

## **INTRODUCTION**

Cranford Park is a green and beautiful oasis, sandwiched between Heathrow, the M4 and the A312, the latter officially the busiest road in the Transport for London network. It is on the doorstep of one of the most congested, polluted and (soon to be) densely redeveloped parts of London, which already lacks quality open space. The park has been abused, misused and under-used over a great many years, with its potential far from fully realised, despite the best efforts of the Friends Group and Hillingdon Council.

The vision is to return the ownership of Cranford Park to the people who live in the area so they will be able to experience, enjoy and interact with its historic buildings and landscape and discover and appreciate its rich and varied habitats and wildlife.

The strap line 'Cranford Park: Looking beneath the Surface', is a reference to the sumptuous buildings and landscapes from the Berkeley era, now all but hidden, and to the astonishingly rich variety of wildlife and plants which thrive, largely out of sight, in such an inauspicious part of London. Many local residents admit they have only ever driven past and never looked within.

### **The Plan Itself**

This Conservation Plan had its distant origins in the Feasibility Study written by LDA Design and MRDA Architects in 2015-2016. This built upon the results of a Public Consultation in April-May 2015, with input from the Cranford Park Steering Group, created in 2014.

The Feasibility Study was later extended to form a Conservation Study by the then LB Hillingdon Conservation and Urban Design Team in 2016-17 (Sarah Harper, Alisha Lad and Charmian Baker). The team incorporated more detailed information about the socio-economic context of the park, the significance of its heritage, the condition of its listed buildings and its archaeology. Information on the quality and management of its habitats, plants and wildlife was also included, referencing the Council's excellent 'Management Plan for Cranford Park (2013-2017)', written by Alison Shipley, then Countryside Conservation Officer in the Green Spaces Team.

During the Development Phase of the Cranford Park project, these documents were reworked, updated and greatly extended to include much more information about the history, significance and context of Cranford Park and a vision for its future, one that has been shaped by the many members of the Steering Group. This work of drawing together the Conservation Plan was carried out over several months by the Project Manager, Charmian Baker.

Four members of The Friends Group have been crucial to the Conservation Plan:

Bob Barton – Founder and Secretary of the Cranford Park Friends (CPF)

Dr. Justine Bayley – Vice Chair of the CPF and an archaeologist

Christopher Luetchford – Chair of the CPF's History Group, who has been researching the history of the Park over many years

Wendy Marks – Member of the CPF, who has been recording the plants and wildlife in the Park over many years

## **The Scope of the Plan**

The Plan aims to bring together the most important information relating to the considerable built and natural heritage at Cranford Park, illustrated with a range of historic maps, drawings and photographs and including some modern photographs. It highlights the significance of this heritage, and to whom it matters, whether nationally, London wide or locally and includes a gazetteer ranking its significance. This information is considered to be vital for all engaged in developing the proposals for the project, whether consultants or stakeholders, and of interest to all who are discovering the Park as a result of the interest this project will engender.

The context of the Park is very important too. The landscape character and the gravel extraction industry nearby; the history of its former owners, the Berkeley Family and what happened to their estate after they left in 1918; the story of the River Crane, Crane Island and the Shot Tower and of Cranford Village in LB Hounslow. The Park is also linked to the industrial heartland of Hayes, which is fast becoming transformed with high density residential development.

The issues and opportunities are highlighted and, from these, policies have been developed to help decision makers prioritise when direction is needed or when conflicts between different heritage values occur. The Park is very large and complex: there are various Council departments and a number of external agencies whose work impacts either directly or indirectly upon it. It is intended that a published plan will provide the body of evidence and policies needed to co-ordinate work and guide it to achieve the overall vision.

## **Surveys and Research Undertaken**

In January 2020, the Conservation Plan was revised with references to the findings and recommendations of the surveys and research undertaken during the Development Phase. These are as follows:

Ecology by Middlemarch Ltd: Preliminary Ecological Appraisal with extended surveys of breeding birds, otters and water vole, dormice, vegetation classification, detailed bat surveys with bat mitigation strategy and recommendations for biodiversity enhancement

Trees by Trevor Heaps Arboricultural Consultancy Ltd: Visual Tree Assessment of trees in eleven areas affected by the project proposals. Trees of historic and landscape significance tagged and plotted on plans, also those requiring tree work.

Archaeology Community Excavation Report, November 2018 by AOC Archaeology Ltd: three excavation sites investigated to determine the character of the surviving remains of Cranford House, the presence or otherwise of a formal garden or parterre in the Pleasure Grounds and the location of the centre of the Ice House.

Archaeology Test Pits Report, September 2019 by AOC Archaeology Ltd., five archaeological investigations to inform the structural specifications for the new build.

Archaeological Geophysical and Topographical Survey by AOC Archaeology Ltd: earth resistance survey over former site of Cranford House, gardens and immediate environs, with gradiometer and topographic surveys over 8.32 ha. of the Park, from meadow to River Crane, to include ice house copse and second plantation.

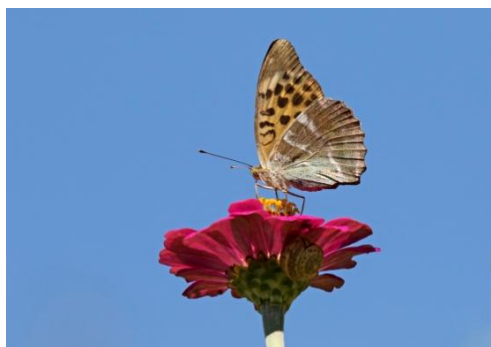
Survey Report and Repair Schedule (The Cellars, Stable Block and Boundary Walls) by Thomas Ford & Partners: detailed, photographic schedule.

