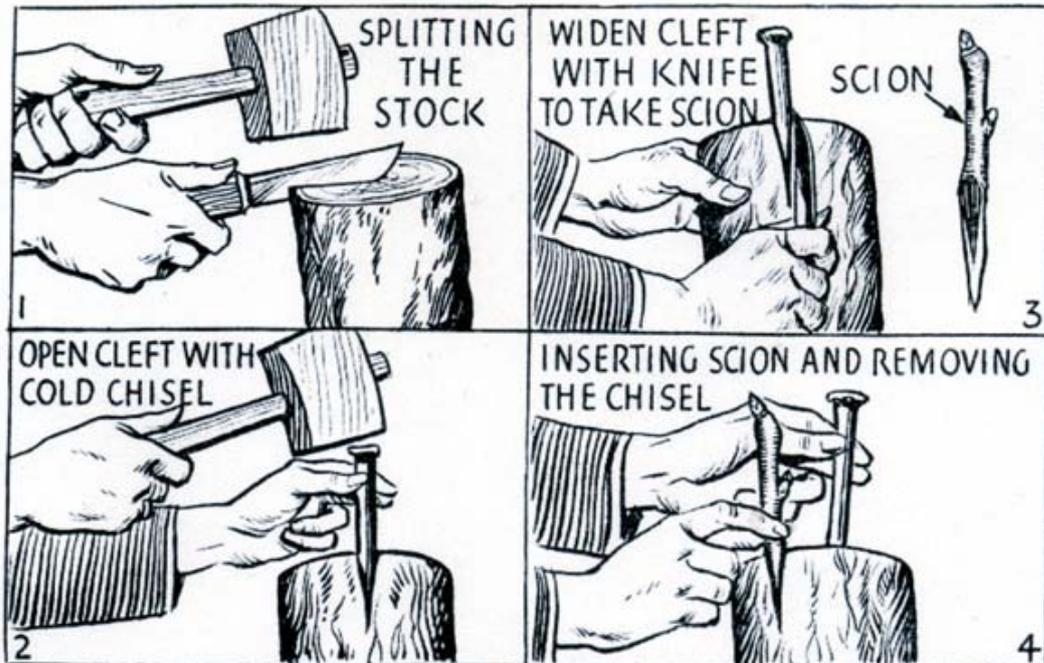


THE CAMBRIDGE COMMUNITY COLLECTION

SOUTHERN CAMBRIDGE CONNECTIONS PROJECT PROPOSAL NEVILLE GABIE

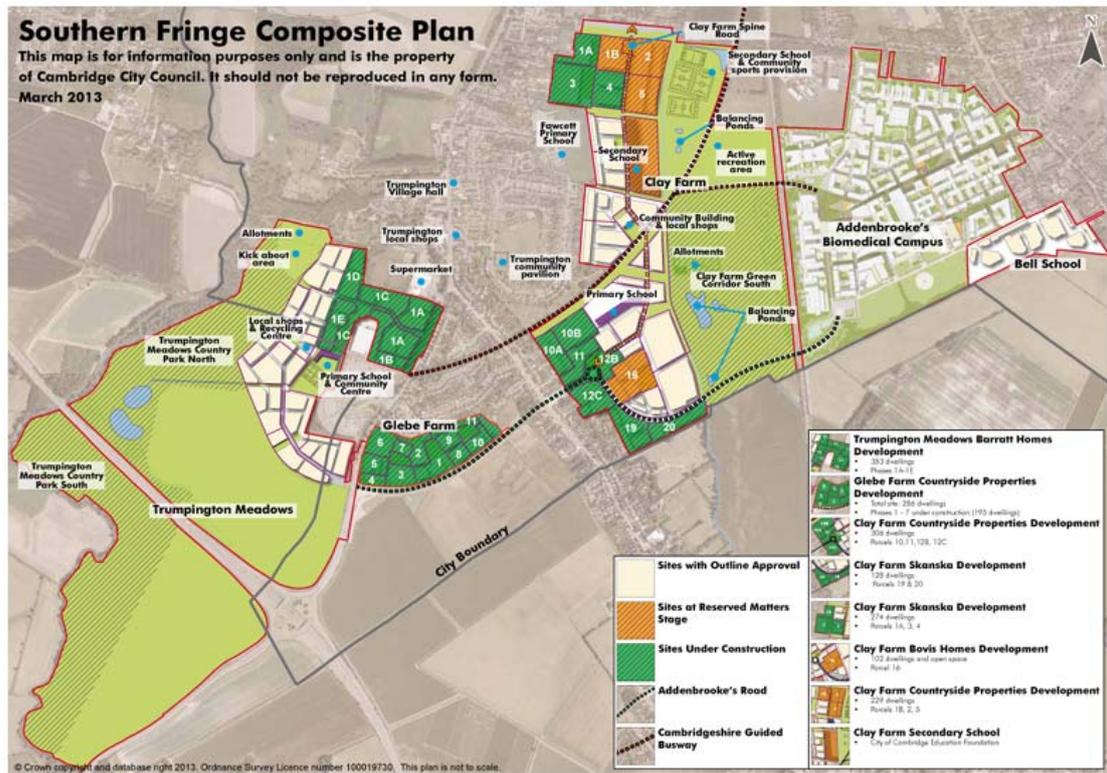


In December 2012 I was appointed to develop a proposal in response to a brief to look at routes and connectivity for the South Cambridge area. Given the number of large scale developments within the Southern Fringes of the city, the brief was specifically intended to consider and develop an artist's project in response to;

- Links between the new developments on Clay Farm and Glebe Farm with the existing communities of Trumpington, the city centre and outlying villages - Wayfinding
- To consider routes between Addenbrooke's Hospital and the proposed Biomedical development area with new and existing residential communities and the City.
- To promote walking and cycling routes to Nine Wells Nature Reserve, Byron's Pools, Grantchester Meadows, the new development on Trumpington Meadows and the Country Park.

- To work with the City Council and all key stakeholders, including local community/ interest groups – and to link the work to other commissioned artists working in the Southern Fringe across all development sites.
- To develop and implement the final project over a three – four year period.

This framework document brings together my final proposal, outlining the evolution of the idea, the conceptual underpinning, a developed budget and timescale, established partnerships and those people with whom we wish to work. It is a project which is hugely ambitious and will require a very significant involvement with new and existing community groups, as well as the support and commitment of Cambridge City Council.



THE CAMBRIDGE COMMUNITY COLLECTION - PROPOSAL

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1 Project outline, the concept and its evolution

