



sow and grow everywhere



final report
prepared by
erz Limited.
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contents:

Introduction	4		
Study Approach	5		
Executive Summary	6		
1.0 Making the case (why it matters?)		7.0 Approach to site design:	
1.1 Why it matters everywhere?	12	7.1 Broad concepts	52
1.2 Why it matters here?	13	7.2 Supply strategy	54
		7.3 Detailed feasibility testing of sites	55
2.0 Scoping of community need & unmet demand:		8.0 Modular system design:	
2.1 Consultation: process & findings	16	8.1 Design description	56
2.2 Allotments: as an indicator of unmet demand	20	8.2 Indicative costs	61
3.0 Geographic scoping:		9.0 Exemplar projects:	
3.1 The land resource	22	9.1 Overview	62
3.2 Health & deprivation	22	9.2 Exemplar projects & outline costs	62
3.3 Land resource categorisation	23		
4.0 Strategy overview:		10.0 Organisational structure:	
4.1 Strategy structure & aims	24	10.1 overview	74
4.2 Description of strategy strands	25	10.2 regional organisational structure	74
		10.3 local authority area structure	76
5.0 Geographic action areas:		10.4 role of the delivery agent	78
5.1 Scoping process overview	30	11.0 Strategy for measuring outcomes:	
5.2 Geographic action areas	32	11.1 overview	79
6.0 Preliminary scoping of sites:		11.2 why measure outputs	79
6.1 Scoping process & criteria used	42	11.3 standardised template	79
6.2 Scoping of sites: Glasgow City	43		
6.3 Next steps for project development	50	12.0 Next steps/Action plan:	80
6.4 Preliminary project development	50		
		List of consultees	
		References	

introduction:

erz Limited and NVA were appointed by the Glasgow and Clyde Valley Green Network Partnership in February 2009 to undertake a strategic study focused on 'urban food growing' in the Glasgow Metropolitan Region.

The client group is led by the Glasgow and Clyde Valley Green Network Partnership working with the Glasgow Centre for Population Health and Scottish Natural Heritage.

erz Limited has led the development of the strategy and scoping study, working in close dialogue with NVA.

Interest in the 'Sow And Grow Everywhere' programme (SAGE) has been such, that NVA has been commissioned by Culture Sport Glasgow to employ a team to help establish the first schemes in Glasgow. Copyright for the programme name and modular system design is currently being progressed.

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study approach:

The study was commissioned in February 2009. A detailed methodology was agreed at this stage which has formed the broad template for the study.

The study has been informed by:

- research & consultation with key agencies and community organisations active in food growing
- extensive desk based research of existing initiatives locally, nationally and internationally, alongside relevant statistical data for the study area
- review of mapped GIS information for the study area alongside review of aerial satellite images to inform geographic scoping
- fieldwork to test and verify geographic scoping & focused fieldwork to scope out individual sites in the Glasgow City area
- dialogue with relevant agencies and potential suppliers to inform the design of the modular system and supply strategy
- dialogue with groups to investigate the detail of the exemplar projects
- co-ordination with the quantity surveyor, Armour Construction Consultants, to establish indicative costings for the modular system and exemplar project proposals

The interim findings were presented to the client group in May.

The first draft report was issued on 25th August, 2009.

The final report is issued on 16th October, 2009.

executive summary part 1 - analysis:

why it matters:

everywhere:

Local food growing is significant when considered in a global context. Food production and transportation are generators of climate change. The current pattern of production is unsustainable and world food supply is under threat from rising oil prices and the effects of global warming.

here:

The study area contains one third of the total population of Scotland (1.75 million). Life expectancy for the Glasgow Metropolitan Region is well below the UK average and five of the eight regional local authorities demonstrate male life expectancy figures below the Scottish average.

why such poor health?:

Uniquely, the study area has one of the world's earliest urbanised industrial populations and the form of its urban development is different from that of other industrial cities in the UK. It is thought that these factors have discouraged engagement with growing and that this has had a detrimental impact on the health of the population.

benefits of community food growing:

Beyond the production of food, community food growing provides opportunities for people to engage in physical exercise, raises awareness of diet related health and wellbeing issues and provides a stimulating platform for building social capital.

statutory context:

Community food growing is supported at a policy level within the UK, Scotland and at a local authority level. There is notably a legal duty for councils to 'make provision for allotments in response to established local demand'.

current community growing activity:

findings of research & consultation:

Key findings include:

- there is an absence of shared knowledge or information on projects and organisations active in food growing and a lack of joint working between them
- policy supports the principle of food growing initiatives at a UK, Scottish Government and local authority level - there is however a gap at several stages between policy and action
- there is little current activity on the ground, with only about 25-30 active groups operating within a population of 1.75 million
- there is piecemeal support to overcome common barriers
- there is limited infrastructure to link larger agencies and smaller voluntary groups
- funding is hard to access, over-prescriptive and difficult to sustain beyond initial capital input

unmet demand:

analysis of unmet demand for allotments:

Key findings include:

- the study area has an under provision of allotment sites when compared to the Scottish average
- waiting lists are extremely long for most sites, (7 to 33 year waiting lists have been quoted)
- there is little evidence of expansion of provision within the region
- such factors discourage people from applying for allotments space therefore the current level of demand is likely to be substantially understated

executive summary part 1 - analysis:

the land resource:

analysis of unused and underused land:

The Glasgow Metropolitan Region has a high level of derelict and vacant land (4,566 hectares in total (2007 Derelict and Vacant Land Survey figures)). Four of the five local authorities in Scotland with the highest proportion of derelict land relative to administrative area are within the study area.

In addition to 'formally recognised' derelict and vacant land - there is a large volume of 'underused' land in the region. This occurs in many of the social housing areas and peripheral estates in the region – as left over spaces with no defined role or function (the 'green desert').

Derelict, vacant & underused land is a major environmental blight on the Glasgow Metropolitan Region but represents a major opportunity in terms of increasing access and activity in urban community level food growing.

The sites are frequently close and accessible to residential neighbourhoods: the 2007 Derelict and Vacant Land Survey highlights that 59.1% of Glasgow City's population lives within 500m of a derelict site.

The sites are also concentrated in the most deprived neighbourhoods: in Glasgow City: 46% of all derelict and urban vacant land is within the 15% most deprived datazones.

Key factors including population density and urban structure/typology identify four distinct 'types' of land resource, as follows:

the land resource 'types':

- 1.0 vacant & derelict land in densely populated urban areas:
 - built form typically tenemental and high rise flats
 - limited or no private garden space associated with dwellings
 - given higher population density: the potential 'reach' of a site is significant
- 2.0 underused land (amenity space) in peripheral housing estates ('green desert'):
 - urban typology: typically lower density, but flattened development
 - poorly planned social housing schemes from the mid twentieth century
 - demonstrate a lack of private or communal garden space
 - public open space with: no clear function, no sense of ownership or territory
- 3.0 private garden space associated with suburban housing:
 - land divided into individual private plots
 - large volumes of private garden space are being maintained by public agencies on behalf of owners/residents who are physically unable or not empowered to undertake the tasks themselves
- 4.0 underused public land:
 - land under public ownership/control that has potential to be brought into more active and effective use
 - potentially includes: public parks, existing allotment sites, hospital and educational campuses and school sites

Each of the different forms of 'land resource' have specific issues and opportunities associated with them.

executive summary part 2 - the strategy:

SAGE: a multi-stranded strategy:

mission: to generate a massive step up in community and local food growing activity in the Glasgow Metropolitan Region.

The report puts forward an implementation plan with four parallel strands of activity. These focused strands of activity are necessary to:

- unlock the available unused & underused land resource
- establish the correct match between particular forms of growing activity, land resource and urban setting
- focus development in core areas of community need and demand

strategy aims:

- to enable and support community led growing projects to overcome barriers to change
- to re-engage the urban population with the act of growing and the production of food
- to simplify, localise and express links between: production and consumption of fruit and vegetables, recycling and re-use of materials, composting and compost use
- to act as a catalyst for social interaction and social change
- to engage people in a more active and healthy lifestyle
- to re-animate the lost spaces in the urban fabric, bringing human presence and activity to currently dead spaces

strategy strand 1:

bring vacant and derelict land in densely populated urban areas into use for growing as an interim landuse:

the urban setting and sites:
Available sites tend to be limited.

Typically previously developed sites requiring the importation of growing medium.

the opportunity:
Potential for a large number of people to become involved in each scheme.

Highly visible temporary land-use with designed elements being removable if sites are intended for redevelopment in the medium to long-term.



strategy strand 2:

bring underused land (amenity space) in peripheral estates and social housing areas ('green desert') into use at scales up to market garden growing:

the urban setting and sites:
Large areas of land that could be brought into more active use relatively easily.

Often at the fringes of the urban area and border abandoned or underused farmland which could also be brought into use for growing.

the opportunity:
The provision of growing spaces on estates throughout the region could be transformative.

Smaller schemes as well as larger can be identified.

The market garden scale of growing offers the potential for the development of social enterprise opportunities in training and employment as well as selling produce.



executive summary part 2 - the strategy:

strategy strand 3:

bring under used private garden space in suburban or outlying areas into use for growing:

the setting and sites:

Typical urban/suburban housing layouts: single dwellings with associated private garden space.

There are expansive areas of this urban/landscape typology within the Glasgow Metropolitan Region.

the opportunity:

To connect people who want growing space with those who are unable to, or not interested in looking after their gardens or land through a managed database.

On a UK wide level this approach is being pursued through the Landshare Initiative developed by Channel 4. (www.landshare.channel4.com).



strategy strand 4:

bring under used public land into active use for growing:

the setting and sites:

Land under public ownership/control that has potential to be brought into more active and effective use.

This could include: public parks, existing allotment sites and school sites.

the opportunity:

Better use of the existing land resource to deliver growing space.

School sites in particular are seen as having great potential. Such sites can engage young people and families and are distributed through all neighbourhoods. This would require a redefinition of part of the school grounds as a shared school / local community facility, to overcome a number of problems common to other 'landscape focused' school projects.



The study identifies geographic action areas for the different strategy strands across the Glasgow Metropolitan Region.

The study includes a preliminary scoping of sites in core urban areas within Glasgow City. This exercise aims to demonstrate the scoping process required for the wider study area.

The study includes outline designs for the modular system for 'temporary' sites, which are applicable region wide.

The study includes exemplar projects to illustrate each of the strategy strands, which are applicable region wide.

executive summary part 3 - delivery:

SAGE: delivery:

2 scales of organisational structure

The strategy must operate in a co-ordinated fashion at both a regional and local level to overcome barriers to delivery on the ground.

It must be driven and supported at a community level and the necessary support infrastructure and supply chain established on a local authority and regional level.

It is proposed that there are two 'structures' established on a regional level:

- the strategic co-ordination agency
- the regionwide hub

the strategic co-ordination agency:

The role of the strategic co-ordination agency is:

- to establish & manage partnerships with all national, regional & local authority level organisations
- to co-ordinate region wide project delivery and the necessary associated supply chain

the regional hub/support mechanism:

This is envisaged as a support mechanism that will act as a direct point of contact for groups active or interested in community food growing.

It will build on the experience gathered from monitoring the success of the first five years of project implementation. There is potential to link with the 'Glasgow Community Food Network' which is currently being established by Community Food and Health (Scotland).

two stages of delivery:

SAGE should deliver a spread of inspiring and successful fully funded projects across the region and establish the necessary support framework to enable groups in the future to develop and deliver their own projects.

The delivery of the strategy is considered in 2 stages:

1. implementation phase: year 1 - 5
2. community led projects: year 5 onwards

The regionwide hub will become the focus for community-led development after the initial 5 year implementation phase, providing the support and information necessary to enable groups to realise their own plans.

the delivery agent:

Working in collaboration with the strategic co-ordination agency, the delivery agent is the 'common thread' driving different schemes forward to implementation.

This role demands continuity of input over the implementation phase with a remit to:

- establish relationships with key local stakeholders
- guarantee active local community involvement
- develop local supply chain (for materials & support)
- deliver SAGE projects on site (including detailed scoping, feasibility, legal matters, site design and managing implementation)
- ensure sustainable support for established projects
- capture learning and feed back to regional structures and hub

executive summary part 3 - delivery:

timescale/targets for delivery:

For the initial implementation phase of 5 years, the following targets for project delivery are proposed:

2009-2010	5 demonstration projects delivered
2010-2011	20 early action projects delivered
2011-2014	ongoing project delivery: to a possible total of 150 further projects

As an aspiration it is proposed that by 2014 a total of 175 active projects of all possible scales will have been delivered. This represents the equivalent of 1 growing project for every 10,000 people in the Glasgow Metropolitan Region.

If each project directly engages 1000 people during its lifespan - the SAGE programme has the potential to positively impact on the lives and lifestyles of 10% of the population of the Glasgow Metropolitan Region.

Glasgow Harvest:

As a powerful early action to raise public awareness and celebrate SAGE, it is proposed that an annual event is established in George Square, to generate interest in the initiative and encourage wider involvement.

The event is to act as a focus and large scale celebration of urban growing as it expands across the whole region.

It is envisaged that SAGE schemes are physically represented along with a great open-air meal sharing home grown produce and imaginative displays and unusual fruit and vegetable competitions.

1.0 making the case: why it matters everywhere:

1.1 why it matters everywhere?:

Local food growing is significant when considered in a global context.

Food production and transportation are generators of climate change - the impacts of which also threaten the world food supply. The current pattern of production is not sustainable in these terms and is further threatened by the anticipated scarcity of oil and the consequent increased costs of supply.

Associated with this is what has been described as ‘environmental anomie’: a widespread disconnection from the environment and understanding of it. This social dimension of the current global environmental position may be one of the issues that community food growing projects can influence most powerfully.

Arguably for many people there is a disassociation of cause and effect: the loss of concepts of seasonality, of production and waste management. Community food growing projects offer an opportunity to express a number of normally hidden systems in an understandable way.

There has been a huge amount of activity and media coverage of urban food growing projects around the world in recent years. There are longer established examples of urban community food growing in Cuba and a number of North American cities (including New York, Chicago, Portland and Vancouver). However, more recently the number of high profile initiatives both in the UK and internationally have grown.

Recent examples in the UK include:

- Dott urban farming project in Middlesbrough
- ‘What if’ vacant lot growing project in London
- Incredible Edible Todmorden

International examples:

- the Obama Victory Garden on the Whitehouse lawn
- temporary growing space in front of City Hall in San Francisco
- the Edible Estates projects in Kansas & California (encouraging people to dig up suburban lawns to grow produce)
- Shenyang University campus in China: the campus is designed as a productive landscape (of rice fields)



1.0 making the case: why it matters here:

1.2 why it matters here?:

the study area:

The Glasgow Metropolitan Region has a total population of 1,749,260 (2006 figures). This represents one third of the entire population of Scotland.

health national/international comparison:

Life expectancy and health statistics for the Glasgow Metropolitan Region are poor in global, UK and Scottish terms.