Topographical Survey of Cranford Park by Callidus Surveys: south of the M4, from western park boundary to the River Crane, just south of the ha-ha.

Asbestos Survey of the Stables by European Asbestos Services

Courtyard Investigation by Dr. Justine Bayley of Cranford Park Friends, and others: investigation of survival of original paving and brick walls of former Cranford House.

UK Butterfly Monitoring Scheme (UKBMS) 2019 by Wendy Marks, Cranford Park Friends.



Silver Washed Fritillary, seen at Cranford Park 2019

## SECTION 1 - UNDERSTANDING THE HERITAGE

### 1.1 The Heritage of the Site

#### 1.1.1 Cranford Le Mote

The mediaeval moated site of Cranford Le Mote stood close to Watersplash Lane, near the northern end of the canalised section of the River Crane. The manor house survived there until 1780. Only the western portion of the moat and house platform survived the construction of the A312 in 1973. Access to this site is poor now, since it has become overgrown with secondary woodland and waterlogged and there are no surface contours visible.

A short account of the excavation in 1973 and a location drawing was published in the *London Archaeologist* 2(8), 1974 (APPENDIX 1)

#### 1.1.2 Cranford House

Cranford House, a very substantial, three storey, early 18<sup>th</sup> century and later building of some 40 rooms, was not re-occupied by the Berkeley family after 1918 and was finally demolished in 1945. The house was razed to the ground and the area later fenced with a perimeter steel palisade fence. Scrub now covers the site. Trial archaeological excavations in 2018 and 2019 have demonstrated that the foundations of the front wall of the house and the stone passageway in the servants' wing have survived well at ground level, suggesting that more will be discovered. Other than this, only the cellars of the house remain.

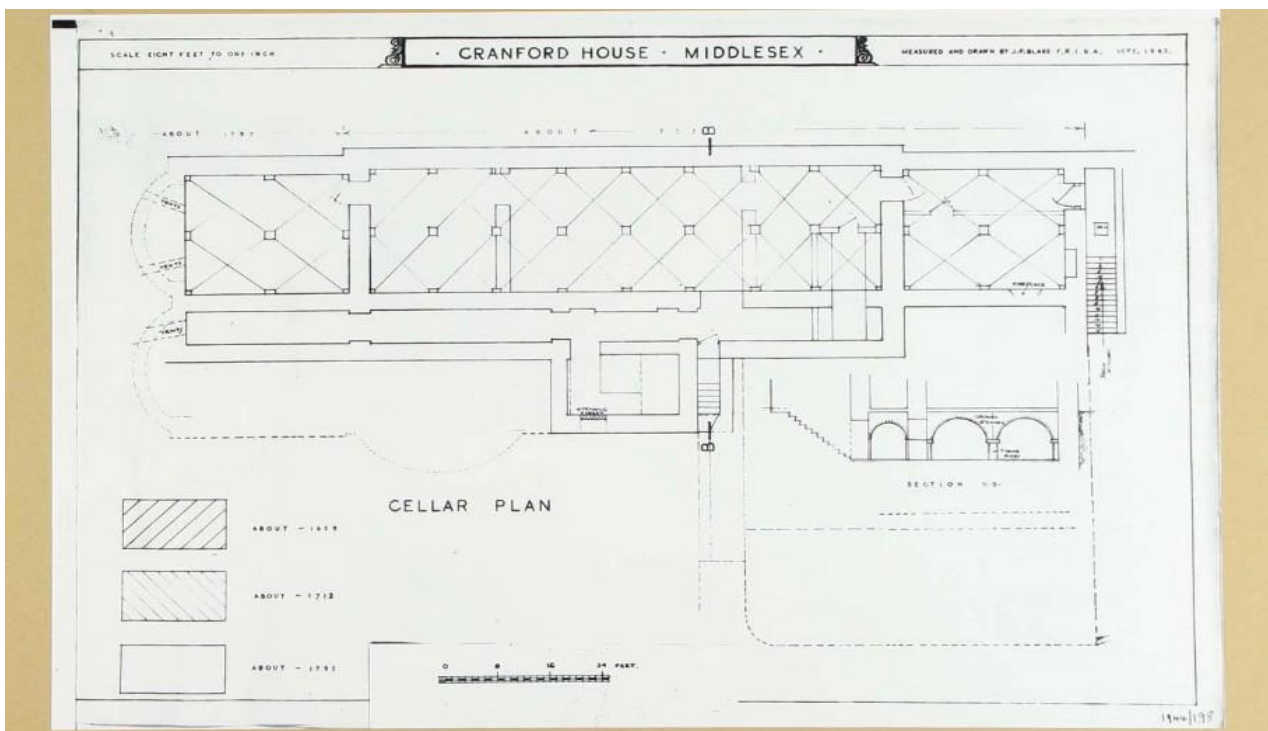


Cranford House from the South-East, undated, Gill collection, Orleans Gallery, Twickenham

### 1.1.3 The Cellars

The cellars comprise an extensive brick barrel vaulted structure, supported on square Portland stone piers with plain capitals, with a floor of brick pavers laid in a herringbone pattern. They comprise the main concourse, some 44 metres long, with a heated office at the northern end, a vaulted corridor along the eastern side, chambers with wine storage bins under the old kitchens and a narrow brick staircase with stone treads leading up to the ground floor. There are ventilation shafts (now blocked) on the south side, once leading to the terrace and two windows on the west side, presumably to a lightwell, but blocked in around 1800. Also, on the western side, there is a large, circular brick structure, with domed roof, visible only through a hole in the cellar wall. This may have been an ice house.