*At its heart, **The Cambridge Community Collection** will use apple trees as the means of establishing a network of routes between the city centre, Trumpington and the new developments, local nature reserves and outlying villages. **The Cambridge Community Collection** will be a completely unique, publicly accessible orchard including every apple variety* held by DEFRA at the national fruit collection in Brogdale, Kent and The East of England Apples and Orchards Project; approximately 2,150 different varieties. The intention is for the trees to be adopted, nurtured and maintained by existing and new communities in the Southern Fringe.*

The concept and its evolution – From December 2012 to the spring of 2013 I began to consider the brief by trying to understand the evolution and history of Trumpington and its relationship to Cambridge. As well as evidence of Iron Age and Roman settlements in the area, Trumpington is mentioned as a thriving village in the Domesday Book, so its roots go deep. In more recent times it is a place with close links (through the Plant Breeding Institute) to the development of food crops in particular potatoes and wheat varieties, and with a strong farming tradition.

Perhaps the most significant building development, prior to this current phase, was the large scale increase in population as a result of the post war housing. Whilst the older parts of the village are still very visible, Trumpington is dominated by its 1950's housing stock. Significantly it is no longer an outlying village but has been absorbed into the fringes of the city itself. Since the 1950's Trumpington has remained largely unchanged, until now. With the last farms being sold for development and the City boundaries being redefined, Trumpington and the Southern Fringes of the City will see a doubling of its population and housing stock. Transport

links to the City Centre have been significantly improved with the new guided bus, park and ride scheme, cycle routes and footpaths and road access to Addenbrooke's. The new developments include; new shops, village centres and schools. This influx will involve a huge cultural shift for the current inhabitants as an entirely new community are grafted into the existing one.

What are the social implications of that? How do you develop a framework or structures to integrate such a large influx? What would be a positive outcome?