The following comparisons aim to put the figures for the study area into context:

- UK average male life expectancy is quoted as 77.3 by the General Register Office for Scotland (2005-2007 figures). It is quoted as 76.5 in the CIA World Factbook (2009) - and is ranked as No. 36 in a comparison of national data worldwide.
- Scottish male life expectancy is quoted as 75.0 by the General Register Office for Scotland (2006-2008 figures).
- 6 of the 8 local authority areas in the Glasgow Metropolitan Region have below average male life expectancies for Scotland (General Register Office for Scotland 2006-2008 figures).
- Glasgow City has the lowest at 70.7. As a national average this would be comparable to Venezuela or the Gaza strip – and is out of the top 80 countries world wide.
- notably life expectancy varies greatly by local area – for example an average male life expectancy of 54 is quoted for Calton in Glasgow (comparable to Laos or Ethiopia – out of the top 180 countries of 223 countries listed).

International comparison data source: CIA World Fact book: 2009.

why the poor health: a historical perspective?:

The document 'Let Glasgow Flourish' by the Glasgow Centre for Population Health, published in 2006, puts the current health position into a historical context:

Work by the historian, Professor Tom Devine is summarised, as follows:

'Devine's argument is that when the industrial revolution started, Scotland experienced a more rapid and profound industrialisation, with higher migration from the land and a greater intensity of urbanisation, than most regions of Europe. Next Scotland experienced the highest per capita death rate on the battlefields of World War 1 and a deep economic slump during the great depression. Scotland, and in particular West Central Scotland, continued to rely on heavy industry much longer than most other European regions. Consequently, when the collapse of heavy industry occurred in the 1960's, 70's and 80's the effect was more profound. This analysis provides a convincing narrative to explain the relatively poor health of Glasgow around the time of the 1981 census.'

The 'Let Glasgow Flourish' document raises the question of whether 'Glasgow's strategy for the 21st century is too heavily influenced by an analysis that was formed in the early 1980's. That analysis focused on material manifestations of deprivation as the primary causes of ill health.'

The document highlights that many improvements in people's material circumstances have occurred - but that health improvements have not necessarily kept step.

The study invites consideration of other influences on the health of the population.

Following this line of investigation and focusing on the population's engagement with food growing, the following aspects of the history and urban form of the study area are proposed as significant.

1.0 making the case: why it matters here:

a history of disconnection from food growing?:

one of the world's earliest urbanised industrialised populations:

Industrialisation in Europe began in Britain and Scotland in particular experienced early industrialisation – starting in the 18th century.

Glasgow's population grew from 17,000 in the 1740's to over 200,000 a century later.

Glasgow and industrialised West Central Scotland has had what could be described as an urbanised population for over 150 years.

In international terms the Glasgow Metropolitan Region has an early and long standing urbanised population.

The longevity of the 'urbanised' population and its associated 'food supply chain' has arguably created a cultural and generational distance between the population and any active involvement in food growing.

a different form of urban development to other industrial cities in the UK:

The form of urban development in Glasgow and West Central Scotland is different to the industrial cities of England.

During the 19th century tenements became the predominant housing type in Scotland's industrial cities. Glasgow has Scotland's highest concentration of tenement dwellings.

This contrasts with the 'back to back' typically 2 storey terraces in English industrial cities.

The tenement realises a higher population density – and dwellings do not have individual/defined outdoor space associated with them.

This predominant pattern of dwellings without associated outdoor space was further reinforced by later social housing development.

Social housing constructed in the twentieth century in West Central Scotland demonstrates a number of different but comparable built forms:

- tenement like flats displaced from the core areas:
- high rise flats
- other models of social housing eg: in the new towns: Cumbernauld / East Kilbride etc.

Typically all have 'non territorially defined' outdoor spaces.

Residents' inability to 'take control' of a defined area of ground (determined by this pattern of urban development) has arguably maintained a disconnection of people from landscape and food production in urbanised West Central Scotland.



1.0 making the case: why it matters here:

health benefits of community food growing:

diet:

Involvement in food growing is clearly inter-related with a greater awareness of and interest in diet. Engagement with food growing gives the edible produce greater personal significance and brings with it a range of positive associations (achievement, satisfaction, delight). The freshness and quality of locally grown fruit and vegetables is also significant.

exercise:

Active involvement in food growing is a valuable form of exercise. For many people who are not physically fit, the notion of entering a gym or stripping to their trunks to go for a swim is a significant barrier to engaging in exercise.

People across a broad range of levels of physical fitness can engage with food growing. For example, traditionally allotment gardening has been dominated by older people. It is well demonstrated in this context that regular physical activity can help keep older people active for longer.

Engagement in food growing offers a flexible, non intimidating form of physical exercise. Arguably this is a potentially very important stepping stone to a more active lifestyle for many people.

mental health:

Involvement in gardening activity has demonstrated mental health benefits. This is perhaps most directly seen in the widespread practice of horticultural therapy in the rehabilitation of individuals with mental health or drug dependency problems.

The mental health and well being benefits of involvement in food growing include:

- relaxation by engaging in a calm, repetitive activity
- a sense of achievement from growing plants/produce
- a sense of well being through a connection with nature
- decreased isolation through social contact
- inspiration through learning opportunities
- simply being outside

statutory / policy context:

The Scottish Government is currently producing the UK's first national food policy.

It recognises the need to increase the amount of food produced in Scotland, to increase the consumption of locally grown food, and to improve the ability of people to make socially and environmentally positive food choices through improved knowledge and awareness.

Community Planning & Local Authority Single Outcome Agreements:

As an example, noted below are the 'Local Outcomes' extracted from Glasgow City Council's Single Outcome Agreement that directly relate to urban food growing activity:

11. improve the attractiveness of Glasgow as a place to live, invest, work & visit
12. increase the proportion of the population with a healthy BMI
13. increase the proportion of residents involved in physical activity
14. improve children's diets

Glasgow City: City Plan 2 states

'the city council will continue to promote the active use of allotment gardens and will seek, through new development, additional allotment space where appropriate'.

Scottish Government: Cabinet Secretary for the Environment Richard Lochhead said: 16/10/2008:

"I am asking a number of public bodies to consider how the land they manage for the Scottish Government could be made available to local authorities to increase the number of allotments in Scotland."

summary:

Life expectancy and health statistics for the Glasgow Metropolitan Region are poor in global, UK and Scottish terms.

The longevity of industrialised, urbanised living in the Glasgow Metropolitan Region and its particular urban form have arguably been significant in discouraging an engagement with growing and hands on activity in the outdoor environment.

Community food growing offers significant benefits in terms of diet, exercise and mental health.

Community food growing is promoted at both a Scottish Government and local authority level.

2.0 scoping of community need & unmet demand: consultation findings:

2.1 consultation: process & findings:

Consultation was undertaken in a series of stages – each stage expanding/informing the list of organisations to contact.

The preliminary list of consultees was developed through dialogue with the client group and desk based research.

Strategic agencies were approached/researched first:

These broadly fall into 2 groups:

1. agencies with a focus on health matters: Greater Glasgow Health Board & Community Food & Health (Scotland)
2. agencies with a focus on urban/community growing: Scottish Allotments & Gardens Society (SAGS), Federation of Community Farms & City Gardens, the Allotments Regeneration Initiative

Next, meetings were undertaken with the relevant officers in each of the 8 Local Authorities. The format for these meetings was as follows:

- discussion of the topic generally
- gathering information on any relevant activities/strategies by the local authority
- gathering information on local/community groups active in the council area

Based on these meetings, a preliminary list of local/community level organisations was compiled for each council area. Further desk based research was carried out to expand/test the list.

Based on this list: meetings with the local/community level organisations were undertaken by community researchers.

The research identified around 50 groups in the region.

Virtually all of the relevant groups have been either researched or directly consulted with.

local groups investigated/consulted with:

groups focused on community food/health:

- North Glasgow Community Food Initiative
- Milton Food Project

housing associations active in growing/associated groups:

- Reedvale/Molendinar HA
- Linthouse HA/Elder Park
- Wellhouse Community Trust
- Glasgow Housing Association
- Cordale Housing Association

local community groups focused on a single space/community garden or similar:

- TACT Blantyre: Community Garden
- Lochwinnoch Community Garden
- Larkfield Community Garden
- Cranhill Community Project
- Rosshead Community Garden
- Craigheads Community Garden
- Kilbarchan Community Garden

groups focused on activity at allotments sites:

- Kennyhill allotments
- Yoker allotments
- Dalmuir allotments
- Hamiltonhill allotments

local area environmental groups/organisations:

- Castlemilk Environment Trust
- Toryglen Environment Project
- Playbusters
- Riddrie/Balornock Urban Garden Scheme
- Drumchapel LIFE
- Renfrewshire Environment Trust
- Watch Us Grow

mental Health/rehabilitation projects focused on growing:

- Inverclyde Association for Mental Health
- Parklee Branching Out
- Whitehill Hamilton/Threshold West Scotland
- Phoenix Futures
- Silver Birch (Scotland) Ltd.
- Coach House Trust

schools with growing initiatives/intentions:

- Hamilton Grammar School
- Oxbang Primary School

projects/organisations with a broader focus:

- the Hidden Gardens
- Knowetop Community Farm

topic specific environmental groups:

- Glasgow Allotments Forum
- Community Orchards Initiative
- Clyde Valley Orchard Group

private/commercial organic growers:

- EKO McKenzie growers
- Clyde Organics

information gaps:

No information on local/community level organisations was provided by North Lanarkshire Council, Renfrewshire or East Renfrewshire Councils.

limitations:

The groups and projects investigated are already active and are those which have demonstrated outcomes to date. There may be other groups currently forming or pursuing community growing projects that have yet to become visible.

It is also noteworthy that since the consultation work was undertaken in early 2009, some groups have ceased to exist.

2.0 scoping of community need & unmet demand: consultation findings:

broad findings:

1.0 lack of information & co-ordination:

There is an absence of shared knowledge or collated information on projects and organisations active in food growing.

- it is difficult to find out about and make contact with groups
- there is a lack of co-ordination/shared activity between groups
- there is a lack of knowledge/co-ordination of action by different public agencies and in some cases even between departments within a single agency

2.0 lack of linking up policy & action:

Policy supports the principle of food growing initiatives at a UK, Scottish Government and local authority level.

There is however a gap at several stages between policy and action.

Much of the action in local areas is driven by a few or even one individual.

This 'grass roots' community activity is largely unsupported by local authorities – other than through notable individual officers.

3.0 lack of activity on the ground:

Activity on the ground is not of a significant scale.

The Glasgow Metropolitan Region contains one third of the population of Scotland, 1.75 million people. A couple of dozen active projects/groups have been discovered.

Given the global and national significance of the environmental & health issues faced: this does not represent significant action.

If one discounts projects that are focused on rehabilitative outcomes for specific user groups and those that are directly supported by housing associations etc. – there is a remarkable lack of delivery of growing projects on the ground at present.

4.0 lack of support to overcome common barriers:

Many community groups have struggled against the same barriers to delivering projects and clearly many others have failed to overcome them.

The common barriers include:

- legal access to land
- processes formalising changes in land use designations
- health and safety considerations
- access to funding

Voluntary and unsupported individuals driving forward action are frequently faced with issues that demand specific expertise to overcome.

5.0 lack of 'infrastructure' to make links:

This issue can perhaps best be exemplified through the dialogue with the Greater Glasgow Health Board. The representative of the Health Board stated that they are keen to support community growing initiatives. This illuminated the communication gap that frequently exists between large organisations and community groups.

It is a requirements of large organisations such as this to demonstrate:

- baseline need
- outputs of the community activity
- that the activity aligns with the organisations goals

Small, voluntary community groups typically don't have the skills to engage with such requirements.

6.0 lack of funding:

A recurring finding was the difficulty of accessing funding initially and furthermore there were many examples of existing groups/projects having their funding cut.

Of the projects/groups consulted with, many have had some support from a partner agency to deliver the project. Such partner agencies include:

- housing associations:
- environmental agencies:
- local authority departments - a few instances: notably not widespread
- NHS/health agencies: where the focus of the project is on rehabilitation and therapeutic activity for clients with mental health or alcohol or drug addiction problems. Organisations with this focus are amongst the best established of those visited/researched.

2.0 scoping of community need & unmet demand: consultation findings

recommendations:

Create a common forum/focus for information and contact between different groups active in community food growing.

Co-ordinate activity between public agencies in a strategic manner to support community food growing.

Bridge the gaps between agencies and groups through focused support (for example introducing standardised and supported forms for assessing project outcomes).

Encourage groups to be properly structured with a core team rather than lone individuals driving forward the project.

Co-ordinate local authority activity to support community food growing.

The scoping study: 'options for collaborative working in Glasgow' was being undertaken for Community Food & Health (Scotland) by EKOS in parallel with the development of the SAGE strategy. The EKOS study recommends the creation of a hub & network for organisations working in community food and health in Glasgow.

As a development of this proposal, we recommend that a 'twin' hub is created for organisations active in community food growing.

It's role would be to:

- circulate & share information
- facilitate opportunities for joint working
- assist in links to funding agencies
- support development of new projects & activities
- provide expert guidance on management, fundraising etc.

It is anticipated that shared resources with the community food/health hub activities would be more cost effective.

This 'twin' hub also enables links to be established between local growers & distributors.

'Urban agriculture tends to define itself as a bottom up, grass roots movement with no time for the top down elitism of designers. This is misguided. Environmentalism, in whatever guise, demands both top-down and bottom-up initiatives. Freeing up or reclassifying land for urban agriculture requires more than a desire to hold hands and plant vegetables. It requires top-down intervention by planners and local authorities. If urban agriculture is viewed as one of many ways of achieving environmentally productive landscape within, around and outside cities, then those whose business it is to contribute to the design of cities, their open spaces as well as their built fabric, are vital allies in the project. Urban agriculture in a highly urbanised Western Europe cannot be reproduced in the ways it is being pursued in countries like China, with a much more widespread and direct connection to its traditional farming roots...'

Dr Susannah Hagan - Continuous Productive Urban Landscapes

2.0 scoping of community need & unmet demand: consultation findings:

The goal of the strategy is to encourage community driven projects –

but to do this, the support infrastructure needs to be in place to remove the barriers to action.



Spittal Field City Farm, London



Strathcona Community Garden, Vancouver

other currently emerging initiatives:

Through the course of researching the study – a number of concurrent pieces of work have emerged. The most significant of these are:

1. Glasgow City Council Land & Environmental Services: Draft Consultative Strategy for allotments:

The focus of the strategy is on improvement and management of existing allotment sites and does not promote the expansion of provision in the short term.

2. GCC Land & Environmental Services have since announced an initiative to create growing spaces within existing parks:

This initiative is linked to the Commonwealth Games

3. Glasgow City Council: Development & Regeneration Services has commissioned a study by ceis: 'Market Assessment of the Potential for Developing a Social Enterprise Market Garden Business'

4. Community Food and Health (Scotland) has commissioned a study by EKOS: 'Scoping study: options for collaborative working in Glasgow'.

The study is focused on the feasibility of options to improve collaborative working by community food and health organisations in the Glasgow Metropolitan Region.

2.0 scoping: allotments as an indicator:

2.2 allotments as an indicator of unmet demand:

Allotments are the historically established and most obvious point of reference when discussing community food growing as a topic.

Although the agenda of this study is broader, consideration of the issues surrounding allotment provision in the Glasgow Metropolitan Region provide a useful point of reference.

allotments: history

Allotments originated in the 19th century. Glasgow has a long and established tradition of allotment gardening, with the allotments at New Victoria Gardens and Sir John Stirling Maxwell recorded as established sites in 1895.