JP Blake, who drew the plan below, in 1943, believed the central section to be early 18<sup>th</sup> century, when the 3<sup>rd</sup> Earl rebuilt the house, with the sections at either end, added slightly later. (It should be noted that the second partition from the left is not shown in the correct location).



The Cellars, measured and drawn by JP Blake, FRIBA, Sept. 1943

The current entrance stair to the cellars, with metal trapdoor, was historically an external access, avoiding the need to go through the house. It may have been modified for use as an air raid shelter, although local memory suggests it was never used as such. There is a persistent rumour of an escape tunnel from the cellars to the ha-ha.



The Cellars looking north, by R. Barton 2015

#### **1.1.4 Kitchen Courtyard or Secret Garden**

This enclosed area lies between the western frontage of the stables and the northern end of the former house. It is surrounded by brick walls, about 3.5 m. high, but there is no evidence that it ever had a permanent roof. A well was discovered there when it was transformed into a garden in 2002. A door at its southern end, now blocked, once linked it with the service quarters of the house and there are other blocked doorways on the walls to west and east. The area is now entered through a narrow timber door in the courtyard wall and known locally as The Secret Garden.



The Friends in the Secret Garden, by R. Barton, March 2017

### 1.1.5 The Stables

The stables were built by the 3<sup>rd</sup> Earl in the 1720's. They comprise a rectangular building of brown brick with red dressings, of three elements. The central section has a facade with parapet, large semi-circular arched blind arcading and a central Dutch gable with inset clock. At the rear of this is a more recent, lean-to structure of no architectural merit, accessed via a compound at the rear.



The Stables, by A. Lad 2015

On either side of this section is a tall arched entrance, the eastern arch still retaining its huge timber gates, the western one retaining only the supporting pins of its former gates. To either side of the arches are two-storey structures with stables at ground floor and rooms above, reached by external staircases.



The western end of the stables and site of Cranford House (within the railings) by C. Baker 2014

The western stable has a loose box and two stalls, with 18<sup>th</sup> century mangers, troughs, hay baskets, wall tiling, stall dividers, retaining rings and a herring bone brick floor with drainage gulleys. There is a ventilation shaft which passes through the ceiling and is opened and shut by a paddle on the landing above. The eastern stable has four stalls, again with 18<sup>th</sup> century fittings intact and the termination point for a ventilation shaft. The Stables now house memorabilia and old photographs.



Stall in the western stable block, by C. Baker 2014

There was once a two-storey wing at right angles at the eastern end of the stables, demolished in 1945. This appears to have been used for stabling but also contained an open carriage shed. Old photographs and drawings show that this had the same tall semi-circular arcading as the front facade.



MB166

The Stables, Cranford Park Middlesex, showing the now demolished East Wing.  
Copyright English Heritage c. 1936



The clock in the Dutch gable is by Langley Bradley and its mechanism is still in place. It is dated MDCCXXI, shortly before the stables were built, and is believed to have come from Hampton Court Palace.

### **1.1.6 The Courtyard**

This has a cobbled floorscape which is illustrative of the history of the house and stables. The herringbone brickwork of the demolished wing of the stables is visible, as are the stone flags outside the servants' wing of the House. An investigation of the courtyard in 2019 discovered original stone paving under the grass verge by the Secret Garden, and brick foundations under the grass near the crinkle crankle wall. In the centre of the courtyard is a modern, hedged sitting area, possibly once the site of a maze. A small mounting block survives by the gate.

### **1.1.7 The Ha-ha**

The ha-ha comprises a brick retaining wall with a deep ditch on the outer side to prevent animals straying into the gardens, orchard and woods from the meadow.

A square ha-ha is shown on the 1720 map, completely enclosing the garden, from the driveway right round to the wall which formed the garden's northern boundary. However, at some later time, the southern arm was extended to defend the woodland and orchard, so forming a 575 metre long structure with a bridge half way down and a flight of steps. Later too, when the eastern part of the garden was used for greenhouses, a small part of the western arm was infilled to allow access through to the orchard.

It is alleged that there is a bricked up tunnel entrance in the western arm, leading to the cellars. This was said to have been constructed as an escape route for Mary, Dowager Countess of Berkeley, who was terrified she was going to be arrested for perjury.



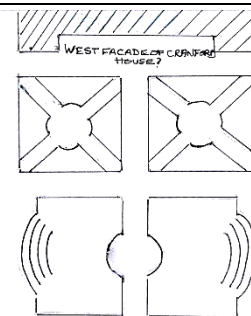
The eastern corner of the ha-ha, by A. Lad 2015

### 1.1.8 The Pleasure Grounds

The Pleasure Grounds were contained within the square ha-ha and, in the 19<sup>th</sup> century, separated from the kitchen garden to the north by shrubbery.