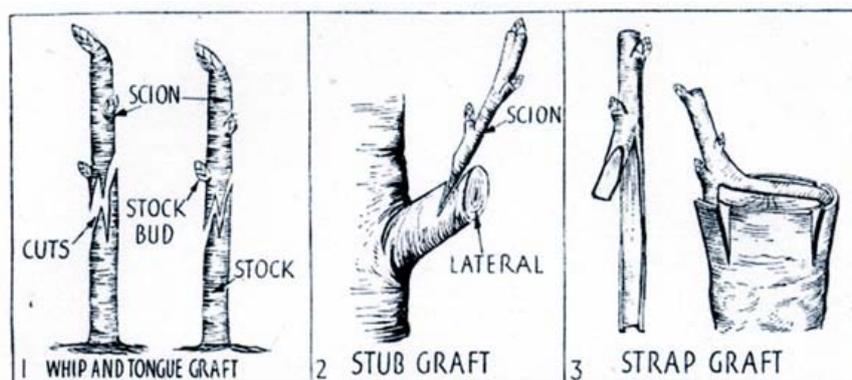


These were some of the questions I began to ask myself as I walked between old and new, established buildings and sites where new buildings had still to be imagined. If an apple tree can be thought of as a metaphor for Trumpington then it would perfectly describe my thoughts. Apple trees do not reproduce from seed. If you wish to grow a particular variety, graft wood needs to be cut into a rootstock. The rootstock could not produce quality fruit without the graft and the graft could not reproduce without the rootstock. If South Cambridge and Trumpington are to thrive into the future, the same symbiotic and mutually dependent relationship between existing and new communities needs to be fed, nurtured and established.

Routes and pathways - To begin to understand the routes myself I began by making a series of walks, cycle rides, bus and train journeys into the city centre via Trumpington, taking in several detours to sites of natural and local interest; Nine Wells, Byron's Pools, Grantchester, Harston etc. As well as making these journeys independently, on occasions I have been lead by members of the local community and City Council Officers in an effort to understand the area from differing perspectives. Regardless where I began, as you approach the city, you inevitably reach more formal landscapes, particularly those of the University Botanical Gardens. In the

gardens, almost the first thing I came across was an apple tree, Isaac Newton's Apple Tree – or at least a graft cut from the original in Grantham. I was struck by several thoughts at the same time, which significantly influenced this proposal.

- Is there not something extraordinary about apple trees that the seed of the fruit will not bear the same offspring?
- That apple trees require human intervention and selection to thrive?
- That at the heart of the university garden is a tree which prompted great academic insight?
- That a tree originally found wild in Kazakhstan has become to be seen as quintessentially English?
- Developed over centuries to a point at which there are well in excess of 2000 cultivated varieties, as few as six are on offer on supermarket shelves?
- That the university holds collections and archives of books, objects, plants, art, maps, which significantly define who we are and hold the key to future discoveries and insight?
- That apples and the growing interest in orchards, can be at the heart of fostering community?
- And perhaps the most important question at the time. Do orchards play any part in the social and cultural life of the City?



Cambridge and apples – It quickly became evident that Cambridge has a long association with apple trees. In South Cambridge there are historic, cultural, economic, university and

contemporary examples of the affection for apples. There are also about twenty varieties specific to Cambridgeshire, many related to specific orchards, which existed around the city.

Today in south Cambridge there are the following associations to orchards:

- **The Orchard Tea Rooms**, Grantchester, made famous by the poet Rupert Brooke.
The Orchard Tea rooms have a long and historic relationship to writers and poets over many generations and it continues to be a major tourist destination.
<http://www.orchard-grantchester.com>
- **The Trumpington Community Orchard**. A recent orchard stocked with Cambridgeshire Varieties.<http://trumpingtonorchard.org>
- **Long Road Sixth Form College**. A small orchard within the campus courtyard.
- **Harston**, an ancient, historic Orchard and Meadow, currently being rejuvenated.
<http://cwr.naturalengland.org.uk/default.aspx?Site=5046>

Two new community orchards will be delivered as part of the Trumpington Meadows and Bell School developments.

Cambridge a place of learning – there was something else. Cambridge as one of the oldest university cities in the world has, through centuries brought together academics, collections of books, archives of antiquity, maps, objects, paintings, collections of scientific research, which include the Botanical Gardens. It seemed essential to develop a work which in some ways built on that academic tradition by creating a unique body of work. The site in Southern Cambridge includes Addenbrooke's Hospital, again another exemplar of pioneering medical research. The land around Addenbrooke's has been specifically set aside for the development of new medical research facilities. So research, the quest for knowledge, the ambition of preserving and improving our quality of life is at the core of what the city does. Walk around the new developments and read the wording on any of the hoardings. Words like 'sustainable' 'family' 'functional' 'beautiful' 'community' are frequent by-words for the developer's ambitions.

