, Berks. Tel: 01734 303132



Shrub and Planting Specification- KEYS HILL WROXHAM

A. SIZES AND SPECIFICATION

Origin

1. All trees and shrubs must be true to name.
2. If the plants have been potted or grafted, the supplier shall state the name or designation of the rootstock if requested.

Root system

1. The root system for bare root plants shall be well balanced in relation to the plant and conducive to successful transplantation. Container grown plants shall have a root system, which substantially fills the container, without the plant having become pot bound.

Condition

1. Shrubs and hedging shall be apparently free from any obvious pest or disease and shall be materially undamaged. Roots shall not have been subjected between lifting and delivery to adverse conditions such as water logging or prolonged exposure to drying winds or frost.
2. The compost in the container shall be free from perennial weeds.

Categories of Nursery Stock

1. Shrubs are mostly perennial plants with several main stems and evenly balanced lateral branching. Some may be grown as single stem plants and be specified as free form. They may be bare rooted or container grown, measured by overall height from ground level.
2. Transplants and seedlings are defined by age, the length of time in the seedbed and whether they are undercut or transplanted. The transplants shall have been transplanted or undercut at least once. The age and height shall be stated (the maximum height from ground level will be 1.2m), together with the number of transplants or undercuts. Seedlings shall have been grown from seed and remained undisturbed since sowing. Their age in years shall be specified.



Shrub and Planting Specification- KEYS HILL WROXHAM

**B PLANT HANDLING**

**Lift Bare Root Plants**

1. This should only be carried out when the soil is moist (never during frost or when the ground is frozen) and the plants are dormant. Stock should be lifted with as much of the root system intact as possible. Care to be taken to avoid pulling, which may shear off the fine fibrous roots or strip outer layers from larger roots. Plants should be gently shaken to free surplus soil and any large woody roots should be cut back to encourage fibrous root growth. Any broken branches or twigs are to be pruned.
2. Bare root plants are bundled according to size. Lifted plants must not be exposed to drying winds, frost or strong sunlight and should be protected or packaged in the field. Hessian, straw or any fibrous material may be used as moist protection during transit. Co-extruded polythene bags are the most efficient method of packaging bare root stock. care is to be taken to firmly tie the neck of the bag around the plants before transportation.

**Pruning**

1. Pruning between lifting and transplanting lessens the demand of the plant on the root system. However, hard pruning affects the appearance of the plant and therefore, unless specified, pruning is to be limited to the removal of broken, damaged or dead branches.
- 2.

**Cold storage**

1. A cold store facility allows bare root plants to be kept safely for an extended period in their dormant state. Plants can therefore be lifted in optimum conditions.

**Labelling**

1. All plants must carry identification labels detailing the supplier or grower of the stock, the full Latin name, the size and the root form. If plants are pre-selected and security tagged, they should arrive at the site complete with tag.

**Packaging**

1. Packaging shall be adequate to protect the plants and prevent their heating or drying out.
2. Container grown plants will not normally receive individual packaging.



## APPENDIX 4 (Continued)

### Shrub and Planting Specification- KEYS HILL WROXHAM

#### Notes on handling

1. The period between lifting, storage, despatch and planting is to be kept to a minimum.
2. Plants must not be packed tightly.
3. Plant material should only be transported on covered vehicles or in closed containers to prevent drying out.
4. When plants are received they are to be checked for damage, quantity, type and general health. Any problems should be notified to the supplier immediately.

#### Temporary storage

1. The supplier is to minimise the period between lifting and despatch and the contractor/purchaser is to limit the period between receipt and planting.
2. Bare rooted plants may be stored briefly with a covering of damp sacking, straw or similar material to keep the roots moist. Where delays of more than a few days occur, plants should be packed in moist friable soil, placed in a cold store; or supported upright on a well-drained site and the roots immersed in a deep layer of moist straw/hay/sand/pulverised bark/wood shavings, etc. The material should be firmed to exclude air (particularly on the insides of the bundles) and watered periodically as the conditions of the material requires.
3. Protection should be provided against damage by small mammals.
4. Container grown plants should be kept upright and watered as required.
5. Rootballed plants shall have permeable wrappings kept moist by watering and wrappings protected from direct sunlight. For longer periods of storage, rootballs with permeable wrappings should be placed on well-drained surface and covered with materials suggested bare rooted plants.

#### On-site plant care

- 1 Planting within a few days of receipt
  - (a) Bare root plants: ensure root systems are moist, cover with damp straw to a sufficient depth to prevent drying out and frost damage.