Christopher Luetchford, Chair of Cranford Park Friends' History Group, has researched the history of the Pleasure Grounds. He found evidence in the Coke papers in the British Library that the remodelling of the house in 1722 included substantial works to the grounds. The lists of purchases at that time included large amounts of soil, gravel and turf, a list of twenty species of deciduous trees, several different types of fruit trees for the orchard, a list of nine flower varieties for the gardens and building materials for the construction of greenhouses in the kitchen garden. However other than references to trees being acquired for "My Lord Berkeley" for the layout of "walks and plantations", there are no details as to where these items were to be used.

Christopher Luetchford also found, amongst the Coke papers, a small rough pencil sketch in the margin of a document, which might just relate to the layout of parterres, shrubbery and planting in front of the west facade of Cranford House, long since replaced by the more informal planting of later decades.



He has also pointed out that an aerial photograph of 1932 shows what appears to be oval flower beds in front of the west facade, and a flowerbed which resembles a geometric rose garden on the outskirts of the woods.



<http://www.britainfromabove.org.uk/image/EPW040463>

© copyright English Heritage

Cranford House and Gardens from the air, September 1932, courtesy of Historic England

In 1936, the RCHM noted some stone fragments in the SW corner of the gardens. Heraldic devices have tentatively linked these with the Diana Fountain of Nonsuch Palace. The first earl, as Keeper of Nonsuch, had supervised its demolition.

Today little remains of the Pleasure Grounds. A few rhododendron bushes have survived, near to the site of the old house, together with holly, several yews, four large low-branching oak trees and a prominent lime tree. There survives the base of a sundial on the south lawn.

### **1.1.9 The Walled Gardens**

The garden walls enclose a long, narrow, irregularly shaped area on the north, west and east sides, with a short return section with an entrance, on the south-western corner. The wall does not appear to have ever extended along the remainder of the southern side: there may have either been a fence there or a natural woodland barrier. There is a path west-east between the back of the garden walls and the motorway embankment, of which the eastern part at least appears to have been shown on the 1720 map.

The uses to which the walled garden was put changed over the years. The 1720 survey shows the area within the ha-ha as being the garden to the house and the long triangular section to the west as being the 'kitchen garden'. The 1820 map shows a similar layout. By the 1881 OS map, the kitchen garden appears to be an orchard, and the northern part of the garden to the house has greenhouses and outbuildings within it. (See maps in Section 1.2.1)

The long garden wall, which turns the corner to meet the back of the stables, was probably built in the 17<sup>th</sup> century, though altered in the 18<sup>th</sup> century and later. It is some 530 m in length and it varies in height between 2.5 and 3.5 metres. It runs west/east until it reaches the line of the original ha-ha, where there is a passage through the wall. This is strangely offset, perhaps to render the gap invisible from the house. It may have been designed as the gardeners' entrance to the kitchen gardens, to avoid them walking through the formal gardens. There is also a three metre kink outwards at the eastern end of the wall, where a large greenhouse stood in the Victorian and early 20<sup>th</sup> century eras.

There is a section missing in the wall as it turns the corner to meet the Stables. This may have been taken down deliberately or it may have been dismantled when the high pressure gas main was put through, under the walled garden.

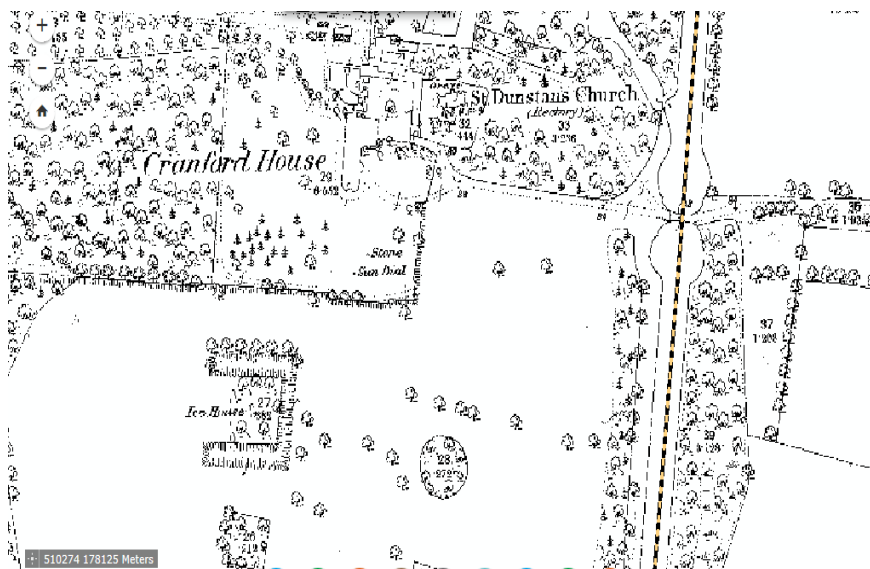
### **1.1.10 Crinkle Crankle Wall**

This is a short section of serpentine wall, standing at the southern end of the courtyard. Its line is visible on the estate map of c.1800, where it appears to have been built as a boundary to an external stone paved yard outside the projecting servants' wing. It is listed Grade II.