'The status of allotments was recognised and formalised by the Allotments (Scotland) Act 1892, which placed a duty upon a Council to make provision for allotments in response to established local demand'. (GCC LES Draft Consultative Strategy for Allotments).

allotments: level of provision

The 'Finding Scotland's Allotments' document prepared in 2007 by the Scottish Allotments and Gardens Society (supported by SNH) provides the following information:

There are 211 active allotment sites in Scotland, containing approximately 6,341 individual plots. This equates to one plot for every 806 people in Scotland.

Glasgow City has 25 sites, with a total of 1,320 individual plots.

East Dunbartonshire has no allotments.

Other Local Authorities in the study area, number of sites and plots:

North Lanarkshire: 3 sites, 139 plots
 Renfrewshire: 4 sites 64 plots
 South Lanarkshire: 3 sites, 113 plots
 West Dunbartonshire: 5 sites, 127 plots
 Inverclyde: 3 sites, 58 plots
 East Renfrewshire: 1 site, 6 plots

The Glasgow Metropolitan Region has in total 1,827 individual plots over 44 sites.

The region contains approximately one third of Scotland's total population.

On a 'pro-rata' population basis – the region has an under provision of allotment sites when compared to the Scottish total – ie less than a third of the total number of plots (1,827 rather than 2,113 – a comparative shortfall of 286).

allotments: unmet demand

652 people were on waiting lists for allotments in Glasgow in 2007 (based on available information).

'For the most popular sites, such as those in the West End of the city, waiting times can exceed seven years'. (GCC LES consultative draft).

Given the rate of 'turnover' of plots becoming available the timescale for individuals to get access to an allotment can be extremely long. It was noted within one local authority area the likely wait was 33 years.

In a number of council areas the waiting lists are not known as sites are self managed.

Despite this known and recorded level of unmet demand in some areas and legal duty on councils to: 'make provision for allotments in response to established local demand', there is little action evident within the region to expand existing allotment provision.

2.0 scoping: allotments as an indicator:

allotments: current initiatives

From dialogue with relevant officers in each local authority area: it becomes clear that in many areas ' food growing' and allotments specifically have not been seen as a priority for a considerable amount of time.

Where there has been a recognition of the increased level of public interest, there have been a number of different responses:

Glasgow City Council: Land & Environmental Services:
Allotment strategy focused on better managing and utilising the existing allotment sites, but without expanding to new sites

West Dunbartonshire Council:
Pilot food growing schemes at 3-4 schools and development of growing space in public parks and a college campus.

South Lanarkshire:
South Lanarkshire Council appear to be unique in moving forward with consideration of 2 new sites.

unknown area specific demand:

Dialogue with relevant officers has revealed uncertainty within local authority areas as to where the demand for new allotment space may be.

Given the cost of establishing a new site, there needs to be a level of confidence that it will be the right facility in the right place and will be fully used.

An area specific testing and demonstration of demand is required.

are allotment waiting lists the best indicator?

Allotment waiting lists are a demonstration of demand to undertake a particular form of growing activity in a particular area.

The following factors need to be taken into account in considering the relevance of allotment waiting lists as a wider indicator of demand:

- the allotments may not be situated where contemporary need lies
- allotments are a major commitment and demand a level of skill and prior knowledge: may not be a good fit with all people's idea of how they would like to engage in growing
- people may not bother to sign up given the likely waiting time

conclusions:

There is a clearly demonstrated and accepted under provision of growing spaces in the form of allotments.

It is also highly likely that allotment waiting lists substantially understate the unmet demand for growing spaces overall.

However, there needs to be a more concrete demonstration of demand on an area specific basis.

3.0 geographic scoping: the land resource:

3.1 the land resource:

The Glasgow Metropolitan Region has a high level of unused or underused land.

The Scottish Vacant Land & Derelict Land Survey 2007, provides the following figures for derelict and vacant land in the study area:

The Glasgow Metropolitan Region has 4,566 hectares of derelict and vacant land.

Across the 8 regional local authorities, the derelict and vacant-land is distributed as follows:

North Lanarkshire:	1,399	hectares
Glasgow City:	1,268	
Renfrewshire:	952	
South Lanarkshire:	499	
West Dunbartonshire	202	
Inverclyde:	105	
East Dunbartonshire:	85	
East Renfrewshire:	56	

4 of the 5 local authorities in Scotland with the highest proportion of derelict land relative to administrative area are within the study area.

these are:

Glasgow City (1),
 Renfrewshire (2),
 North Lanarkshire (3),
 West Dunbartonshire (5).

There is a further category of site that does not appear in these figures which can be described as 'underused' land.

Such 'underused' land occurs in many of the social housing areas and peripheral estates in the region – as left over spaces with no defined role or function (the 'green desert').

Derelict, vacant & underused land is a major environmental blight on the Glasgow Metropolitan Region,

but:

it offers a major opportunity in terms of increasing access and activity in urban community level food growing.

The figures outlined highlight the scale of derelict and vacant land that is potentially 'available'. However, it is not meaningful to identify all or any unused or underused sites.

The sites need to be accessible and in close proximity to where people live.

The 2007 Derelict and Vacant Land Survey highlights that 59.1% of Glasgow City's population lives within 500m of a derelict site. This suggests that there is a significant volume of accessible land.

Notably this figure does not take account of vacant sites – which represent 45% of the total derelict and vacant land area.

3.2 relationship to areas of deprivation:

The Scottish Vacant and Derelict Land Survey, includes an analysis of the location of sites in relation to deprivation datazones.

Scotland wide, Glasgow City has the largest amount of derelict and urban vacant land located within the 15% most deprived datazones. North Lanarkshire is second (2004-2007).

in Glasgow City: 46% of all derelict and urban vacant land is within the 15% most deprived datazones (21% for North Lanarkshire).

A geographic correlation between the locations of derelict and vacant sites and area of deprivation or poor health cannot always be assumed – there is however clearly a broad correlation on a citywide or regional level.



3.0 geographic scoping: the land resource:

3.3 land resource categorisation:

It is not adequate to consider derelict and vacant sites in the abstract. There are several key factors that need to be taken into account in considering the potential of sites for forms of community growing:

population density:

The number of people living in close proximity to the site will influence the appropriate treatment for the site.

urban structure/typology:

The form of the built development and its relationship to outdoor space is a major factor.

The different urban 'typologies' of high rise flats, tenemental buildings or suburban dwellings generate fundamentally different relationships to their associated external spaces (perceived territory as well as actual legal ownership).

On this basis, 4 broad forms of land resource have been identified that aggregate these issues:

1.0 vacant & derelict land in densely populated urban areas:

- typically formerly developed sites
- surrounding built form is typically tenemental and high rise flats
- there is limited or no private garden space associated with the surrounding dwellings
- given the higher population density: the potential 'reach' of a site is significant

2.0 underused land (amenity space) in peripheral housing estates ('green desert'):

- such areas can be described as 'green desert' public open space with:
 - no clear function
 - no sense of ownership or territory
 - the relationship between built development & external spaces is ill conceived
- this type of space is frequently associated with poorly planned social housing schemes from the mid twentieth century
- the surrounding urban typology is typically lower density, but flattened development
- areas demonstrate a lack of private or communal garden space associated with dwellings

3.0 private garden space associated with suburban housing:

- land divided into individual private plots associated with dwellings
- large volumes of private garden space are being maintained by public agencies on behalf of owners/residents who are physically unable to undertake the tasks themselves

4.0 underused public land:

- land under public ownership/control that has potential to be brought into more active and effective use
- potentially includes: public parks, existing allotment sites and school sites.

Each of the different forms of 'land resource' have specific issues and opportunities associated with them.

4.0 strategy overview: strategy structure & aims:

4.1 strategy structure & aims:

SAGE: a multi-stranded strategy:

The goal of the strategy is to generate a massive step up in community and local food growing activity in the Glasgow Metropolitan Region.

To deliver this goal, the study findings suggest a strategy with 4 parallel strands of activity.

These focused strands of activity are necessary to:

- unlock the available unused & underused land resource within the study area
- establish the correct match between particular forms of growing activity and the land resource and urban setting
- focus activity in core areas of community need and demand

The strategy is focused on delivering the right things, on the right sites, in the right places – to unlock potential and opportunity for as many people as possible.

SAGE strategy aims:

To enable and support community led projects and establish the necessary infrastructure to overcome the frequently encountered barriers to action.

To re-engage the urban population of the Glasgow Metropolitan Region with the act of growing and the production of food.

To simplify, localise and express links between: production and consumption of fruit and vegetables, composting and compost use, recycling and re-use of materials.

To act as a catalyst for social interaction and social change: a forum for community integration and development.

To engage people in a more active and healthy lifestyle, also improving diet and engagement with food preparation.

To re-animate the lost spaces in the urban fabric, bringing human presence and activity to currently dead spaces.

4.2 description of strategy strands:

The 4 strands of the strategy are outlined on the following pages.

4.0 strategy overview: strategy strand 1:

strategy strand 1: bring vacant and derelict land in densely populated urban areas into use for growing as an interim land use:

the urban setting and sites:

This strand of the strategy is focused in core, densely populated urban areas where available sites tend to be limited.

The main potential lies in bringing vacant and derelict sites into use. Sites are typically formerly developed and will require importation of growing medium.

the opportunity:

Given the population density around the sites, there is potential for large number of people to become involved in a project.

The sites are also potentially highly visible.

the issues:

There is likely to be an aspiration or intention for redevelopment of the sites in the medium to long term.

The use of the site for community food growing is therefore likely to be a temporary/interim land use.

The physical form of the intervention must be 'removable' and designed with this in mind.

Appropriate legal arrangements require to be put in place to offer the landowner comfort that the interim 'green use' will not endanger the potential for redevelopment of the site.

The temporary nature of the activity avoids issues in terms of land use designations set out by the local planning authority.

The implementation of the temporary use is potentially more costly than using a 'green' or undeveloped site – but the location in a core urban area and the impact achieved is potentially exponentially greater.

Security of sites and preventing vandalism is a design consideration.

proposed approach:

physical form:

The sites are to be brought into use by means of a temporary/removable system that incorporates raised planting/growing areas and all necessary ancillary facilities.

This is to take the form of a designed modular kit/system. An outline design for the modular system is included later in the document.

type of activity and purpose:

This strand of the strategy is primarily focused on engaging people in the act of growing. It is not focused on food production (growing to surplus) for use by others.

The focus is on involving as many people as possible in growing, possibly for the first time.

These sites potentially offer a stepping stone to a longer term engagement in growing activity and stepping up in terms of commitment (for example to allotment sites).

Activity on these sites is to be supported growing: with horticultural advice and guidance and the necessary physical infrastructure to offer a positive and rewarding introduction to growing.

To provide the necessary support structure – it is suggested that the sites need to be able to provide growing space for a minimum of perhaps 15-20 people.

The social dimension of the sites is important. The sites can function as an urban 'village green' a new local social hub for those engaged in growing and environmental matters. Glasgow City in particular, has a lack of local neighbourhood 'green' spaces.

One of the core outcomes lies in increasing skills and building capacity: for people to engage with their local environment and the wider urban area and realise its transformation.

indicative site size:

500 – 5000 sq.m

support & delivery:

- supply of kit/physical infrastructure
- advice/training support
- local composting scheme co-ordinated to site
- wider supply strategy for consumables

project partners:

- Delivery agency
- Glasgow & Clyde Valley Green Network Partnership
- Local Authority
- Housing Association
- Community Health Partnership / CHCP
- Local established community organisation – as partner



4.0 strategy overview: strategy strand 2:

strategy strand 2: bring underused land (amenity space) in peripheral estates and social housing areas ('green desert') into use at scales up to market garden growing:

the setting and sites:

This strand of the strategy is focused in areas of social housing, with poorly conceived layouts which frequently contain large areas of underused land.

Sites tend to be more peripheral & support lower overall population densities.

Such peripheral estates, frequently contain large areas of land that could be brought into more active use relatively easily.

Such sites are frequently at the fringes of the urban area and in some instances border abandoned or underused farmland which could also be brought into use for growing.

the opportunity:

For many such communities, in many cases areas of multiple deprivation, bringing the external environment into active use for growing could be transformative.

The form and layout of many of these housing areas generates a public realm of uncertain territory that has no clear function and is essentially unpopulated 'dead space'.

The introduction of an active outdoor use such as growing, helps to populate these areas, increase casual surveillance, policing by presence and discouraging antisocial behavior.

The market garden scale growing offers the potential for a commercial level of production and following a social enterprise model this generates the potential for local training and employment.

the issues:

Market garden growing would be proposed as a permanent land-use – given its scale, associated physical infrastructure and organisational structures.

This permanent change of use will require co-ordination of land use planning/designations with the local planning authority.

proposed approach:

physical form:

As far as possible such sites would utilise existing ground, cultivated and improved with the associated infrastructure necessary to support growing activities.

Raised beds and other components of the designed 'kit' would however bring difficult or formerly developed areas into productive use and offer improved growing space suitable for certain crops/produce.

type of activity and purpose:

This strand of the strategy offers the potential for a larger scale of growing, which can take the form of a social enterprise market garden.

Clustered around this core 'social enterprise activity' could be a range of other community focused and supported growing activities.

definition:

Market gardening is: 'the relatively small-scale production of fruits, vegetables and flowers as cash crops, frequently sold directly to consumers and restaurants'.

Market gardening is distinguished from other types of farming by several key aspects:

- it tends to occupy small to medium land areas (typically from around 0.4 hectares up to around 4 hectares)
- it is based on providing a wide range of produce throughout the year as opposed to intensive monoculture production
- it tends to involve more manual labour and gardening techniques instead of highly mechanised processes
- production is usually low volume and therefore sold to a limited and clearly defined market (typically through farm-door sales, local produce outlets, subscription schemes or local food service businesses)

The intention for these sites would be to accommodate 'a social purpose (training & employment) within a sustainable business model – growing sufficient produce in order to sell the majority commercially.' (GCC Development & Regeneration Services study).

indicative site size:

0.5 hectare to 5 hectares

support & delivery:

- support in establishment of social enterprise business
- support in site selection and co-ordination of land-use planning matters
- support in funding & implementation of site & infrastructure
- local composting scheme co-ordinated to site
- wider supply strategy for consumables

project partners:

- Delivery agency
- Glasgow & Clyde Valley Green Network Partnership
- Local Authority
- Housing Association
- Community Health Partnership / CHCP
- Local established community organisation – as partner?



4.0 strategy overview: strategy strand 3:

strategy strand 3: bring under used private garden space in suburban or outlying areas into use for growing:

the setting and sites:

This strand of the strategy is focused in typical urban/suburban housing layouts: single dwellings with associated private garden space.

There are expansive areas of this urban/landscape typology within the Glasgow Metropolitan Region.

the opportunity:

The goal is to connect people who want growing space with those who are unable to or not interested in looking after their gardens or land.

The core of this strand of the strategy is a managed database - matching people up. On a UK wide level this approach is being pursued through the Landshare website (Channel 4/Hugh Fearnley Whittingstall).

the issues:

There may be issues in terms of the sense of comfort/territory with regard to sharing a private garden. This clearly would not suit everyone.