Shrub and Planting Specification- KEYS HILL WROXHAM

- (b) Liners/transplants – delivered totally enclosed in polythene bags: place in a sheltered and shady position avoiding direct sunlight and freezing.
  - (c) Container grown plants: ensure soil is moist and prevent root area from freezing by placing in a cool, frost free shed or covering with straw.
  - (d) Evergreen material; avoid handling by the leaves in frosty weather to prevent rupturing the cell structure.
2. Where planting is to be delayed by a week or more
- (a) Liners, transplants – delivered totally enclosed in polythene bags; remove from the bags and heel in as above. Avoid placing bundles tightly together or heating may occur.

**C PLANTING, STAKING AND GUYING**

**Bare root: notch planting**

- 1. This is only to be used with roottrainers or small bare root stock. Ground preparation is unnecessary; hence this method is to be used on sites where large amounts of small stock are to be planted quickly and on steep banks. The soil is to be firmly heeled once the plant has been inserted in the slit.

**Bare root: roottrainer planting**

- 1. Roottrainers are plant stocks, which are raised in roottrainer cells from seed: the cells varying in size producing plants for planting in sizes which would not normally exceed 90 cms.
- 2. They may be planted by spade, or a special planting spear, which is a quicker method, which causes no damage to the fibrous root system.

**Bare root: shrub planting**

- 1. The hole into which the plant is to be placed is to be greater than the root spread of each plant. The excavated soil is to be stored at the side of the hole. The quality of soil is to be investigated and any additions (eg compost, organic material, coarse sand, fertiliser, polymer water retaining granules) should be thoroughly mixed with this soil prior to backfilling. Concentrated fertiliser is never to be placed directly onto bare roots. If the quality of the



Shrub and Planting Specification- KEYS HILL WROXHAM

excavated soil is too poor, it is to be discarded and replaced with good quality imported soil.

2. The sides and base of each pit should be loosened with a fork to break up any compaction. The roots of the shrub should be spread evenly on the soil at the bottom of the hole. The soil should be gently backfilled, maintaining the nursery mark level with the surrounding surface of the hole. The plant should be shaken lightly when backfilling, to allow the soil to mix freely with the roots. Layers of backfill are to be gently firmed until a level is achieved with the surrounding surface. The soil around the plant must be firmed to eliminate any air pockets or uneven compaction and to stabilise the plant.

Container grown – shrub planting

1. The pit is to receive the same preparation as for the bare rooted material. The containerised plant material should be watered well in advance of planting to ensure that the root structure is thoroughly wet.
2. The root system may be very condensed; if so, the bottom of the root system and those around the edge of the container should be teased out gently taking care to avoid breaching down the shape of the root structure and damaging the roots.
3. The plant is to be placed in the hole and the backfill material returned and firmed around the root system. Gentle pressure is to be applied to the backfill material, but the soil must not be compacted.

Utilities above and below ground

1. The location of all overhead and buried services and utilities are to be ascertained well in advance of planting. Deviation from planned positions or routes or services may prevent the use of a specific planting location. The effects of root penetration or disturbance by root systems on services or other building works adjacent to planting areas is to be discussed in the context of both the planting operation and over the long term growth period.
2. It is the ultimate responsibility of the person responsible for the planting works to ensure that every precaution is taken to avoid damage or interference to services.

General planting notes

1. When planting smaller plants such as whips, transplants, hedging, perennials and shrubs, the whole area should be prepared rather than individual pits.



Shrub and Planting Specification- KEYS HILL WROXHAM

Such areas are to be provided with an adequate depth (approx 450mm) of good quality, medium texture, weed free topsoil. Any compacted ground below must be broken up to a further minimum depth of 150mm prior to spreading topsoil. Poor soil is to be improved by the addition of organic matter and/or dressings and/or ameliorants (eg "Alginure") as previously described.

2. Topsoil for tree and shrub planting requires a texture that can both retain and release moisture and nutrients to the plant and a crumb structure that will promote root growth and drainage to prevent waterlogging in the root zone. If a soil structure need to be established, deep soil cultivation and drainage will be required, followed by grassing or herbaceous cover and the delay of planting for at least one planting season. The structure of heavy clay soils may need to be improved so that they become more free draining and friable, whilst light sandy soils will need to have their water retaining capacity increased. Ground preparation will be required over an area at least 3 times the diameter of the root spread and 1 ½ times the root depth of the stock to be planted.
3. Where watering in a dry summer will not be possible, or where summer maintenance may be a problem, the use of tree and shrub planting compost around the roots is advised, incorporated with soil in a 50/50 mix.
4. Planting in poor ground conditions or industrial sites should be with proportionally smaller plants, as should be specified, in order that they become established more readily. Soil analysis may be required to specify adequate nutrient provision.
5. Planting must always be to the nursery mark, with no depressions or mounds in the soil over the roots.
6. When planting large areas with whips, transplants, hedging etc. support will not be required, but protection will be needed against damage by rodents or small mammals e.g. Individual rabbit guards or enclosure by fencing.
7. Plant protection may be required to reduce the risk of damage from equipment, traffic, vandalism, animals and vermin. Protection is to be as specified and may include either individual tree guards and/or fencing of larger areas. Tree guards may be plastic wrap around, welded wire mesh guards, plastic tubes.