The idea of planting an orchard echoes some of the developer's ambitions. But to plant an orchard which has something unique about it and which taps into the underlying ethos of a university and research city, it demanded to be different. It was the bringing together of these

loose threads which lead to a proposal to create an archive, a data-base, a living, functioning, community involved, sustainable pathway of every apple tree variety that has been developed from the original ancestor trees in Kazakhstan. And to plant it as a network of pathways that lead from the periphery to the centre of the city.

*There are approximately 50+ varieties of apple tree which are protected by patent which we are not allowed access to.

2 The routes and links, people and place, signage without signs

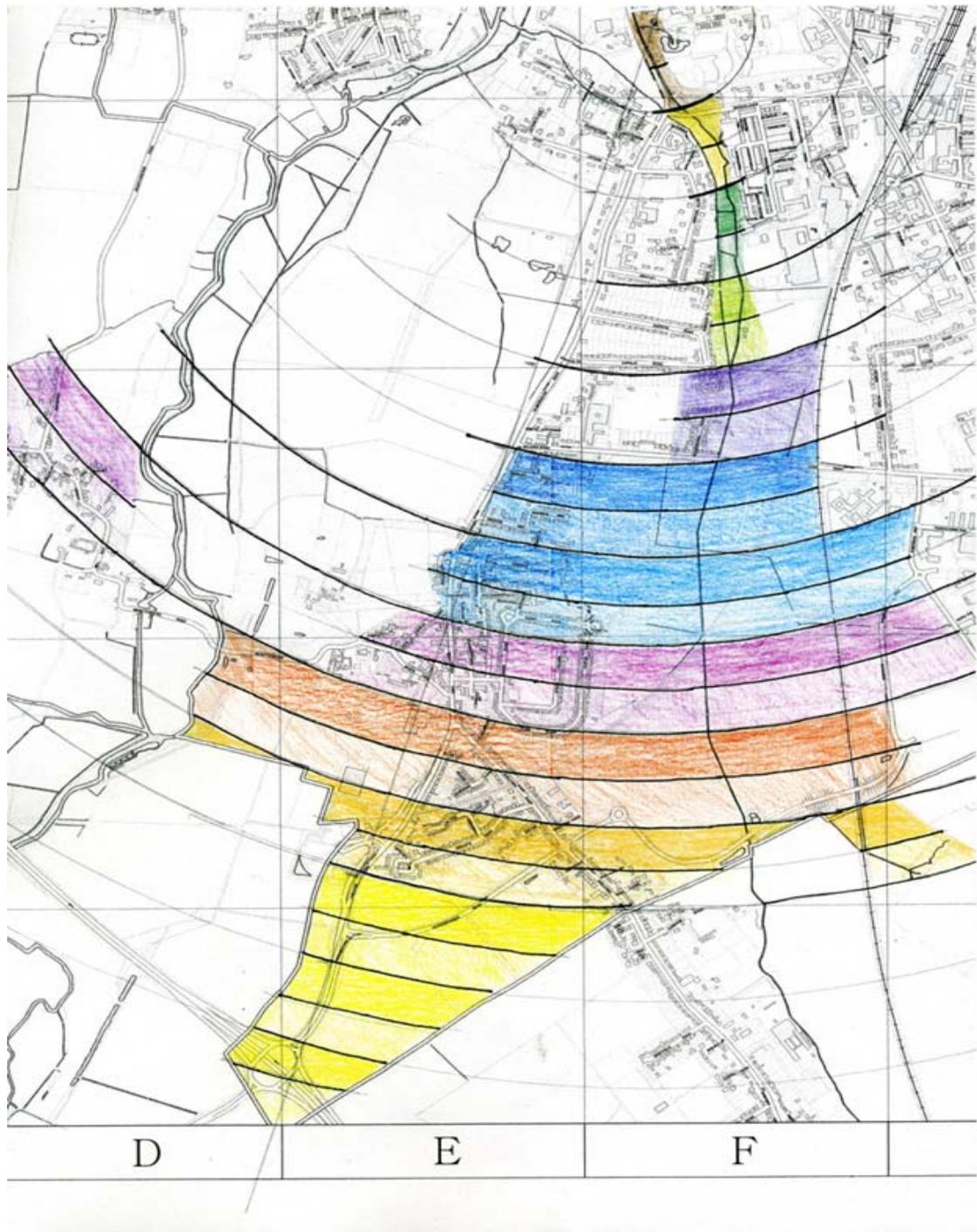
An orchard stretching from the edges of the city to its centre, planted in public open spaces as well as being visible within private gardens. A collection of every variety of apple, maintained by local community groups for the wellbeing and benefit to all. A means of Wayfinding for Southern Cambridge, signage without signs.