There will need to be some form of monitoring and management to avoid abuse of the system - particularly for vulnerable elderly homeowners.

Consideration needs to be given to whether this can just be dealt with through the UK wide Landshare database - or whether additional focused action should take place within the Glasgow Metropolitan Region?

As of early May 2009 on the Landshare website: only 2 people offering garden/land to share & 14 people looking for growing space in Glasgow City.

type of activity and purpose:

This strand of the strategy is simply focused on enabling individual and independent growers to get access to land for growing.

indicative site size:

variable (domestic garden)

support & delivery:

- UK wide Landshare scheme/website?
- Glasgow Metropolitan Region focused delivery/support?

project partners:

- Glasgow & Clyde Valley Green Network Partnership
- Local Authority?



suburban garden space brought into active growing use: Glasgow

sow and grow everywhere

4.0 strategy overview: strategy strand 4:

strategy strand 4: bring under used public land into active use for growing:

the setting and sites:

This strand of the strategy is focused on land under public ownership/control that has potential to be brought into more active and effective use.

This potentially includes: public parks, existing allotment sites, hospital grounds and school sites.

the opportunity:

There is potential for better use of the existing land resource to deliver growing space.

School sites in particular are seen as having great potential. Such sites can engage young people and families and are distributed through all neighbourhoods.

The strategy proposes a redefinition of part of the school grounds as a shared school / local community facility. This is seen as a key move to overcome a number of common problems.

the issues:

In terms of introducing growing space to public parks, consideration needs to be given as to whether the available land is geographically well situated. Is there current local demand for growing space? This move should not be driven by political / financial expediency alone.

The re-organising of activity within existing allotments sites, although potentially worthwhile, is likely to have limited impact.

school sites:

There are a number of issues which have typically prevented growing activity at school sites or that may present barriers to action. These include:

- selecting schools with sufficient land area
- control & management of access to the school site
- perceived health & safety issues with children eating food grown on site
- mismatch of the school calendar and the main growing season

proposed approach (school sites):

physical form:

The proposal is to create a shared resource on the school site: physically separated by fencing from both the street and the school and with controlled gated access from both.

It is proposed that a core community group is established (through the school) - who run and work the site (including the period through the summer holidays).

The school has access to the site and children have access to the growing space as part of curricular activity.

type of activity and purpose:

This strand of the strategy is focused on creating a joint community and school resource.

The site benefits both the school, (providing a learning resource for the school children (linking to the 3-18 year curriculum)) and the community (developing involvement in growing).

health & safety:

consultation with Glasgow City Council 'eco-schools' officer:

The perceived barrier to food growing and consumption on school sites is described as an urban myth. There is no centralised edict about children not eating food that has been grown on a school site.

Risk management is the responsibility of each school. The school has to prepare a risk assessment and pass this to the Education Department.

To assist this process, within Glasgow City a pro-forma risk assessment sheet for food growing at schools has been prepared by the 'eco-schools' officer. This aims to make the exercise as easy and understandable as possible for school staff so that it does not act as a barrier to food growing activities.

indicative site size:

variable (500-5000sq.m)

support & delivery:

- support in funding & implementation of site & infrastructure
- local composting scheme co-ordinated to site
- wider supply strategy for consumables

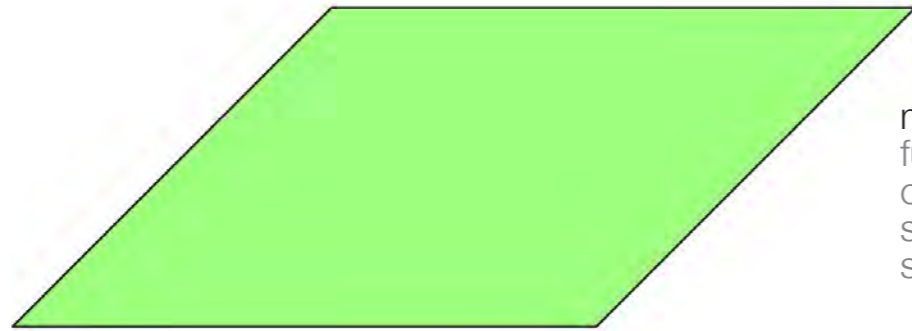
project partners:

- Delivery agency
- Glasgow & Clyde Valley Green Network Partnership
- Local Authority
- 'Grounds for Learning' etc.
- Community Health Partnership / CHCP
- Local established community organisation – as partner?

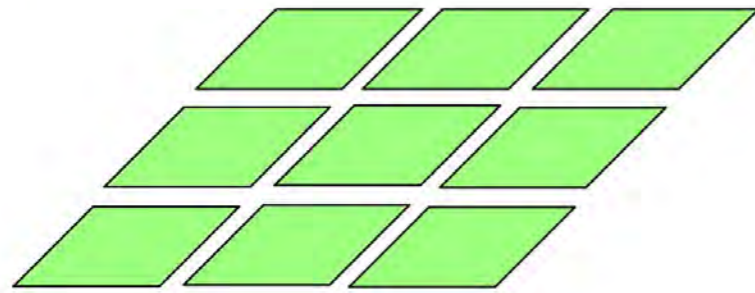


shared school/community growing space: Berlin

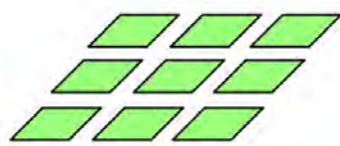
4.0 strategy overview: growing sites: scale & role



market garden:
function: commercial operation
crops: grow to surplus for sale
structure: centrally co-ordinated
size: 0.5 - 5.0 hectares (approx)



allotments:
function: skilled pass time
crops: grow for own consumption
structure: association of individuals
size: 100-150 sq.m (individual plot)



temporary sites:
function: introduction to growing
crops: grow for own consumption
structure: supported activity
size: clustered on sites: 500-5000 sq.m

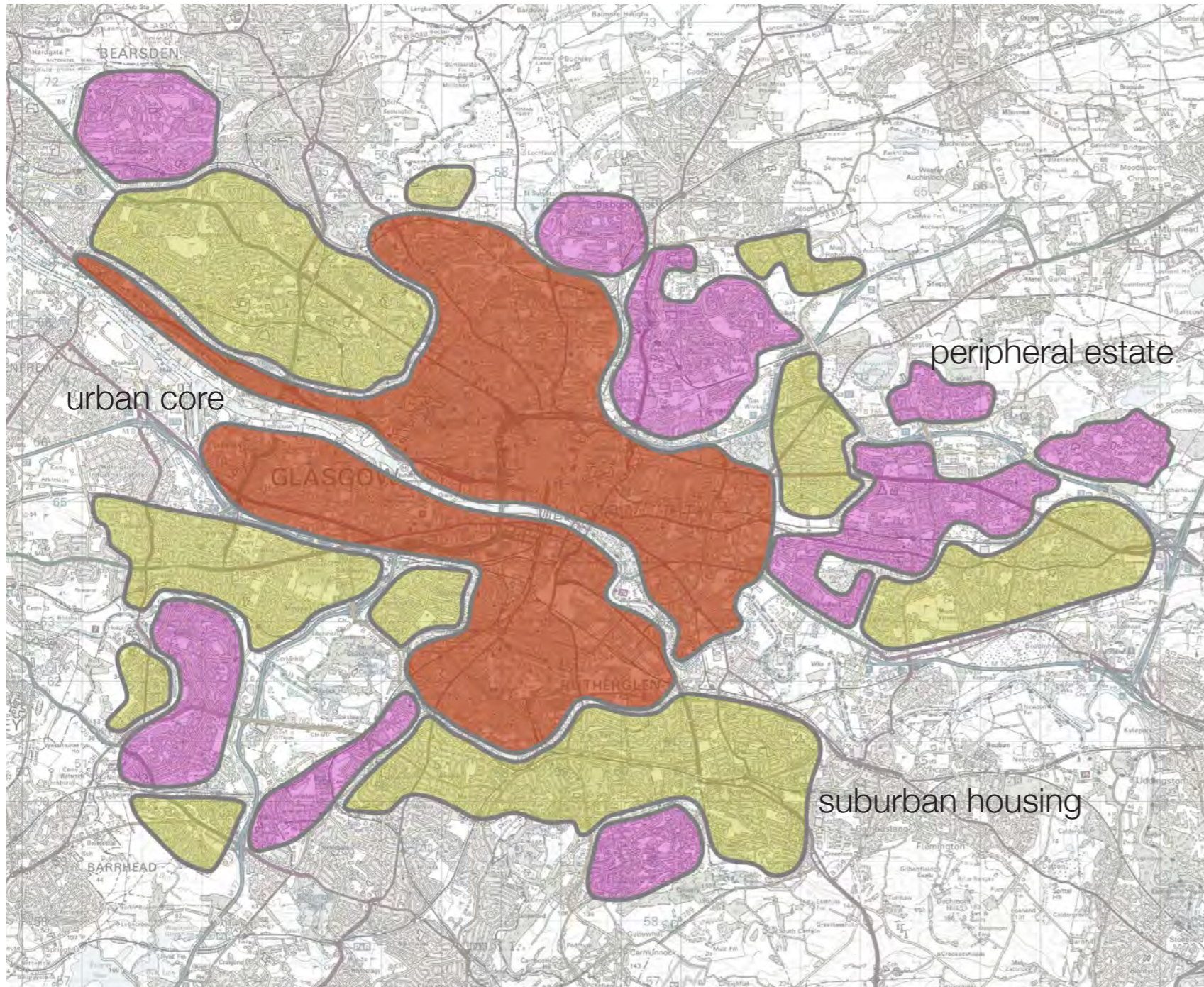


garden/landshare:
function: skilled pass time
crops: grow for own consumption
structure: 'matched' individuals
size: variable - domestic garden

sow and grow everywhere

5.0 geographic action areas: scoping process:

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landscape typology mapping: Glasgow City

5.1 scoping process overview:

The scoping of areas of focus for intervention has been informed by considering 3 sets of mapped information, as follows:

1. a mapping of the broad extent of the 'landscape typologies' as defined earlier in the report, namely: core urban areas, peripheral estates and suburban housing.
2. this is then overlaid with the mapped health & deprivation data, to determine areas of greatest 'need' for intervention
3. from this composite map, non residential areas have been omitted to offer greater clarity

The geographic mapping of broad landscape typology has been informed by:

- desk based review of GIS data & satellite images for the study area
- familiarity with the physical form of many areas of the study area
- dialogue with officers from the 8 local authorities in the study area

This scoping process has been undertaken for all 8 of the regional local authority areas.

The resulting mapping of geographic action areas for each strand of the strategy, within each local authority area, is detailed in the following pages.

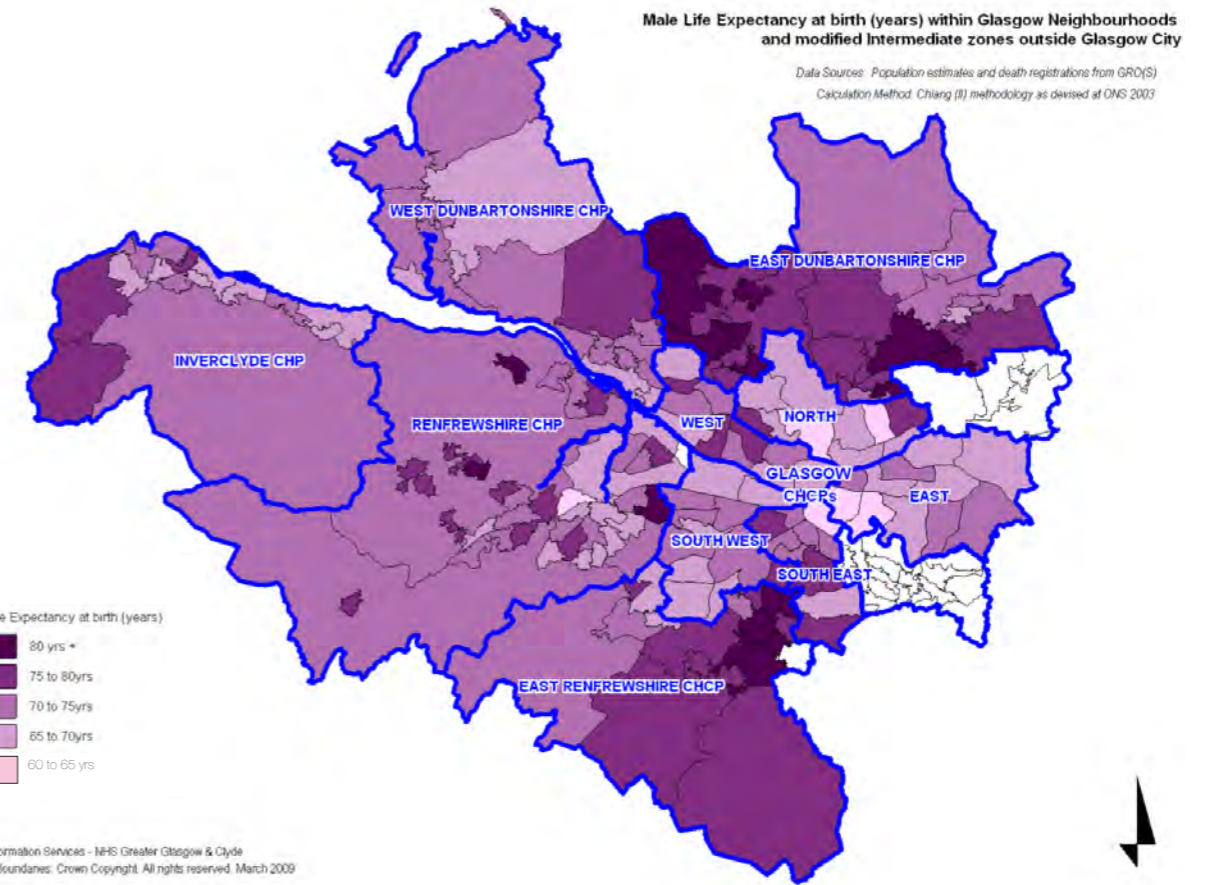
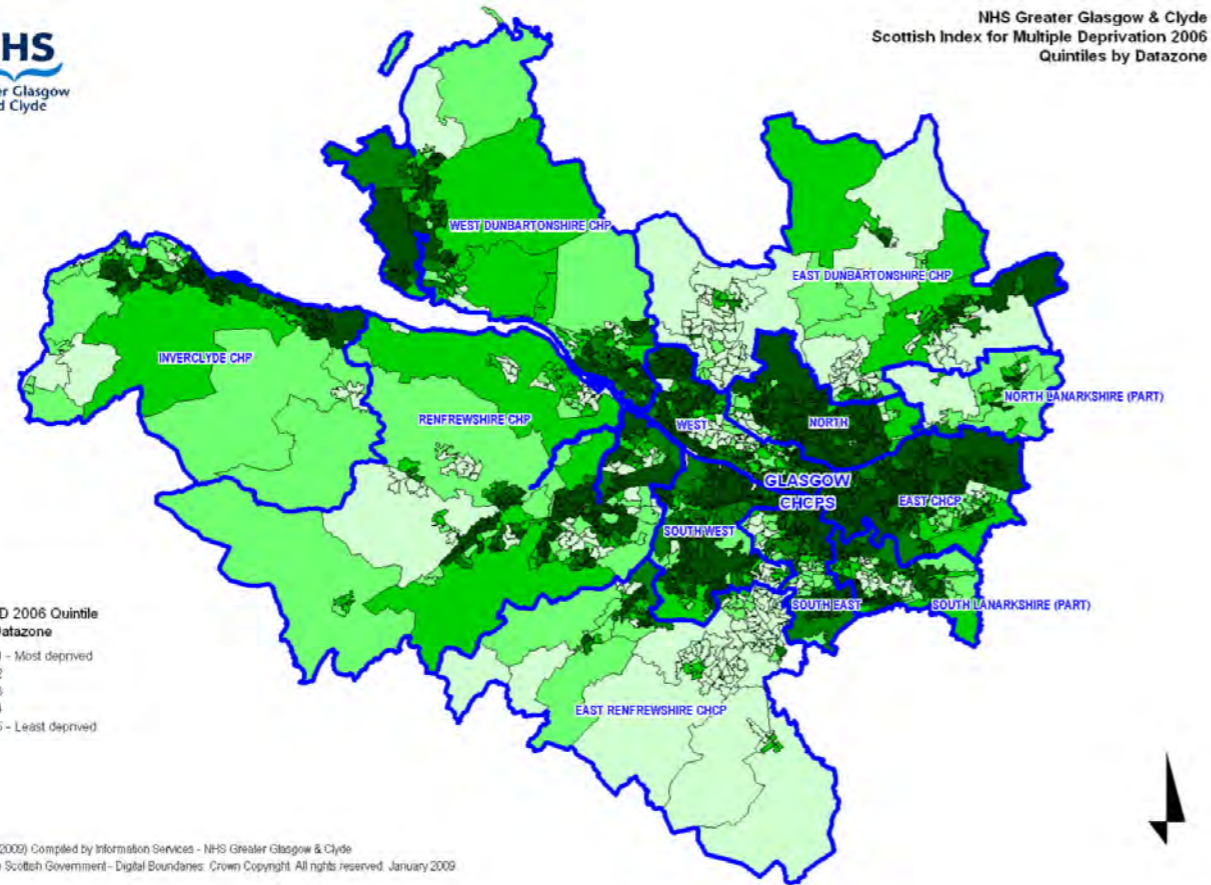
In addition, the groups active in community food growing in each local authority area (where known) have been mapped.