### 1.1.11 The Ice House

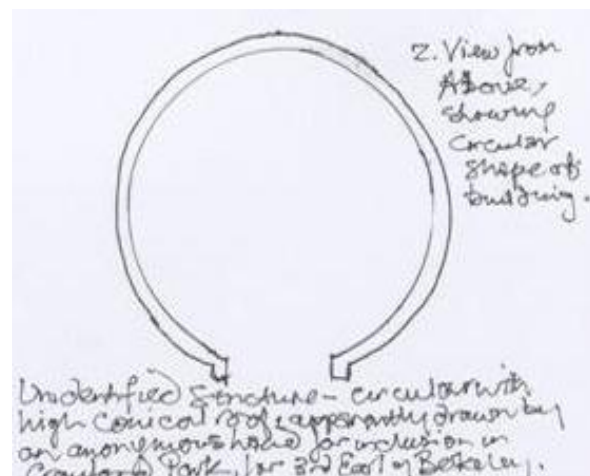
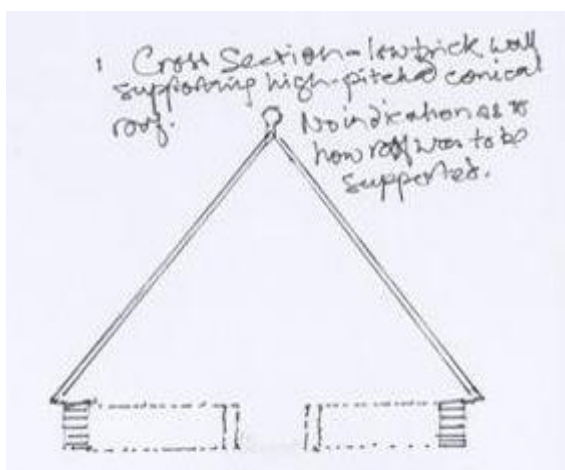
The Ice House is located due south of the Pleasure Grounds beyond the ha-ha and within a dense copse of trees. The structure was probably built in the 1720's, when Cranford House was rebuilt, to keep fruit and other perishable goods fresh.

The Ordnance Survey maps of 1881 and early 20<sup>th</sup> century show that the ice house had a substantial moat on its northern, eastern and southern sides. The area covered by ice house and moat together is approximately square in shape and very large: some 65 metres x 73 metres. It was uncovered in the 1980's but was not fully investigated and recorded before being backfilled.



Ordnance Survey County Series 1865

Drawings in the margins of the Coke Papers, may depict the ice house. If this is so, the structure would have had a circular brick chamber, with an opening and a conical roof rising from a low brick wall.



(COKE PAPERS (SERIES III) Vol. XXX: Architectural Papers of Thomas Coke.

There is very little sign of the ice house now, other than the depressions formed by the northern and eastern arms of the moat. Some years ago, the mouth of an upward-facing pipe, flush with the ground, could be seen within the north eastern part of the moat, perhaps an outflow for melted ice from the Ice House chamber. Also visible at this time was a large rectangular thick concrete slab adjacent to the south side of the path that runs through the site, possibly a capped-off entrance to the underground chamber. An interpretation board stands at the edge of the copse.

#### **1.1.12 Brick Structure west of Ha-Ha**

In February 1998, a brick structure with substantial walls was revealed during unauthorised digging for old bottles. It lies in woodland, 13m west of the inner bar of the ha-ha and is 0.3m below the surface. It is a key shaped feature, the circular element having an internal diameter of 1.73m with a rectangular slot, brick floored and about 1.25m long and 0.55 wide, on one side. The end wall of this slot was of a single brick thickness and appeared to have been inserted later to block a conduit. The feature was only dug to a depth of 1.5 metres, so its full depth is unknown. 19th/20th century debris was removed and it was then covered with a protective wire grille.

Finds included broken pottery, several pieces bearing a coronet above an F, presumably for FitzHardinge. (The eldest illegitimate son of the 5th Earl of Berkeley had been created Earl FitzHardinge in 1841, his brother Maurice, Baron Fitzhardinge in 1861). However, most of the items recovered dated from 1880-1910.

The purpose of the structure is unknown. Suggestions have included: a garden water feature or well, another ice house or a gunpowder store which enabled cartridges for sporting guns to be made on the estate.

A short account, map and photographs were published in the London Archaeologist 8(10) 1998. (APPENDIX 2)

#### **1.1.13 The Bridge and Driveway**

The current driveway follows the straight line of the 18<sup>th</sup> and 19<sup>th</sup> century driveway, which crossed over the River Crane, then ran due east to 'Hartlands', the Rectory and then on south. The line of this drive is still visible today, under the M4 flyover and out the other side down Church Road to Heston High Street. At the western end, in front of the former house, the current footpath layout still partly preserves the oval carriage turning circle, its gravelled surface visible through the grass.

The driveway bridge was designed in 1805 by the Architect Charles Beazley, as part of the 5<sup>th</sup> Earl's modernisations. The Berkeley archive contains some original drawings. It is a single track, hump backed bridge, constructed of red brickwork, covered more recently in a hard cement based render. It consists of a segmented arch with a plain keystone. The piers on either side have semi-circular rusticated

plinths that were originally designed to carry decorative urns. The panelled walls supporting the sloped approaches to the bridge curve out in quadrants of an oval, to curve around the former moon ponds. There is a 6 tonne axle weight limit to protect the bridge from structural damage by heavy vehicles.



Historic England Archive: CGH01 0075, 1892-1933 CG Harper Collection

### 1.1.14 The Statue

A life size marble statue of a woman with a Cupid like child at her side survives from the Berkeley gardens. It was found many years ago, near the river, but later rescued and kept in the Information Centre.