D PLANTING SEASON

Field grown bare root plants



Shrub and Planting Specification- KEYS HILL WROXHAM

Transplanting of field grown bare root plant material is carried out in the dormant season (approximately October to March). The season for planting bare root material can be extended if plants are held in their dormant state in a refrigerated cold store until such time as they can be planted. Early planting before the end of the year is more successful than planting from January onwards. Later plantings are vulnerable to spring droughts and should be avoided unless watering can be carried out.

**Container grown plants**

This material may be planted throughout the year. However, when planting during the growing season, care must be taken to ensure that the root systems are thoroughly wet before planting.

**Evergreen**

Evergreens and coniferous material establish more readily if planted in early autumn or late spring.

**E AFTERCARE, MAINTENANCE AND PROTECTION**

Reference is to be made to the "Good Planting Guide" available from the Horticultural Trades Association.

Maintenance of all plants will be required at all times until the plants are well established. Successful establishment will be encouraged by:

**Ground mulches**

1. To retain moisture and prevent water loss through evaporation. A coarse mulch, 75mm deep, is to be applied to all planted areas, eg bark or woodchip or similar approved materials, on completion of planting. Topping up may be required to maintain this depth.
2. Care to be taken to remove all perennial weeds from the soil prior to spreading the mulch.
3. Mixing of soil and mulch is to be avoided, particularly through hoeing, as it encourages weed growth and destroys the interface between mulch and soil.

**Irrigation and aeration**

1. After planting, soak the soil around the roots of the plant. If rainfall is insufficient, allowance must be made to apply water mechanically.



Shrub and Planting Specification- KEYS HILL WROXHAM

2. The quantity of water required varies according to soil, climate, season, etc. As a guide, the soil around the roots should not dry out in the first two seasons and plants should never be allowed to wilt. Over-watering may also cause wilting, if this occurs, the planting pit should be pierced to the bottom to allow air to penetrate and water to drain away. Over-watering on heavy or badly drained soils is to be avoided. An even soaking every 10 – 14 days in any weather is of more benefit, than small amounts of water applied more frequently, which promotes surface root growth.
3. Plants in containers, particularly above ground, need their water requirement monitored more carefully.
4. If the roots of new plants become loosened they are to be re-firmed to exclude air pockets.

Therefore, a source of water near the planting area must be established in the planning stages. If the ground becomes hard and impervious after several waterings, it should be lightly forked to allow water and air penetration.

**Pruning**

1. Any dead, diseased or damaged growth should be cut back to the first living bud or the branch/stem removed entirely. Any crossing branches or growth, which is rubbing is to be removed.
2. Cuts are to be made near to the main stems as possible leaving no spur. Sharp tools are to be used to leave no rough edges.
3. All prunings are to be removed from site and burned/disposed of to avoid vermin or disease
4. Bare Root Plants should have their crowns reduced by up to 20% after planting to reduce the demand on the root system.
5. Woody plants should be pruned in the dormant season. Additional work may be required in the growing season if neighbouring plants are being suppressed or obstructed.

**Fertilisers**

1. These are only to be applied if there are obvious signs in the appearance or health of the plants that a chemical imbalance is causing problems. The soil is to be analysed to establish the poor nutrient availability or mineral/trace element deficiency, prior to undertaking any feeding.
2. Fertiliser should not be applied as a matter of course, as over-application or use of the wrong type may damage the plant.



Shrub and Planting Specification- KEYS HILL WROXHAM

Weed control

1. Weed growth is to be removed so as not to deprive the plants of water and nutrients they require. This is to be carried out prior to seeding to prevent germination of a new crop. Those species with deep root systems or those, which spread by rhizomes, complete removal, or treatment with a translocated weedkiller will be required.
2. Physical weed control (e.g. hand pulling) is preferred as it increases air penetration of the soil. Chemical control includes the use of a pre-emergent herbicide, but the effect will be reduced by subsequent physical action.

Protection

1. The efficiency of rodent and vandal guards should be checked, whether it be fencing, guards, tubes, etc. They are to be stable, undamaged, effective and not restricting plant growth in any way. Damaged guards are to be replaced immediately and any fencing should be repaired. Wire tension should be regularly checked and corrected.
2. Once the threat of any damage has passed, the protection should be removed

F REPLACEMENT OF FAILURES

1. All damaged plants and plant failure during the first year after planting are to be replaced with the same species as per the specification above and the cost borne by the contractor (except when vandalism is the cause of the damage or loss).