As outlined there are already a number of small orchards and single trees within South Cambridge. The idea of 'The Cambridge Community Collection' is to enhance these, to build on what exists with the community, who are already enthusiastic, at its heart. But what makes this concept unique is that it will also be the only collection of every apple tree variety apart from DEFRA's collection in Kent and varieties held by the East of England Apples and Orchards Project. The ultimate concept is for the trees to provide navigational or way-finding routes around the Southern Fringes and into the City Centre, so how will that work?

There are over 2000 different varieties of apple tree we will have access to in the DEFRA and the East of England Apples and Orchards Project collections. These come with names from A-Y in the alphabet, from 'Abbondanza - Yarlinton Mill'. The idea would be to plant the Orchard alphabetically, in concentric circles from the fringes of the city to the Botanical Garden. [See attached plan A] By seeing the name of any tree one would immediately know where one was in relation to the centre, and by moving up or down the alphabet, one would have a clear understanding of the direction in which you were travelling. Within any band, trees would be planted in order next to one another, as you would find in a library index. So for example

'Chorister Boy / Christine Mannson / Christmass Pearmain' would follow one another. As the trees would be grown from a graft, we can determine the form of each. So while one might be grown as an espalier, others could be planted as hedging, or specimen trees, depending on exactly where we choose to plant.

Proposed Alphabetical zones - concentric circles from the fringes of the city to the Botanical Garden



- Each tree or plot would have a name and alphabet tag for route finding, similar to those found in Botanical gardens. However in addition to being an identity label, they might include local history, anecdotes or other references.
- Trees would be planted in different groupings – small orchard plots to singular trees along specific routes.
- Tree types would vary according to their situation – informal and unmaintained in the nature reserves to formal plantings of espalier in the built environment.
- Routes have been divided into ‘Primary’ and ‘Secondary’ with ‘Orchard Hubs’ at key locations.
- Routes are beginning to be identified and will run between schools, the new community facilities, through old and new estates, along the guided bus route, cycle foot paths, and along Hobson’s Brook.
- They will link existing Orchards at Grantchester, Trumpington, Harston and proposed community orchards in Trumpington Meadows and Bell School.
- Routes will also extend to some of the nature reserves at Nine Wells and Byron’s pool.
- There will be a printed and web based ‘tree guide’ and route map

3 The timescale

It was always the intention that this particular commission would be developed over a number of years. To a large extent that is a result of keeping in step with the build out the development areas and phasing. This proposal is based on a timescale where the first trees would be planted in Autumn 2014 and the last in Autumn 2018 There are a number of reasons why a protracted timescale to complete this particular proposal are ideal.

- Routes linking the new developments between each other and to the city centre are in their very early days of evolution and the timescale will allow us to respond to these changes
- The intention is that community groups will adopt and maintain the trees into the future. To build a network of volunteers and interested groups takes time, particularly when large areas of housing are yet to be built and inhabited with new residents.

- Planting 2000+ trees in one season would be very ambitious and by staggering the planting over 5 years, we can plant more mature trees in the more vulnerable areas.
[please see proposed budget plans for possible planting cycles]

First trees planted – In order to begin a cycle of planting commencing in Autumn 2014, it is essential to begin the process of grafting the apple trees by January 2014. An order for rootstock would ideally be made by the end of December 2013. A possible proposed timescale for planting could be as follows:

Dec 2013 – 500 trees ordered and grafted

Autumn 2014 – 250 trees planted [maidens, or one year old trees which would be vulnerable]

Dec 2014 – 1,507 trees ordered and grafted

Autumn 2015 – 250 trees planted [maidens, or one year old, which would be vulnerable]

Autumn 2016 – 500 trees planted [two year old trees]

Autumn 2017 – 500 trees planted [three year old trees]