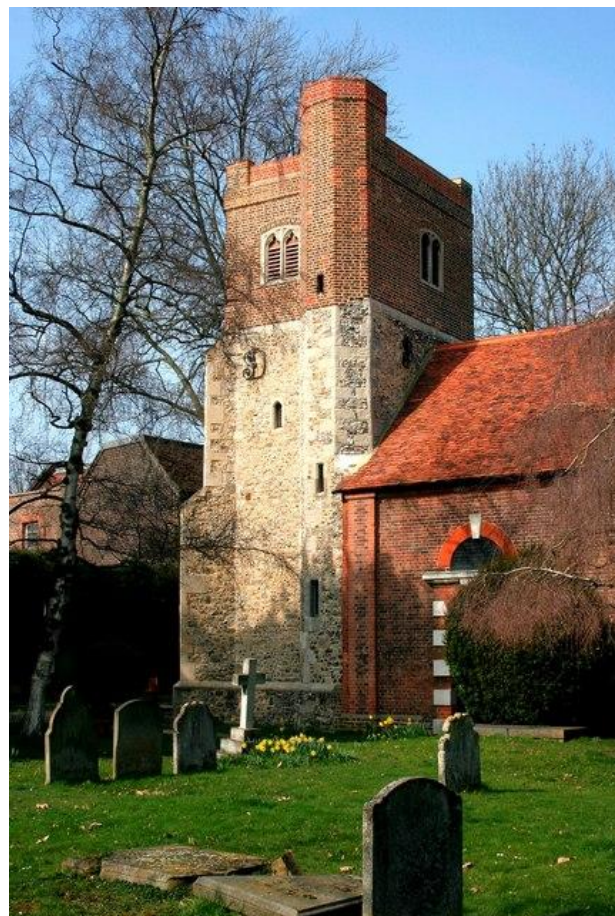
When the Centre was burned down the statue was badly damaged. It was later restored and is now on temporary display at Botwell Library, pending its return to Cranford Park.



**1.1.15 St. Dunstan's Church and Churchyard** (This is not part of the project site, although its history, connections with the Berkeley Family and its location mean that it is inextricably linked with Cranford Park)

Surviving records and documents suggest a 7<sup>th</sup> or 8<sup>th</sup> century Saxon church existed on the same site as the present building. The Domesday Book of 1086 mentions a priest who served at the church in Cranford prior to the Norman Conquest of 1066. Although much of the church was damaged in a fire in 1710, the 15<sup>th</sup> century tower, some of the wall fabric and its bells and monuments survived. One of the six bells was cast in 1380, making it likely to be the oldest bell in the diocese of London. Within the church is a medieval wall painting of early 14<sup>th</sup> and 15<sup>th</sup> century date and a superb collection of funerary monuments, including two prominent 17<sup>th</sup> century monuments to Sir Roger Aston and Lady Elizabeth Berkeley.

The churchyard has a Victorian lych gate of dark stained timber set in an attractive curtilage wall and its mature trees are subject to a Tree Preservation Order. On the churchyard wall is a plaque to comedian Tony Hancock, whose ashes are buried in the graveyard.



### **1.1.16 The Orchard**

The Coke Papers in the British Library list the fruit trees purchased by the 3<sup>rd</sup> Earl for his new orchard - some 65 different types, including cherry, apple, nectarines, figs and apricots. Although it is not clear where these were planted, the 1881 OS map shows an orchard in the western end of the kitchen garden, where the current orchard is sited. There was also an extensive orchard to the north of the walled garden which was destroyed by the construction of the M4.

The current fruit trees are thought to date from 2005. There are 39 different species of apple and 7 of pear. (APPENDIX 3)



Path through the orchard, by A. Lad, 2015

### **1.1.17 Cranford Wood**

Cranford Wood, to the west of the old house, is of high landscape, ecological and recreational value, partly due to the age and size of many of the trees and the attraction of the spring flowers, particularly bluebells, and partly because there are relatively few mature woodlands in the area.

Some of the invertebrate species recorded suggest that elements of ancient woodland survive here, although the woods were augmented in the 18th and 19th centuries by exotic trees such as Wellingtonia and other formal plantings introduced by the Berkeley Family. The wide variety of native and exotic deciduous and coniferous trees forms a high canopy, which towers above its surroundings and can be seen for many miles around the Park. The woods attract many walkers, in spring enjoying the extensive carpet of Bluebells and Red Campion, vibrant red Copper Beech leaves and spectacular Horse Chestnut 'candles' and in the autumn, the dazzling colours of the leaves.



The range of native tree species in Cranford Wood includes mature Hornbeam, Sycamore, Beech, Lime, Oak, Larch, Sweet Chestnut, Ash, and Yew, with an understorey of suckering elm, cherry, holly, elder, and an increasing establishing of native ground vegetation such as foxgloves.

### 1.1.18 Individual Trees

There are three Veteran trees within or at the edges of this woodland:

The Ancient 'Domesday' Oak tree (500 - 550+ years), which stands at the edge of the wood near the Pleasure Grounds. The tree is mostly hollow, and is supported on two sides by wooden posts. It has a circumference of 6.9 metres. A limb broke off it in a storm in August 2019.

Photo by C. Baker, 2018



Sweet Chestnut (300-350+ years). This stands in the grassland just to the south of the ha-ha. It has a trunk of 5.75 metres circumference, and was mentioned in Richard Mabey's book 'Flora Britannica'.