To exemplify the scoping process, the initial mapping of landscape typology for Glasgow City is shown (here), alongside the relevant mapped health and deprivation information (provided by NHS Greater Glasgow & Clyde).

It is notable that through the Glasgow Metropolitan Region there is a broad correlation between the 'urban core' and 'peripheral estate' typologies and the areas demonstrating the worst health and deprivation position.

5.0 geographic action areas: scoping process

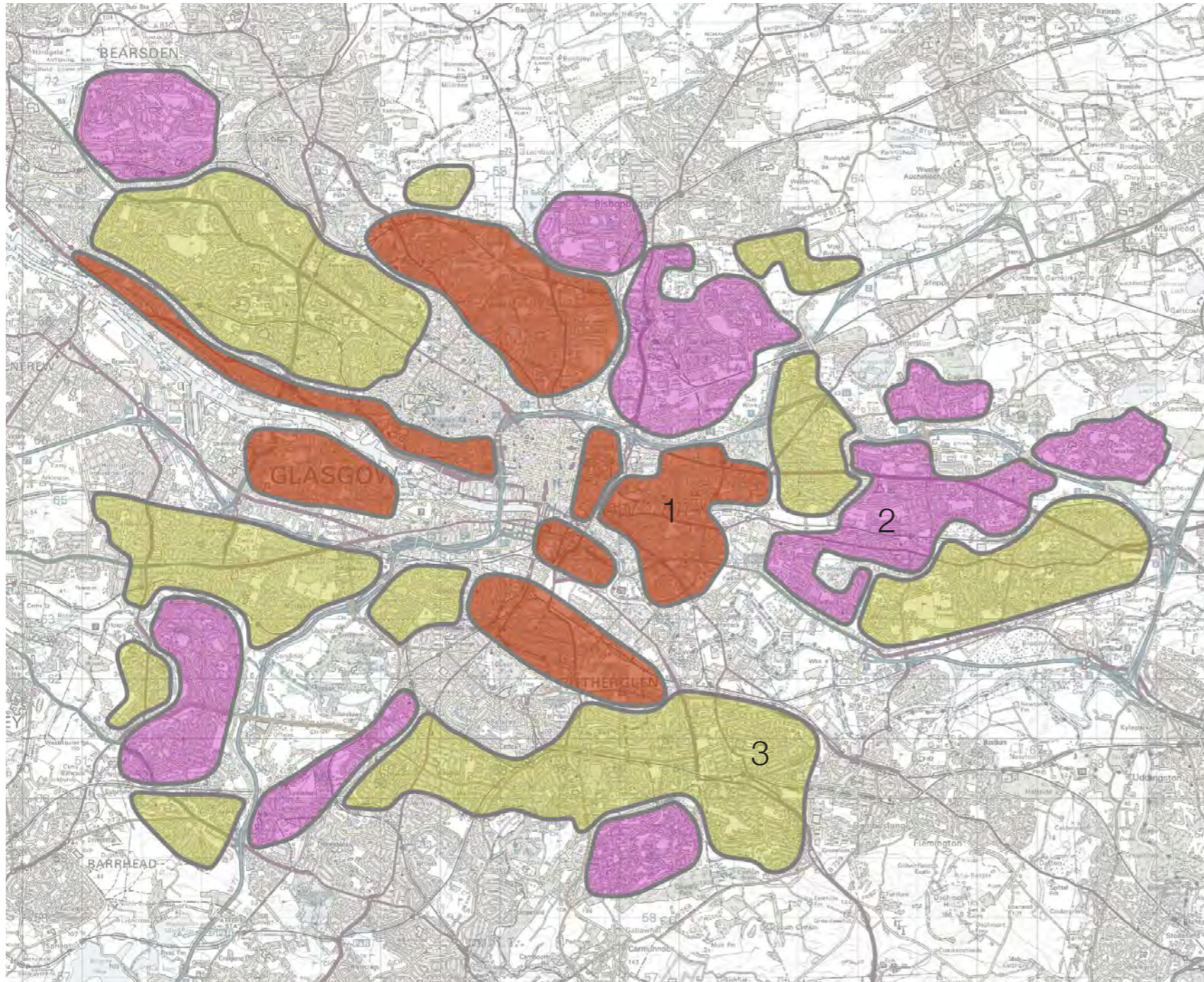
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5.0 geographic action areas: glasgow city

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5.2 Glasgow City: geographic action areas:

strategy strand 1:

bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse

strategy strand 2:

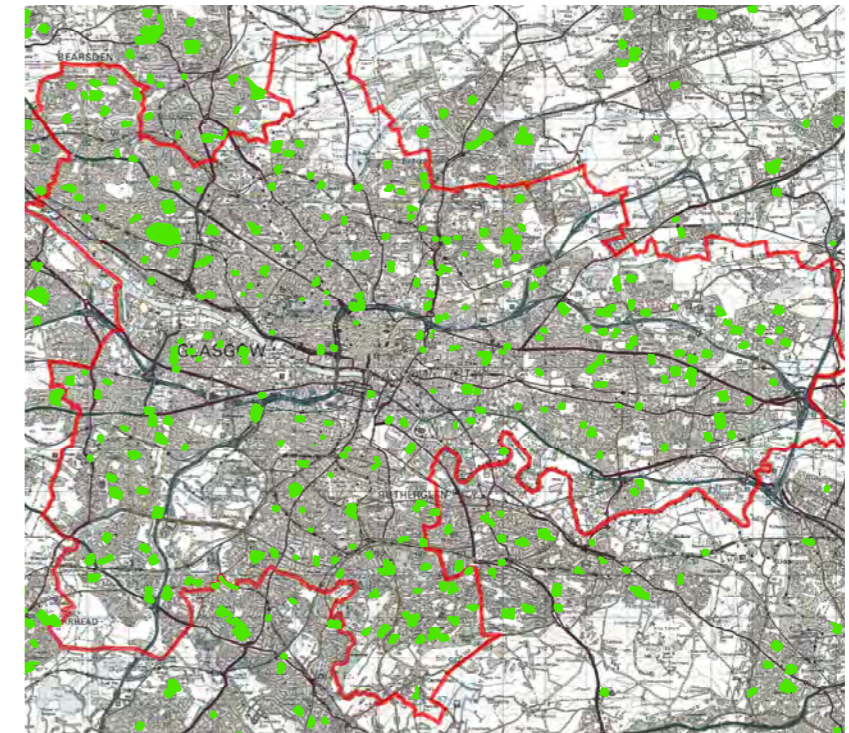
bring underused land (amenity space) in peripheral estates & social housing areas into use at scales up to market garden growing

strategy strand 3:

bring underused private garden space in suburban or outlying areas into use for growing

strategy strand 4:

bring underused public land into active use for growing (focused on school sites throughout the area)



strategy strand 4: location of school sites: Glasgow City

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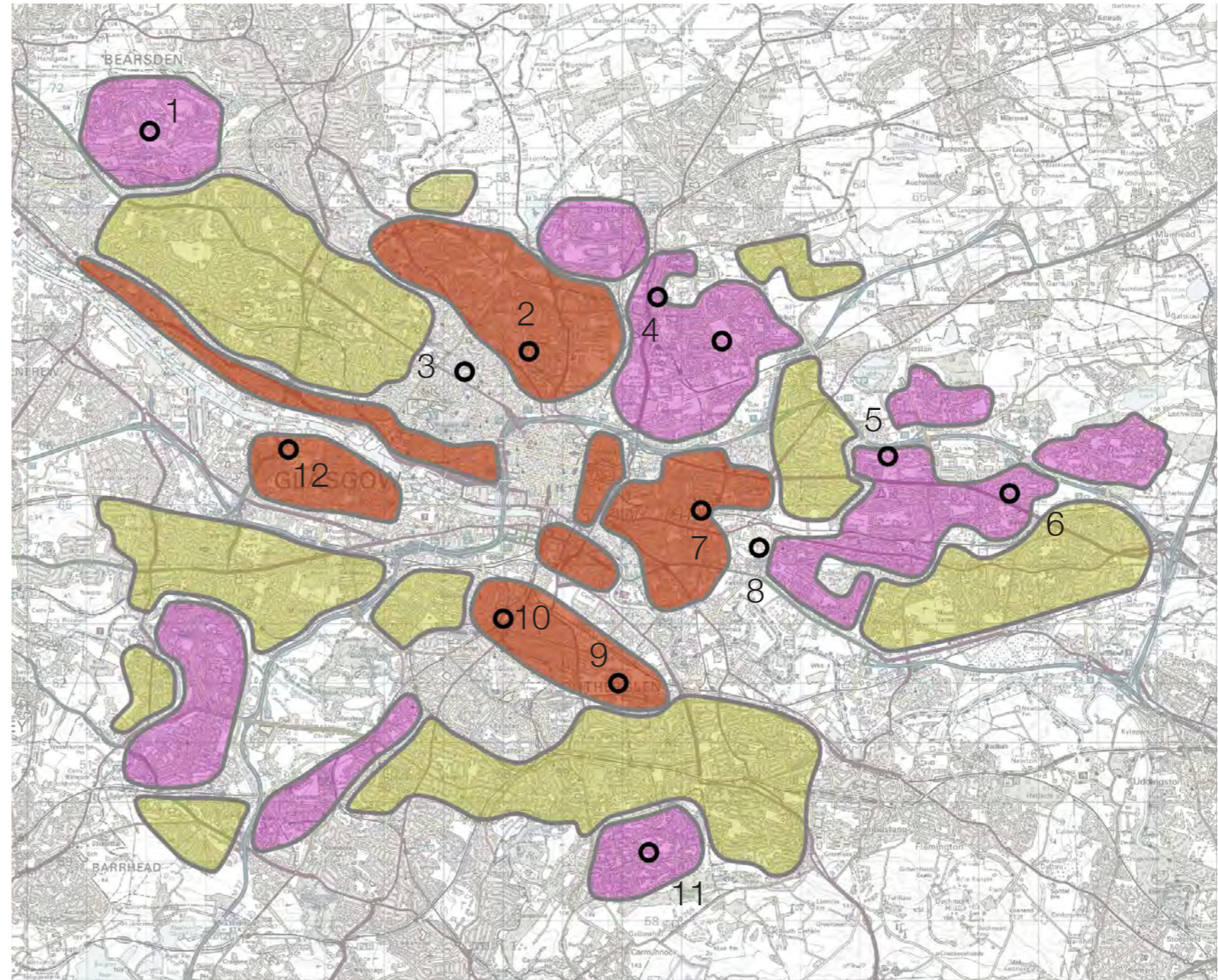
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5.0 geographic action areas: glasgow city

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5.2 Glasgow City: action areas/active groups

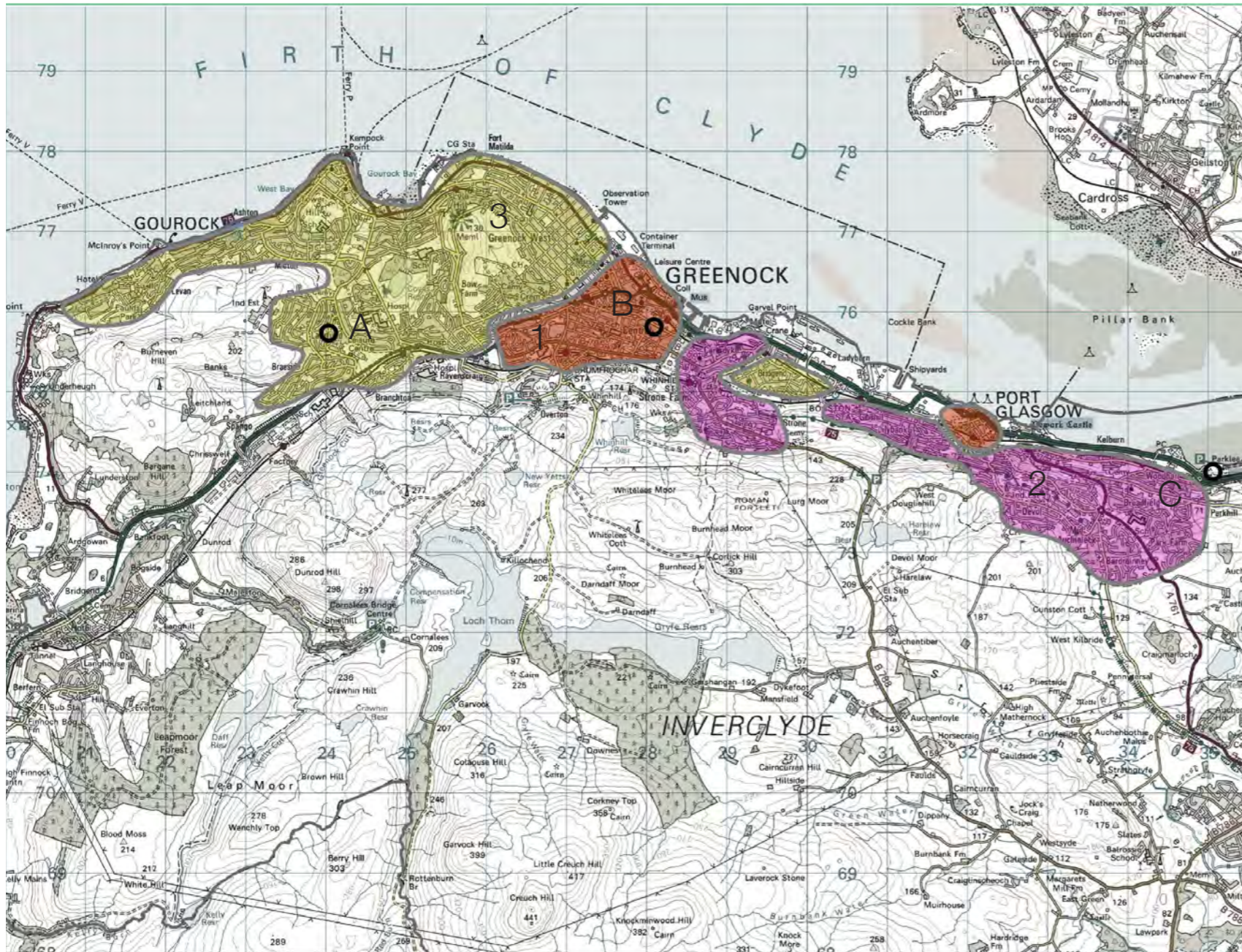
1. Drumchapel LIFE
2. Hamiltonhill Allotments
3. The Coach House Trust
4. North Glasgow Community Food Initiative
5. Cranhill Community Garden
6. Wellhouse Community Trust
7. Reidvale/Molindiner Housing Associations
8. Playbusters
9. Toryglen Environment project
10. the Hidden Gardens Trust
11. Castlemilk Environment Trust
12. Linthouse Housing Association/Elder Park