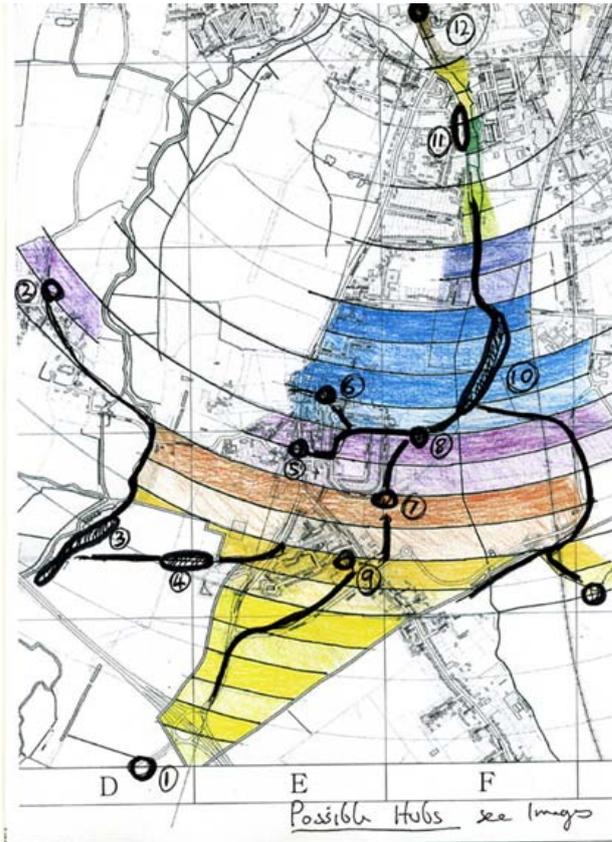
Autumn 2018 – 257 trees planted [five year old and trained as espalier]

In between these dates, particularly in spring and autumn, and in collaboration with interested local community groups the idea would be to have a series of workshops and events around pruning and maintenance, apple days, juice making, etc. Just as the orchard grows the plan would be to nurture a community of practical support drawn from all in the area.

Delivery Management

We are in the process of identifying possible locations and routes with City Council Officers and local community members. This will be an ongoing process, which will evolve as the area develops. However, there are some key locations, which need to be established to create a framework for way-finding.

It is also worth pointing out that Cambridge City council already use a system/database '*Ezytrees*' which locates every tree within the city and can provide details on its type – condition– age etc. We would use this system to accurately record data on each apple tree planted. A version of this could be developed for public access.



We have identified a number of 'Hubs', which would contain larger groups of apple trees and which also mark significant route-finding locations. [See indicative plan and numbered images of key hubs] Between these are some of the 'Primary' and 'Secondary' routes which we propose for planting and which, will be developed further, once the initial proposal is approved. Where proposals impact on the public highway, the Council will consult with the County Council's Highway Officers.



4 Trumpington Meadows - Country Park



9 - Glebe Farm - Singular Trees



5 - Trumpington - Shops / Open space - Hub



6 - Trumpington Estate Orchard - Hub



8 - New Community Centre - Primary Route



10 - Guided Bus Route - Large Orchard



11 - Hobson's Brook - Singular wild trees



Addenbrooke's - Primary Route

Key Partners and Stakeholders

We have already met and consulted with a number of potential stakeholders and partners, all of which will require further follow-up meetings once approval has been agreed. They include:

- Landscape and urban planners for the new green open spaces
 - Cambridge City Council
 - South Cambridgeshire District Council

Countryside – Developers for Clay Farm and Glebe Farm

Grosvenor and Barratt Homes – Developers for Trumpington Meadows

Hills Residential – Developers for Bell school and Quad 22

Addenbrooke's

The Botanical Garden and University

East of England Apples and Orchards Project

Trumpington Community Orchard

Brogdales

- Other commissioned artists within the Southern Fringe developments

- Various community groups – allotment and Orchard groups.

- Website leaflet

Schools, Primary and Secondary

Trumpington Historical Society

- Scottsdales, Fordhams and Barkers Garden Centres and Tree Specialists

4 Implementation, local community support and involvement

Community support and engagement – for this project to succeed, to make a worthwhile impact and to flourish, it is absolutely essential that it engages and involves the community as a whole. Looking to the future, the intention is that the Orchard, whilst planted in public open space, would be maintained and nurtured by community groups and in areas such as the Country Park at Trumpington adopted by the Wildlife Trust. There are already groups within the area with specific interest in orchards, wider groups with allotments and interest in plants, nature groups and local history groups. Groups such as the Brownies and Scouts could be approached along with the schools. Over the next few years, particularly as the population in the area increases, it will be a central task of this project to build and strengthen these groups. The residents of the area will need to be key stakeholders in the project, particularly given that some of these trees, at least when first planted, will be vulnerable.

I have begun to identify a number of these groups; however, until the project has Council approval it is not appropriate to approach them all, due to raising expectation within the community.