Photo by C. Baker, 2018



Cedar of Lebanon (150-200+ years), in the Pleasure Grounds. It has a circumference of 6.8 metres

Photo by R. Barton,



## Other notable trees

1. Avenue east/west through Cranford Wood, along the former drive, mostly comprising mature horse chestnuts, with some beech.
2. A mature lime, in which mistletoe grows, in the corner of the Pleasure Grounds.
3. Group of four mature oak trees in the Pleasure Grounds, two multi-stemmed with huge trunks.

A Tree Preservation Order at St. Dunstan's Churchyard (TPO 460), was made on 20<sup>th</sup> September 1989. It lists seven individual trees: Tree of Heaven, Corsican Pine, Sweet Chestnut, Gean, Silver Birch, Yew and Horse Chestnut and 9 groups of trees. The circular plantation (G1) at the eastern end of the Churchyard and visible on Victorian maps, comprises: 4 Wellingtonia, 2 Beech and 1 Deodar Cedar. (APPENDIX 4)

### **1.1.19 Meadowland to the South of the Park**

Prior to World War 2, the area was traditional pasture land. During and post war (1941-52), it was cultivated with wheat, but was afterwards reinstated as grassland, probably with some of the original sward composition. In 1991, the mowing frequency was reduced to allow it to develop into a wildflower meadow. A band of wildflowers was sown in the meadow close to the driveway in 2019.

In 2018, five Sussex cows (known affectionately as 'the girls') were introduced as a trial, to graze the meadow and enhance its natural biodiversity, a project supported by Natural England's Countryside Stewardship Scheme.



Cows in the Meadow, by C. Baker 2018

Grasses found by Middlemarch during their Botanical surveys in 2019 included Yorkshire Fog, Timothy, Meadow Foxtail and Red Fescue. However there were many coarse grasses too. Amongst the butterflies recorded in the 2019 meadow transects were Marbled White, Small Heath, Large Skipper, Small Copper and Painted Lady. Birds regularly seen or heard there include Skylarks, Meadow Pipits and Kestrels.

### **1.1.20 Wetland Areas**

#### **a. Parkland Wetland**

The area east of the river and just south of the driveway bridge originally comprised a series of hollows and channels. It was enhanced in the late 1990's to form a complex of ponds and marshland, linked by ditches. Now 1,000 sq metres of marshland containing two small pools, it is home to a variety of wetland flora: great reed mace, yellow iris, greater pond sedge, false fox sedge, water plantain, water pepper and creeping yellow cress. It is also home to a large population of common newts and at least eleven species of dragonfly.

#### **b. Southern Wetland**

This is a ditch, flanked by marshy ground, some 275 metres long, terminating at the Frogs Ditch by Cranford Lane. Water is present in the ditch all year, fed via land drains from the meadow, natural seepage and high ground water. In 2007, the ditch was widened into a pond and a sluice inserted. In spring, it is frequented by spawning Common Frogs, Teal and, occasionally in winter, Snipe visit. Ground vegetation includes Horsetail, Fool's Watercress, Remote Sedge, Water Forget-me-not, Yellow Iris, Gypsy-wort and Reed Sweet-grass. Purple Hairstreak butterflies have been spotted in the oaks bordering the wetland in mid-summer.

### **1.1.21 River Crane**

The River Crane is a tributary of the River Thames. It originates in Pinner as the Yeading Brook, and becomes the River Crane near the Grand Union Canal in Hayes. The Crane and Yeading Brook together are 24.5 miles long. The river runs north/south through Cranford Park, for the most part forming the boundary between LB Hounslow and LB Hillingdon. It joins the River Thames at Isleworth.

#### **a. The Canals, Moon Ponds and Structures**

The upper part of the River Crane, to north and south of the driveway bridge, was straightened, widened and canalised by James, 3<sup>rd</sup> Earl of Berkeley, in the 1720's and 1730's, to form an ornamental, rectangular lake. This was part of his grand plan to remodel the Park, to create a fashionable, formal landscape. The sections of canal either side of the bridge were each approximately 250 metres long, stretching

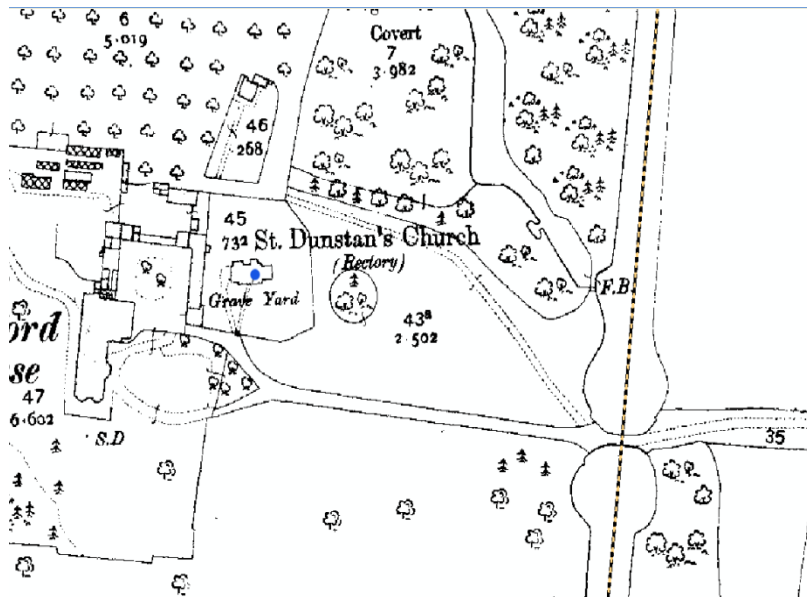
from the footbridge leading to Avenue Park in the south, to the moated site of Cranford Le Mote in the north. On either side of the driveway bridge, and on each side of the canal, four 'moon ponds' were created. These are clearly visible on the Rocque Map of 1754. (See Section 1.2.1)