sow and grow everywhere

5.0 geographic action areas: inverclyde

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5.2 Inverclyde: action areas/active groups:

strategy strand 1:

bring vacant & derelict land in densely populated urban areas into use for growing as an interim land-use

strategy strand 2:

bring underused land (amenity space) in peripheral estates & social housing areas into use at scales up to market garden growing:

strategy strand 3:

bring underused private garden space in suburban or outlying areas into use for growing

strategy strand 4:

bring underused public land into active use for growing (focused on school sites throughout the area)

potential local project partners:

- A. Larkfield Community Garden/HA
- B. Inverclyde Association for mental health
- C. Parklea Branching Out

5.0 geographic action areas: west dunbartonshire

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5.2 West Dunbartonshire: action areas/groups

strategy strand 1:

bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse

strategy strand 2:

bring underused land (amenity space) in peripheral estates & social housing areas into use at scales up to market garden growing:

strategy strand 3:

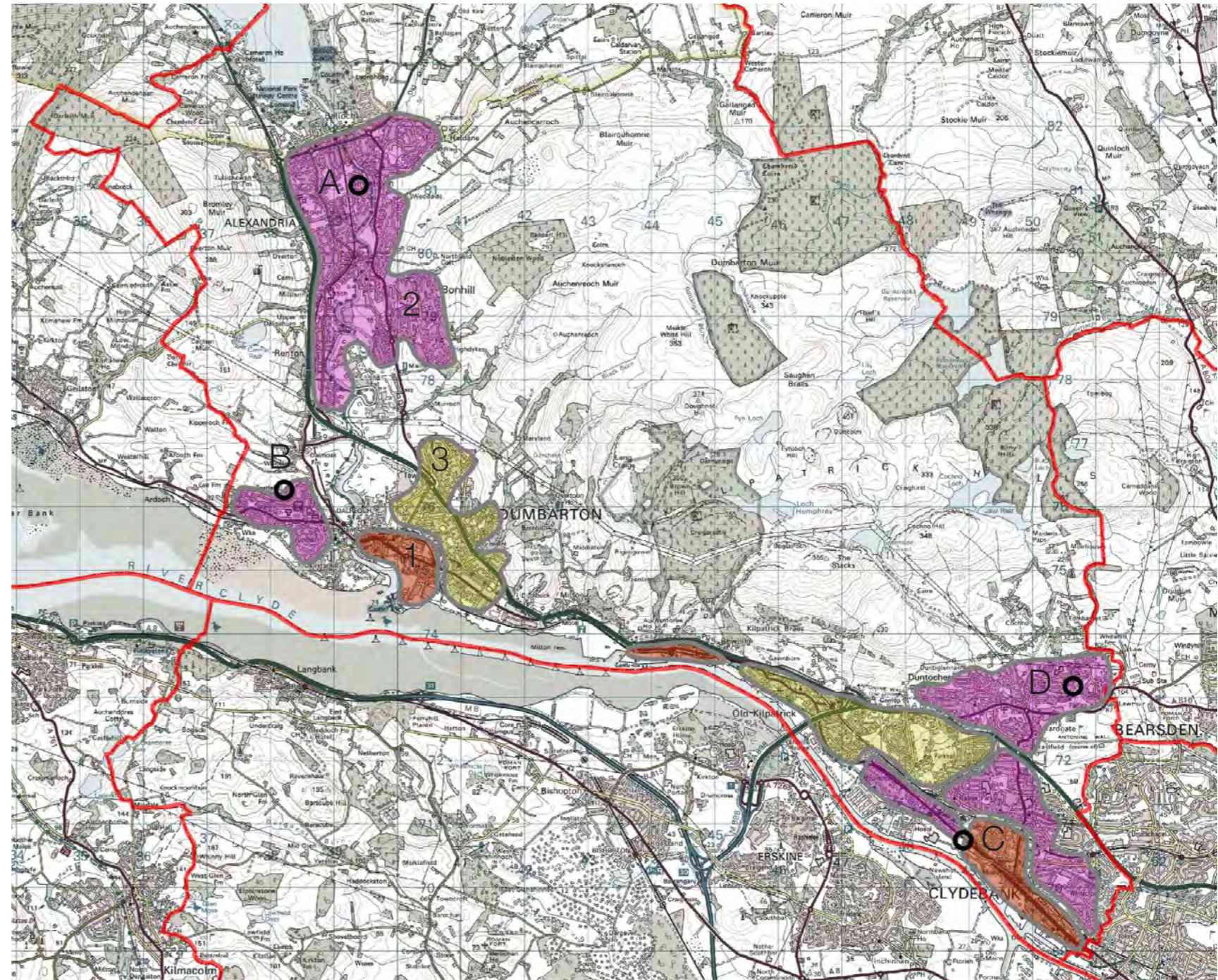
bring underused private garden space in suburban or outlying areas into use for growing

strategy strand 4:

bring underused public land into active use for growing (focused on school sites throughout the area)

potential local project partners:

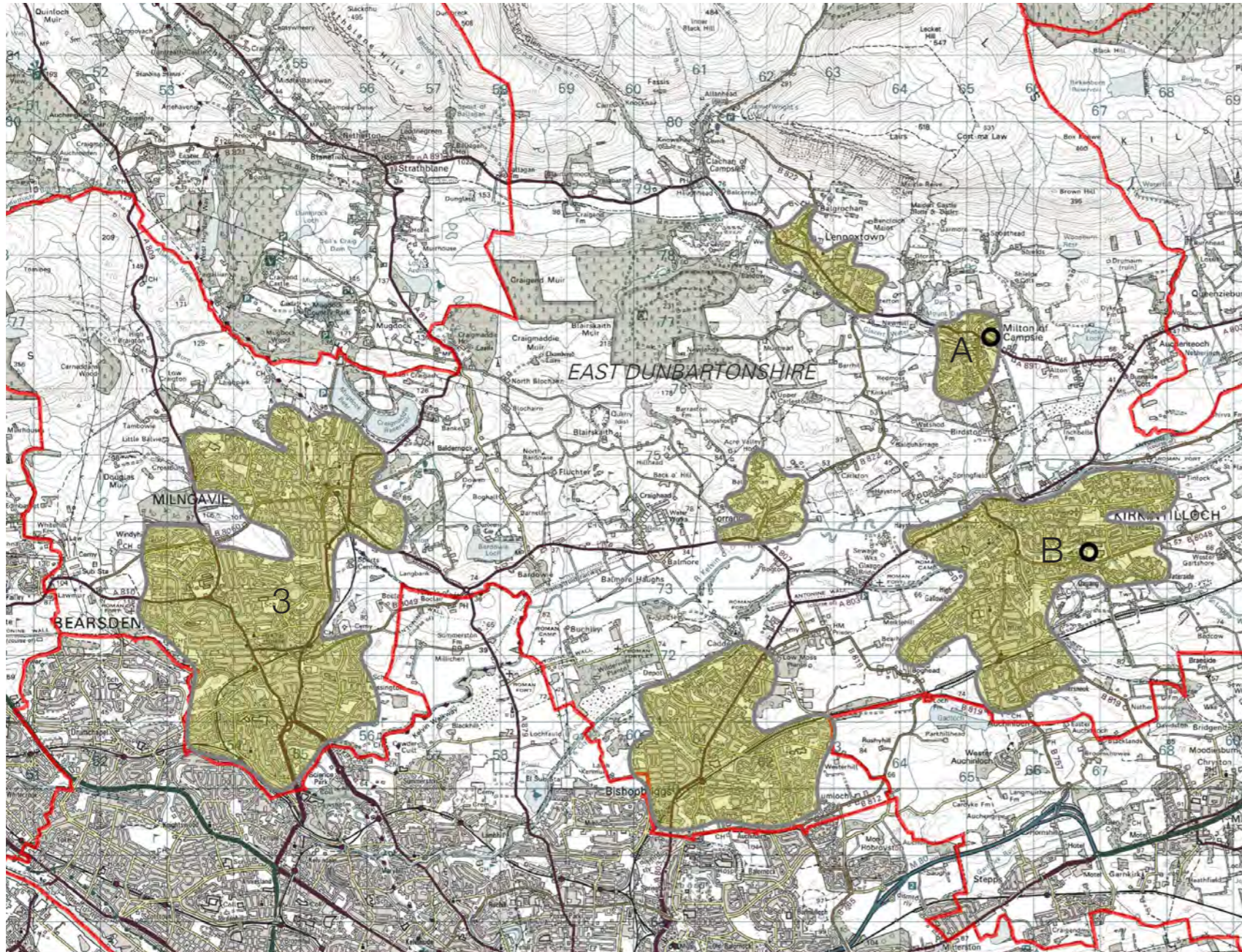
- A. Rosshad Community Garden
- B. Knowetop Community Farm
- C. Dalmuir allotments
- D. Failley project/resource centre



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5.0 geographic action areas: east dunbartonshire

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5.2 East Dunbartonshire: action areas/groups:

strategy strand 3:
bring underused private garden space in suburban or outlying areas into use for growing

strategy strand 4:
bring underused public land into active use for growing (focused on school sites throughout the area)

potential local project partners:

- A. Silver Birch (Scotland) Ltd.
- B. Oxbang Primary School

5.0 geographic action areas: north lanarkshire

5.2 North Lanarkshire (N): action areas/groups

strategy strand 2:
bring underused land (amenity space) in peripheral estates & social housing areas into use at scales up to market garden growing:

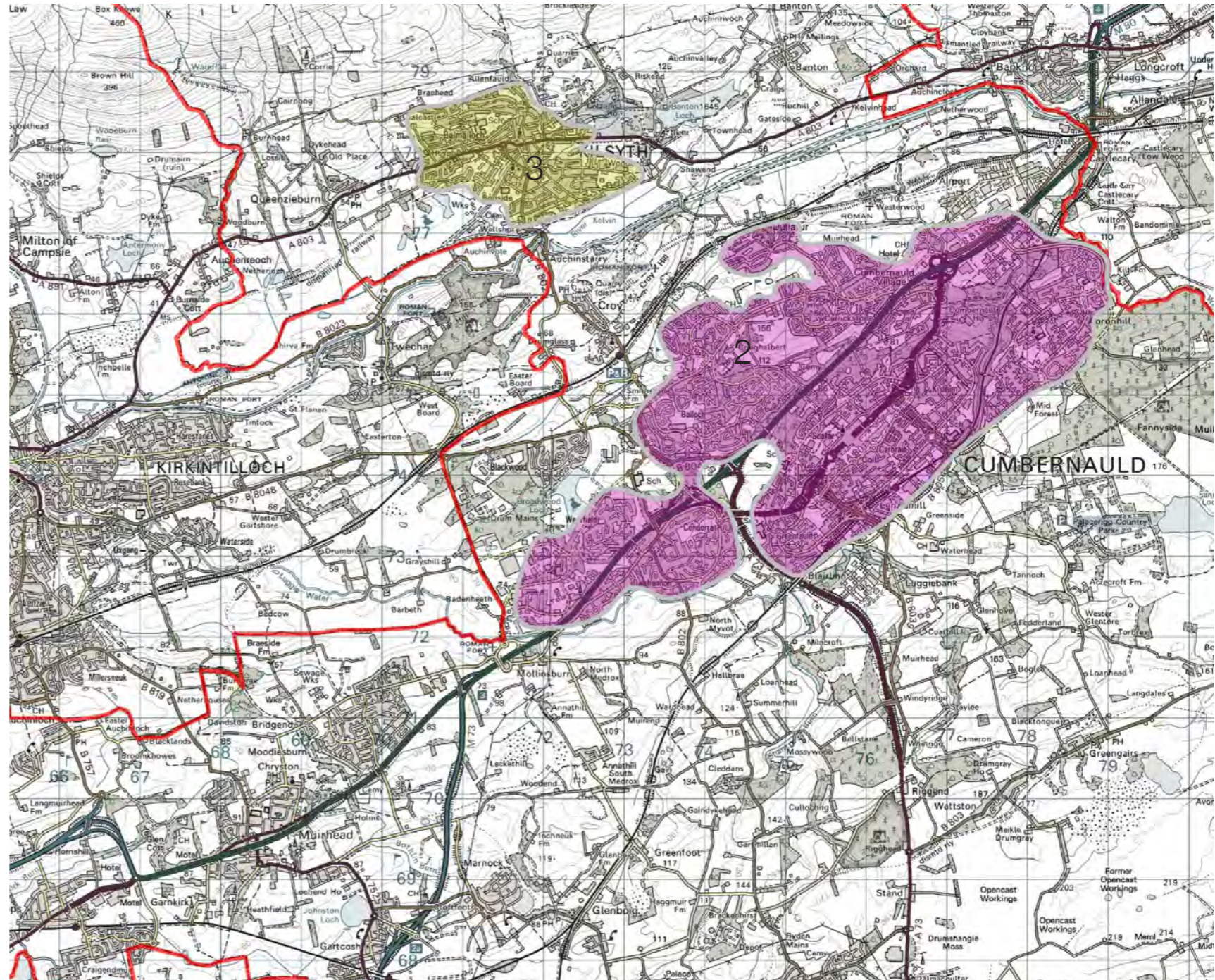
strategy strand 3:
bring underused private garden space in suburban or outlying areas into use for growing

strategy strand 4:
bring underused public land into active use for growing (focused on school sites throughout the area)

potential local project partners:

no information provided by North Lanarkshire Council

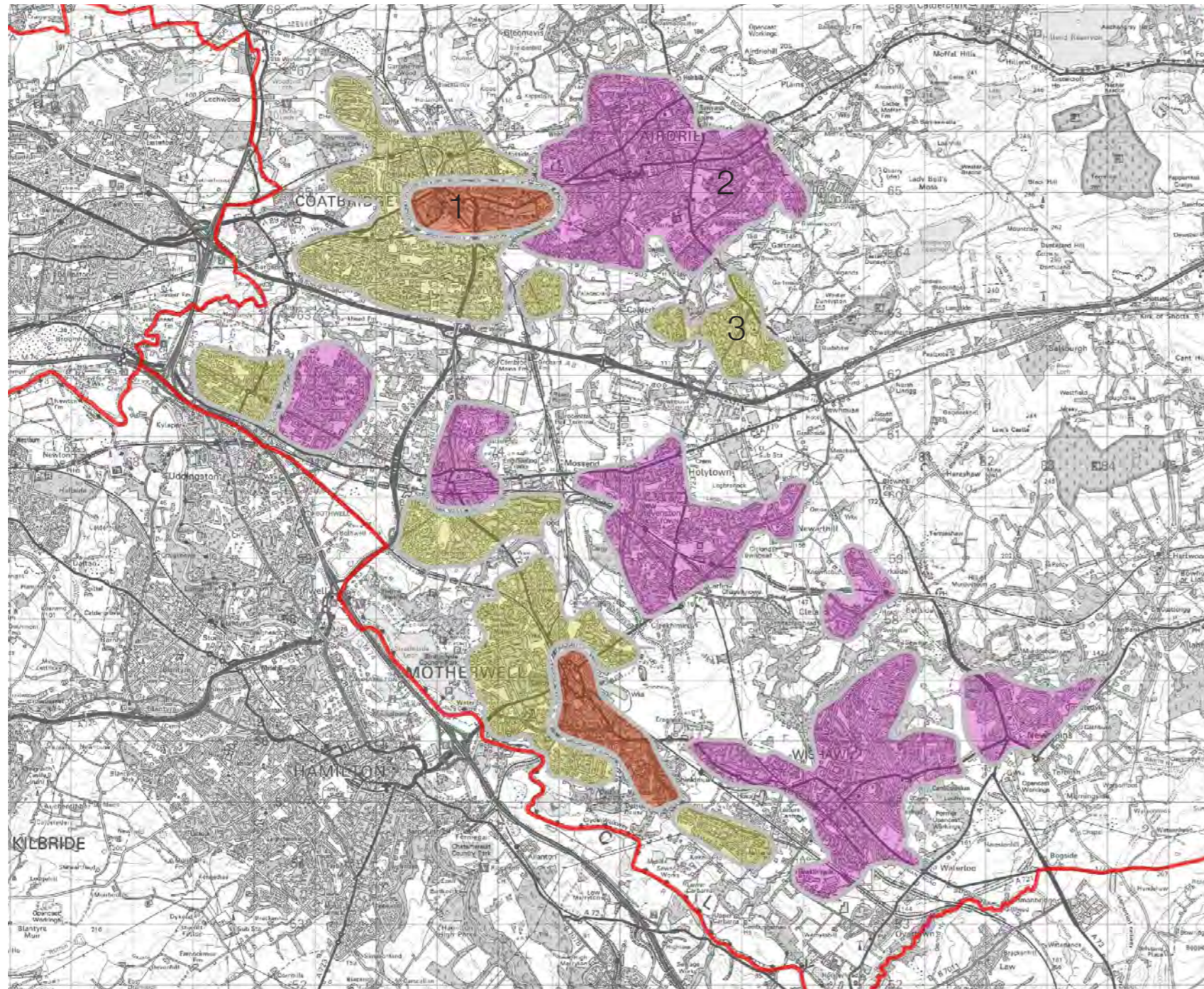
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5.0 geographic action areas: north lanarkshire

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5.2 North Lanarkshire (S): action areas/groups:

strategy strand 1:

bring vacant & derelict land in densely populated urban areas into use for growing as an interim land-use

strategy strand 2:

bring underused land (amenity space) in peripheral estates & social housing areas into use at scales up to market garden growing:

strategy strand 3:

bring underused private garden space in suburban or outlying areas into use for growing

strategy strand 4:

bring underused public land into active use for growing (focused on school sites throughout the area)

potential local project partners:

no information provided by North Lanarkshire Council

5.0 geographic action areas: south lanarkshire

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5.2 South Lanarkshire (N): action areas/groups

strategy strand 1:

bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse

strategy strand 2:

bring underused land (amenity space) in peripheral estates & social housing areas into use at scales up to market garden growing:

strategy strand 3:

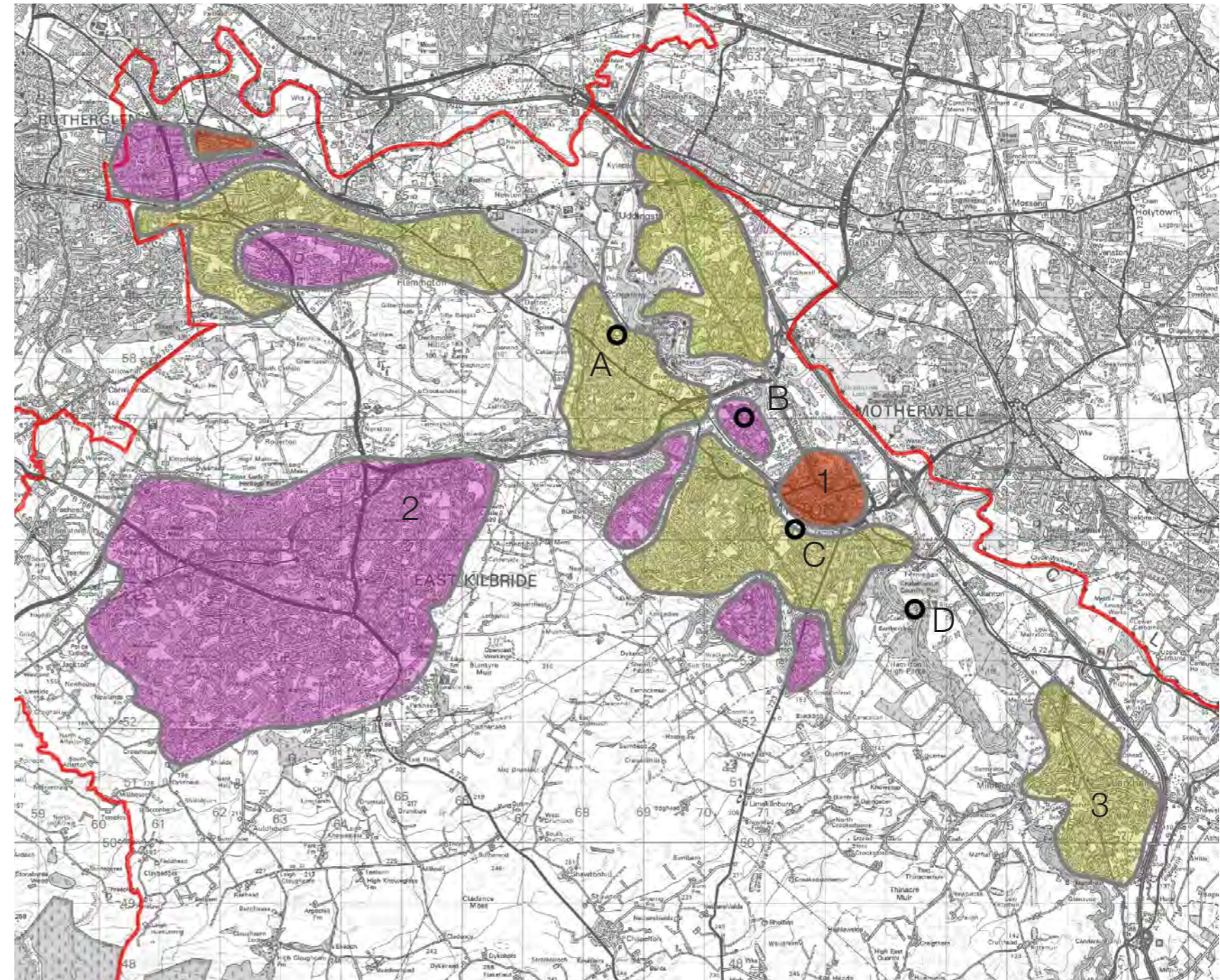
bring underused private garden space in suburban or outlying areas into use for growing

strategy strand 4:

bring underused public land into active use for growing (focused on school sites throughout the area)

potential local project partners:

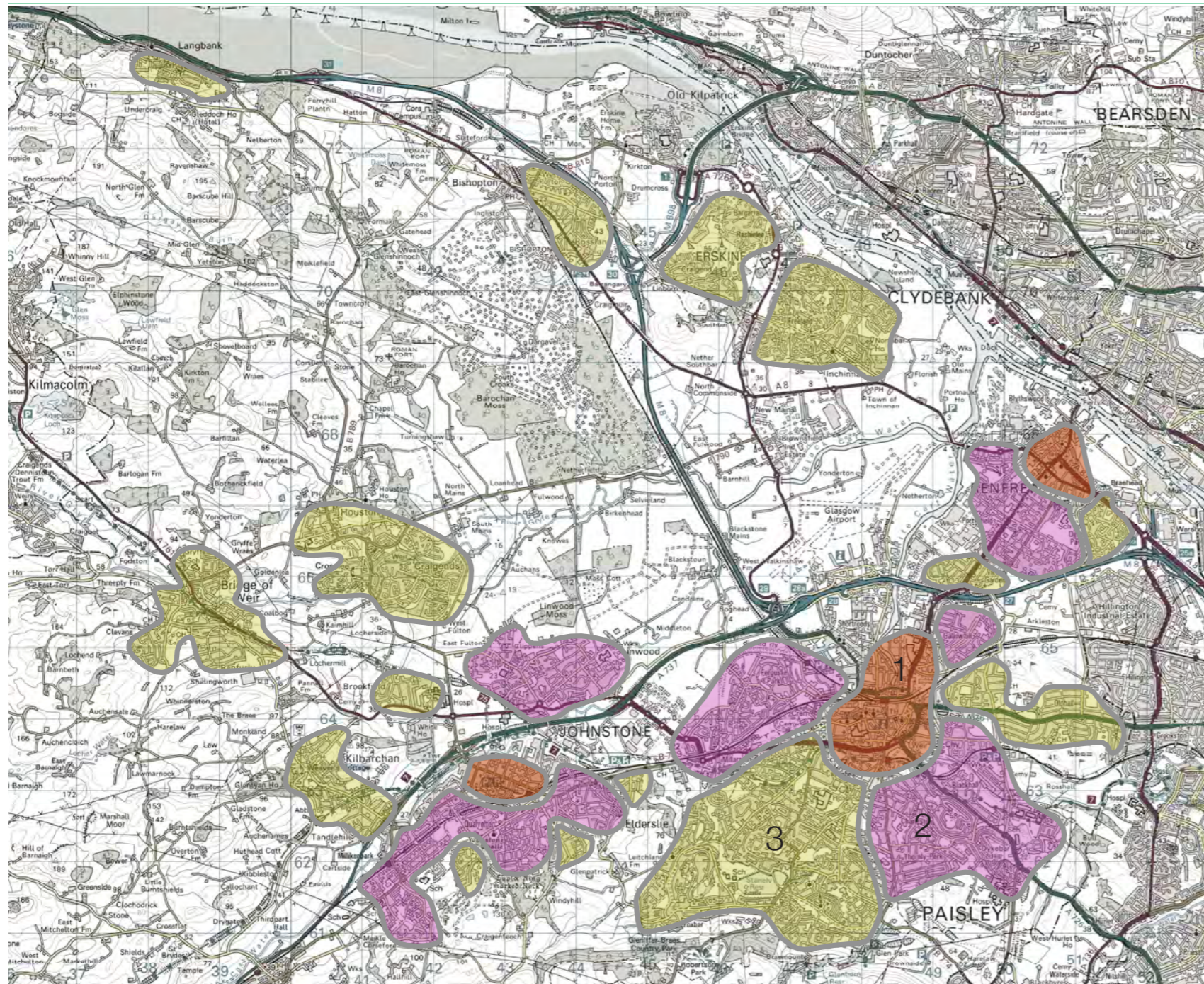
- A. TACT community garden Blantyre
- B. Whitehill/Threshold community garden
- C. Hamilton Grammar School
- D. Phoenix Futures: Chatelherault



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5.0 geographic action areas: renfrewshire

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5.2 Renfrewshire: action areas/active groups:

strategy strand 1:

bring vacant & derelict land in densely populated urban areas into use for growing as an interim land-use

strategy strand 2:

bring underused land (amenity space) in peripheral estates & social housing areas into use at scales up to market garden growing:

strategy strand 3:

bring underused private garden space in suburban or outlying areas into use for growing

strategy strand 4:

bring underused public land into active use for growing (focused on school sites throughout the area)

potential local project partners:

no information provided by Renfrewshire Council

5.0 geographic action areas: east renfrewshire

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5.2 East Renfrewshire: action areas/active groups:

strategy strand 2:

bring underused land (amenity space) in peripheral estates & social housing areas into use at scales up to market garden growing:

strategy strand 3:

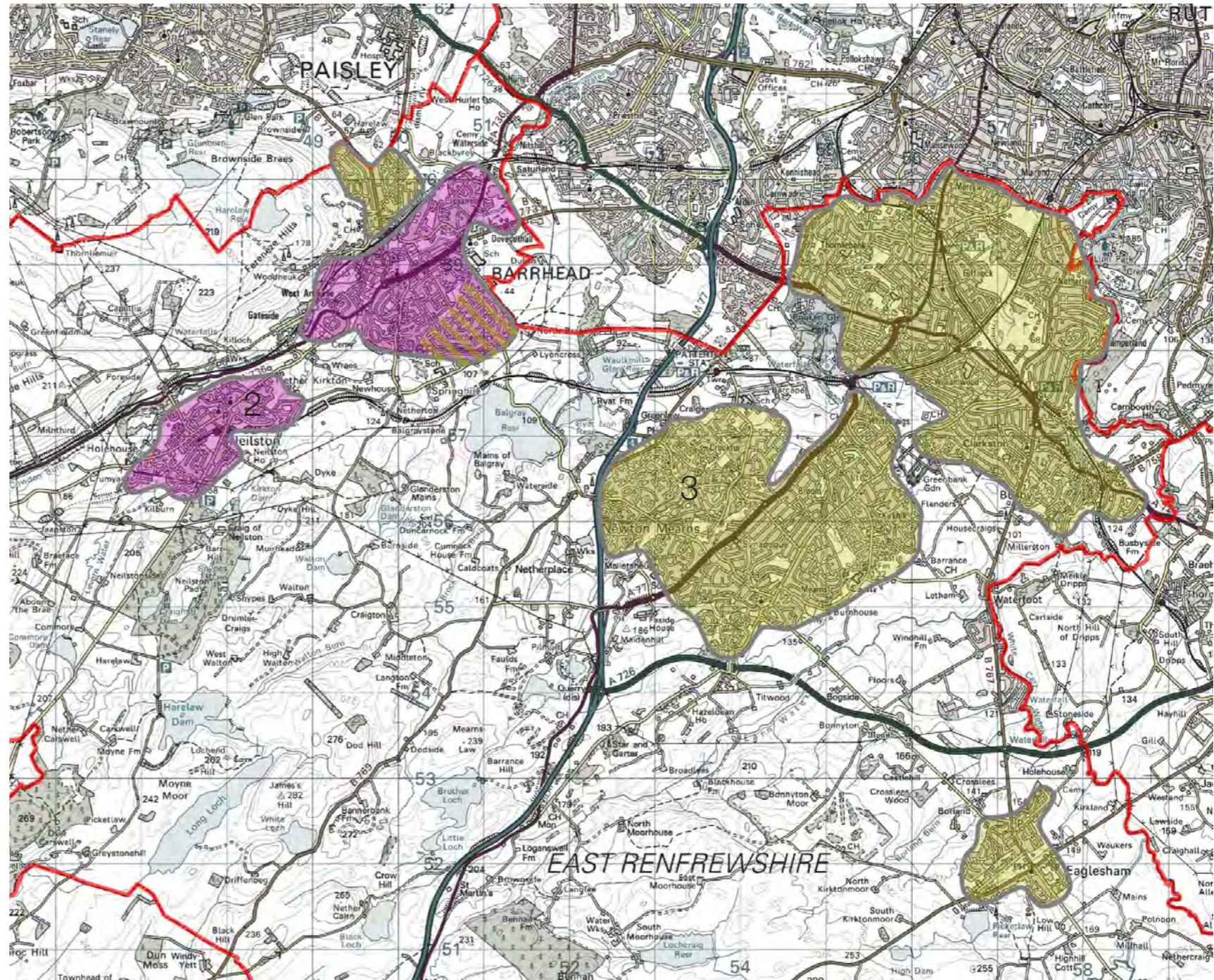
bring underused private garden space in suburban or outlying areas into use for growing

strategy strand 4:

bring underused public land into active use for growing (focused on school sites throughout the area)

potential local project partners:

no information provided by East Renfrewshire Council



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6.0 preliminary scoping of sites:

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6.1 scoping process & criteria used:

The previous section of the report provides a geographic overview of the 'action areas' for each strand of the strategy.