The Botanical Garden – I see the botanical Garden as potentially playing a key role within this project. An archive of apples is a natural extension to their own role as plant archivist's scientists and a very visible part of the city. We have already met with them to discuss how they label and record each plant in their collection and how we could create an archive which is publically accessible, scientifically accurate but which extends to the anecdotal / historical / folklore / in which the apple is so embedded.

Apple adoption scheme – The intention of the project is to plant the apple trees as way-finding in public open space. One ambition is that individuals living in the area could adopt and maintain specific trees along the routes as 'their own', particularly if they live in accommodation which does not afford the space to plant in their own gardens. In addition, to successfully graft each variety of apple tree, we will need to graft two of each variety; in case one does not take. It is very likely that we will have almost double the quantity we need. One thought is that these trees could be made available for anyone within the South Cambridge area to plant within their own gardens. Residents will be trained in how to look after their tree. There is already a similar scheme in Cambridge run by the council for families to adopt and plant a tree when a child is born.

5 Route finding – maps for the future

One of the key objectives of this proposal is for way finding using a methodology which engages everyone in unexpected and creative ways. How each tree is marked, the information we include on any labels, will be critical. It is an aspect of the project which would lend itself to being developed in partnership with the University Botanical Gardens.

Botanical gardens mark each tree and plant with a label which might for example have the plant's proper botanical Latin name, the plant family, Distribution, Provenance, and an Accession Number. The information links to a database where more information which cannot

be managed on a label is recorded. Label types vary from place to place, but common to all is their functionality and simplicity.

Imagine labels, which in addition to the functional information of variety apple, might include its best use, a brief history from the specific location, a tiny story or poem, an apple recipe, the name of the tree adopter or tree guardian. Imagine labels where the text might be altered from functional script to hand written and etched typefaces. Imagine a label with an app that could reveal a map of all the trees, their locations and a database.



This is an aspect of the project which might open itself to other community groups that might not have an interest in planting, but might be inspired by local histories and stories, by cooking, by archiving or map making.

6 Brogdale and The East of England Apples and Orchards Project – rootstock, soil and other practical concerns

Brogdale and the National Fruit Collection - DEFRA in collaboration with Reading University maintain the national collection for fruit trees. The collection is used for research and most significantly for bio- security. The collection of apple tree varieties numbers around 2,007 and with the exception of about 50 varieties of apple [which are protected by patent] Brogdale Farm has the right to access these. Over the past few months I have had several meetings at Brogdale to explore the practical considerations in developing this project. These include; the

timescales, budget, rootstock, soil type in South Cambridge and any concerns around particularly delicate varieties.

The East of England Apples and Orchards Project – The East of England Apples and Orchards Project (EEAOP), a not-for-profit company limited by guarantee, is working to ensure a future for local orchard fruits and orchards. EEAOP hold up to 125 varieties of apples from the East of England, which Brogdale does not hold and I will be meeting with this organisation, once the project has been approved by the City Council.

Rootstock – All varieties of apple can be grafted onto different rootstocks, depending on the