The northern canal was fed by the River Crane, at an angle, part way down its length, the junction being later adorned with an ornate, curving 'Chinese' foot bridge'. This bridge was probably added by the 5<sup>th</sup> Earl, seeking a more naturalistic landscape, and fashionably drawing inspiration from Chinese gardens. He may also have added what may have been a 'temple' summerhouse at the head of the canal, a structure apparent on the 1820 plan of Cranford Parish.

By the Ordnance Survey Map of 1881, a structure described as a 'Boat House' stood there, and punts were used for pleasure-boating on the canalised section of the river during the Berkeley's tenure. The northern section of the canal was cut in two by the M4 and after this, the River Crane was relocated so that it fed into the top of the canalised section. The canal sections were also widened and straightened at this time, resulting in little marginal vegetation.



'Chinese Bridge' over the link between the River Crane and the ornamental lake. In 1961, the construction of the M4 Motorway began, just beyond the fence line in the photograph



The Chinese Bridge marked as 'F.B.' on 1865 OS Map

#### b. The Natural Section

The section of the River Crane south of the footbridge to Avenue Park and north of Cranford Lane is natural. This has been designated a Site of Metropolitan Importance for Nature Conservation. It was upgraded from site of Borough Importance, Grade II in 1988 due to the increase in BAP species recorded there. There are mature Ash and Oak trees, with pockets of Field Maple, Hawthorn, Elder and Blackthorn while Dog Rose and suckering White Poplar form understorey thickets. However, the tree cover is mostly very dense allowing little access to the river and although this is a natural section of river with pools, riffles and meanders, the heavy shading and steep banks allow little aquatic or marginal plant growth.

#### 1.1.22 The Frogs Ditch

The Frogs Ditch skirts the western edge of Cranford Park at the northern end, and has been diverted to follow the boundary of the park, and then Cranford Lane, before meeting the River Crane at the foot of the park. It suffers from very high pollution levels, partly due to the run-off from the M4 and partly due to the Thames Water surface water sewer. Little or nothing can grow or live in it. The small brick bridges crossing it at the northern end partially obstruct its flow and the stream has been known to flood in that area.

The Frogs Ditch originally crossed over the meadow diagonally to join the River Crane higher upstream than now, and this is the route it will still take when the flood waters are high.

### **1.1.23 Biodiversity**

The mature woodland, open grassland, scrub and tall riverbank vegetation are all very important habitats within Cranford Park and the hedgerow and river provide important linear routes, connecting different parts of the park and providing easy passage for birds, insects and plants.

The woodland and scrub provide nesting and feeding sites for more than half of the regularly occurring bird species and a home to mammals such as Hedgehogs, Wood Mice, Fox and Muntjac deer. The ecological surveys of 2019 saw no evidence of Water vole, Otter or Dormice. Neither was there any evidence of Great Crested Newts in the ponds or rivers, although Smooth Newts were plentiful, Frogs too.

The 2019 surveys, together with sightings by Wendy Marks, recorded no less than 63 birds in Cranford Park in 2018/19, of which 11 were Red listed and 10 Amber Listed. Many were thought to be breeding there, including the Red listed Linnet, House Sparrow, Song Thrush, Mistle Thrush, Skylark and Grey Wagtail. Amber listed birds included Kestrel and Dunnock whilst Kingfishers are now regular visitors. Birds nesting locally but foraging in the park include swifts, swallows and house martins. A recent visitor to this country is Cetti's Warbler, which was found to be breeding in the Park in 2019. (APPENDIX 5)

At Cranford Park, the 2019 surveys recorded, surprisingly, eight different bat species, including the rare Alcaethoes Bat. They also confirmed that Brown Long-Eared Bats have maternity roosts in the upper floors of the stables, and Common and Soprano Pipistrelles have day roosts there too. Bats are protected under the Wildlife and Countryside Act 1981, so mitigation strategies will need to be adopted. (APPENDIX 6)

The year 2019 was also a bumper year for butterflies. No less than 26 types of butterfly were recorded by Wendy Marks, amongst them Purple Hairstreak and Silver Washed Fritillary. Wendy sends fortnightly butterfly transect reports, March to August, to the UK Butterfly Monitoring Scheme (UKBMS). (APPENDIX 7) This began in 2008. Moth recording re-started in 2008 too, and at least seven BAP priority species have been found.

Many nationally scarce invertebrates have been recorded since 1995: Stag Beetles, Ruddy Darter, Long-winged Conehead, Roesel's Bush Cricket, Longhorn Beetle, Solitary Bee, Hoverflies (11 species), Soldier Flies (3 species), Snail Killers and Pipunculid Flies.

(See: 'Management Plan for Cranford Park', Green Spaces Team, LB Hillingdon – 2013-2017 see <https://www.hillingdon.gov.uk/localparks>)