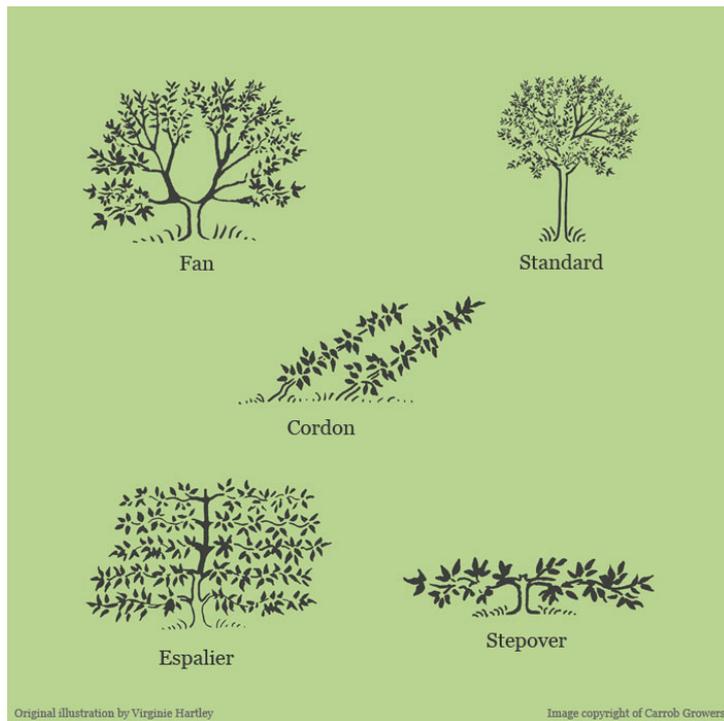
Apples					
Rootstock:	M27	M9	M26	MM106	M25
Ultimate height:	5-6ft 1.5-2metres	8-10ft 2-3metres	12-15ft 3-3.5metres	14-18ft 4-5.5metres	25-30ft 7.5-9metres
Uses:	Vertical cordon Patio tree Step Over Dwarf bush	Oblique cordon Step Over Bush Central leader Pyramid	Oblique cordon Step Over Bush Central leader Pyramid Small Espalier	Double cordon Half standard Espalier Fan Bush Central leader	Standards
Fruiting in:	2-3 yrs	3-4 yrs	3-4 yrs	3-4 yrs	6-7 yrs
Cropping potential:	4-5 yrs 7kg	5-6yrs 20kg	5-6yrs 30kg	7-8yrs 50kg	8-9yrs 120kg
Planting distance:	5-6ft 1.5-2m	5-6ft 1.5-2m	10ft 3m	12ft 3.5	25-30ft 8-9m
Soil/site:	Requires good deep fertile loam, clean ground, no competition from other plants. Not for heavy soils.	Requires good deep fertile loam, clean ground, no competition from other plants. Not for heavy soils.	Good deep fertile loam. Allowing the grass to grow up to trunk will slow growth. Not for heavy soils.	Can tolerate heavier soils and more exposed sites. Suitable for planting where grass grows up to trunk.	Will tolerate most sites and soils. Good pest and disease resistance. Not the tree to plant if space is limited.
Stake:	Permanent Stake	Permanent Stake	for 5yrs	for 5yrs	for 5yrs

size and vigour required. In simple terms the more vigorous the rootstock, the larger the tree will ultimately grow to and the less likely it is to suffer of disease. [Please see table attached] In discussions the best option is probably M25 – the most vigorous. It would mean a tree left un-pruned would potentially grow to a height of 25–30ft. Within the context of most of the public open space that is not an issue and is probably desirable anyway.

More discussion will need to be had before selecting the ideal rootstock for the Orchard.

Soil Type – Brogdale is located near Faversham in Kent. All their trees are planted outdoors and seem to thrive in environment. It is not very different in climate or soil type from Cambridge and I have been advised by Brogdale that they would not expect any issues. It would however be advisable to invite staff from Brogdale to visit the locations in Cambridge for more detailed advice before planting commences.

Types of Apple tree planting – Apple trees can be planted and maintained in very different forms depending on the situation. This is a key consideration with respect to the project. Where there are areas of formal and hard landscaping apples can be planted as espalier or pruned into other formal arrangements. Whilst along Hobson’s Brook or Byron’s Pools any apple trees would be allowed to grow as wild. We fully intend to exploit all possibilities depending on location.



Timescale – The most pressing issue for the programme for the project is to begin to graft the trees in December 2013 or January 2014, if we wish to begin planting the first trees onsite next autumn and 500 trees have now been ordered and grafted. Other considerations regarding the full programme are flexible and I would need to be guided by the City Council.

Practical Concerns – The Cambridge Community Collection could be a challenging proposition for some in terms of practical technicalities, such as maintenance and other issues. As set out previously, a main aim of the project is for the community to take ownership of it and adopt trees. This will be developed through community engagement, as set out elsewhere in this document and this will take time to implement. As part of the process for developing this project I have consulted with Council Officers such as the Project Delivery Team, Arbicultural Officers and Landscape Architects who have identified the main practical issues of the project and made suggestions for how they can be addressed. The recommendations from the Council's Officers will be considered throughout the project and the implementation of the project will also be supported by these Officers.

7 Programme

In order to deliver this project we need to establish the next steps and key milestones.

- **December 2013** – meet steering group with proposal
- **December 2013** – project sign-off by Cambridge City Council
- **December 2013/January 2014** – order and graft 500– 900 apple trees
- **January 2014 Onwards** – meet with and develop the proposed planting areas with the City Council, Landscape Architects, Master planners, Developers, the local community and other key partners.
- **January 2014 Onwards** – meet with other commissioned artists for South Cambridge
- **January 2014 Onwards** – meet EEAOP – Trumpington Community Orchard
- **March – July 2014** – ongoing workshops / talks etc with community groups, schools, etc to engage interest in being actively involved.
- **September – November 2014** – continued meetings with interest Groups
- **November 2014** – first trees planted, continue relationships with local partners, orchard groups, engage the wider public