Within these action areas, there are a large number of potential sites which require to be scoped down to identify sites appropriate for community growing projects.

Glasgow City has been used as the focus for a preliminary scoping exercise. As is clear from the adjacent extract of the 2008 Derelict and Vacant Land map for Glasgow City - there are a large number of sites to consider.

To help focus discussion and action, a preliminary scoping has been carried out. This exercise has been focused (as an example) on the 7 action areas for Strategy Strand 1 (bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse) within the Glasgow City area.

The preliminary scoping exercise has been informed by fieldwork, whereby all of the derelict and vacant sites within the relevant action areas have been visited.

Based on a visual assessment, sites that are clearly unsuitable have been omitted. The following criteria were applied to inform the selection:

- proximity & relationship to housing: is the site close to housing and overlooked? Sites remote from residential areas have been omitted.
- developed/under development: sites with evidence of construction works or an 'imminent' development intention have generally been omitted.
- accessibility: are there other barriers to access?. inaccessible sites have been omitted.
- gradient: steeply sloping sites have been omitted.
- condition: sites with obvious risks eg: dangerous derelict buildings etc. have been omitted.

On the following pages, the output of this process is mapped for each of the 7 action areas.



6.0 preliminary scoping of sites: Glasgow:

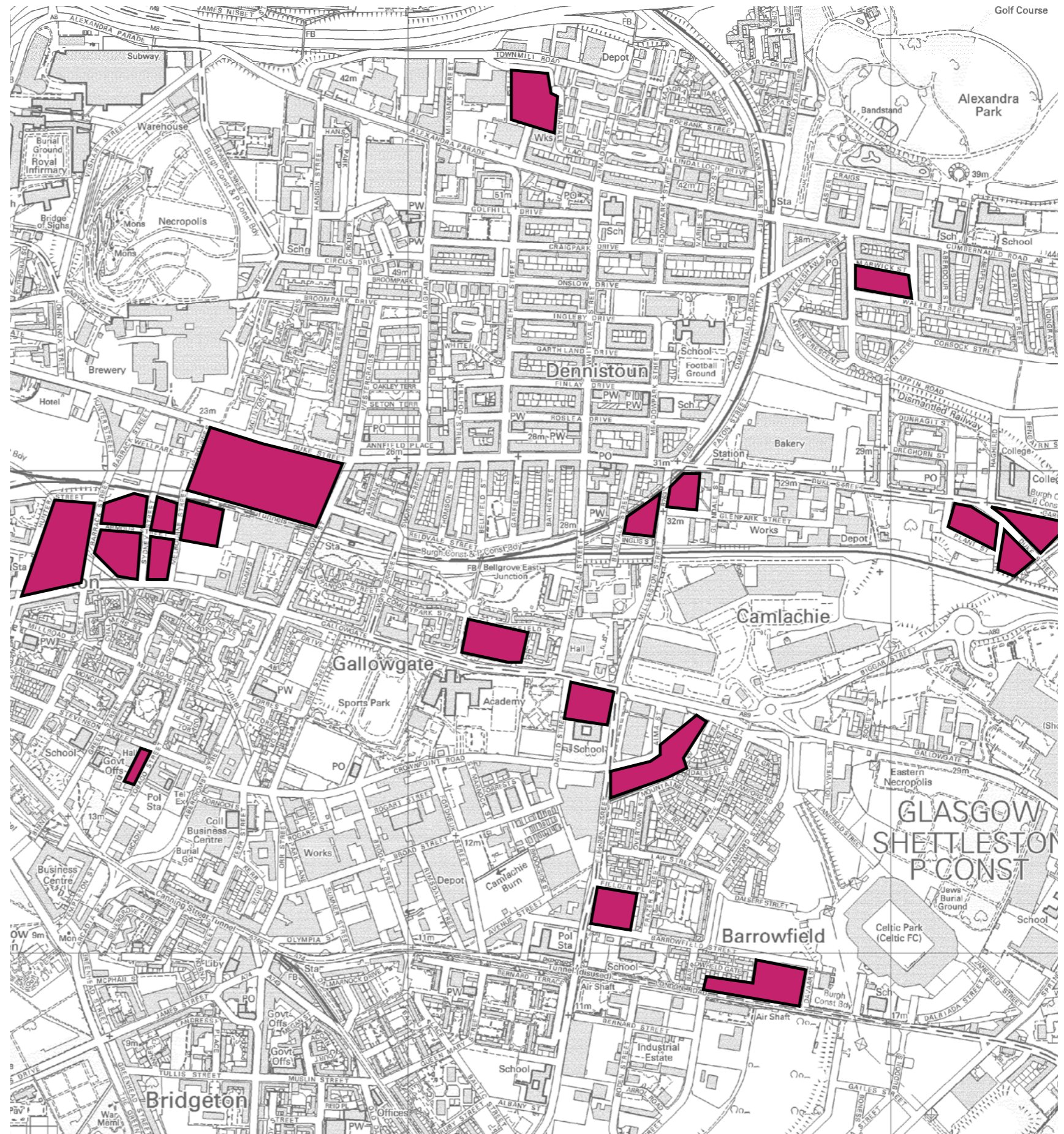
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6.2 preliminary scoping of sites: Glasgow:

strategy strand 1:

bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse

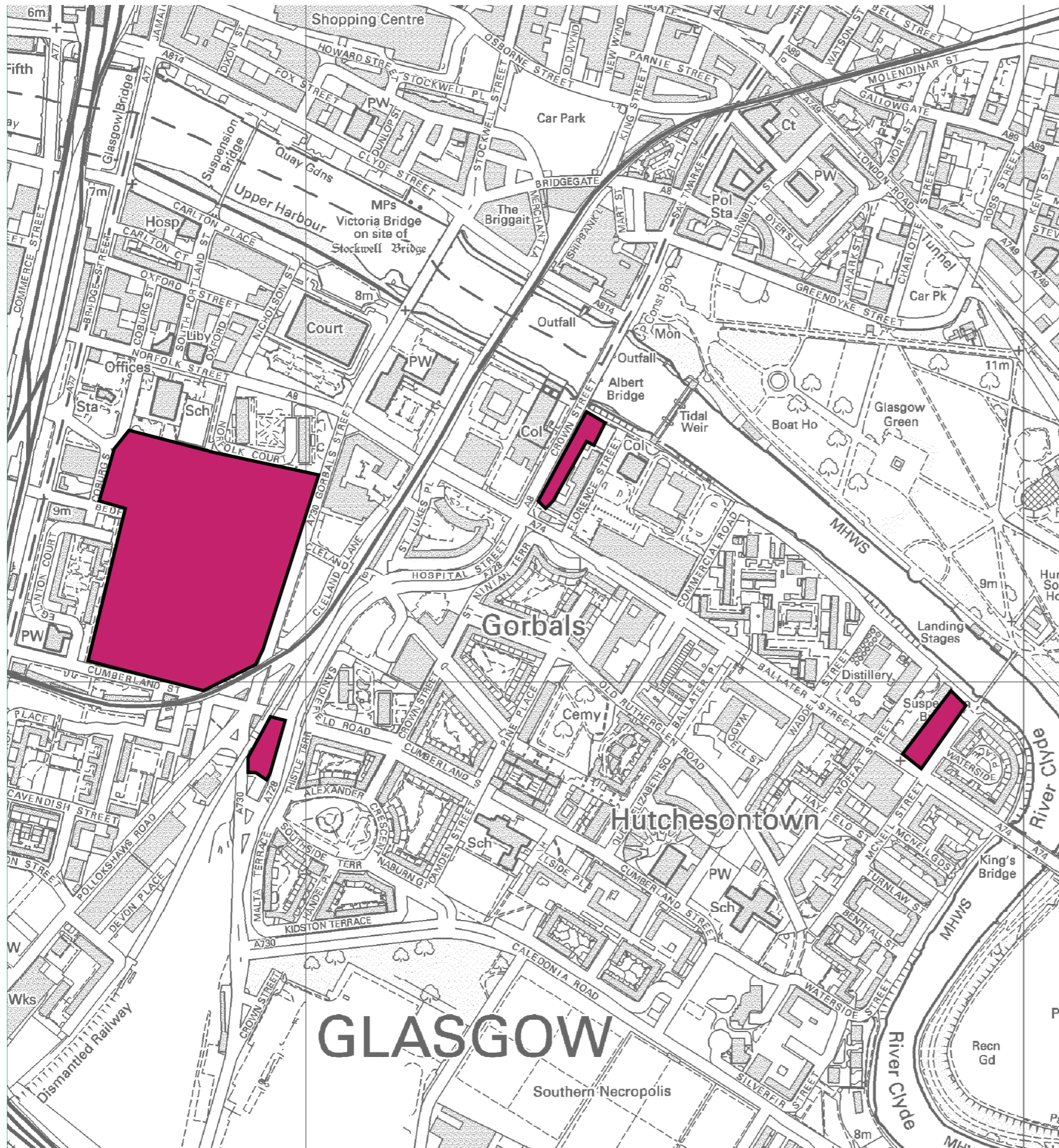
action area: Glasgow East End:



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6.0 preliminary scoping of sites: Glasgow:

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6.2 preliminary scoping of sites: Glasgow:

strategy strand 1:

bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse

action area: Gorbals

6.0 preliminary scoping of sites: Glasgow:

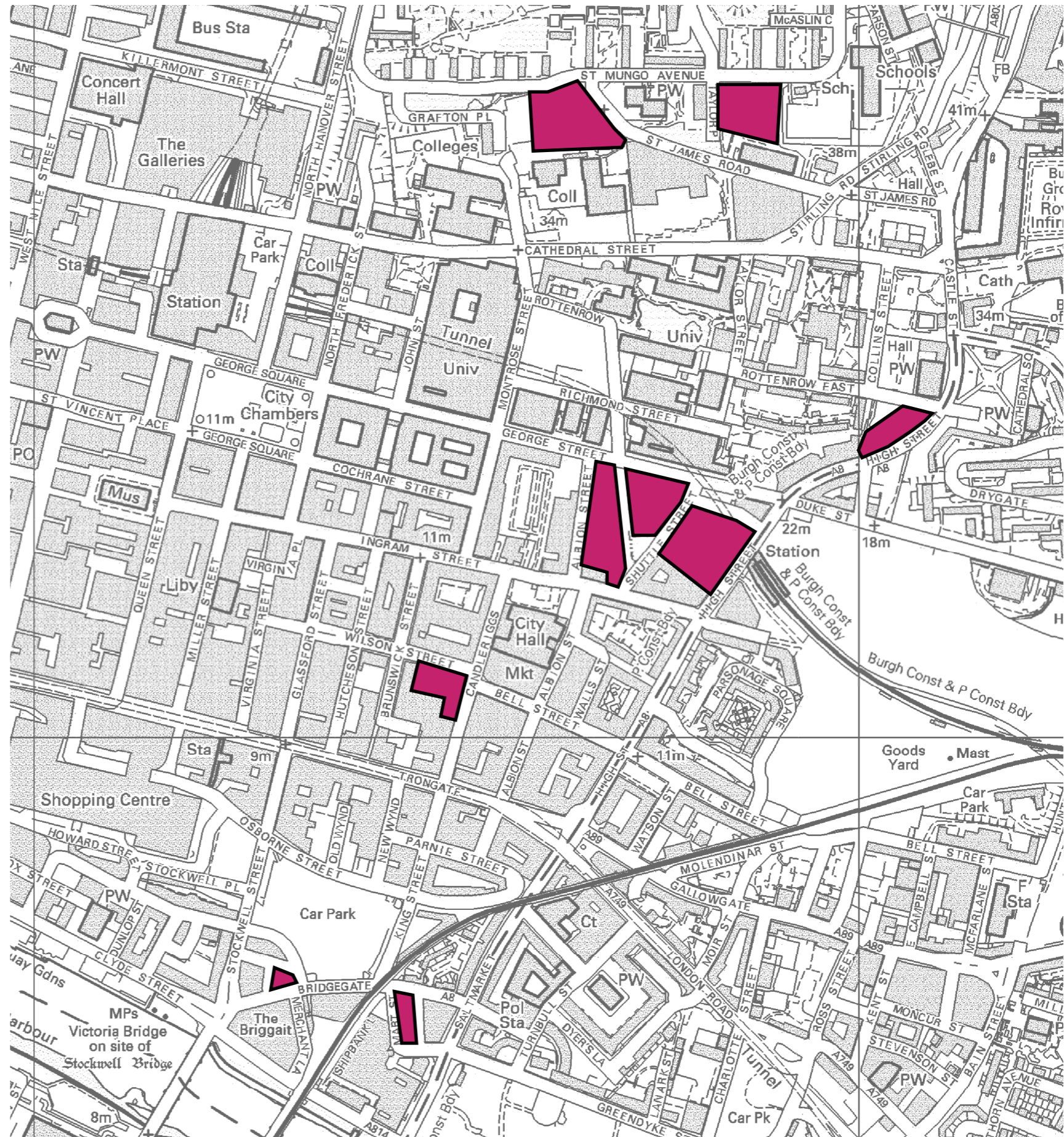
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6.2 preliminary scoping of sites: Glasgow:

strategy strand 1:

bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse

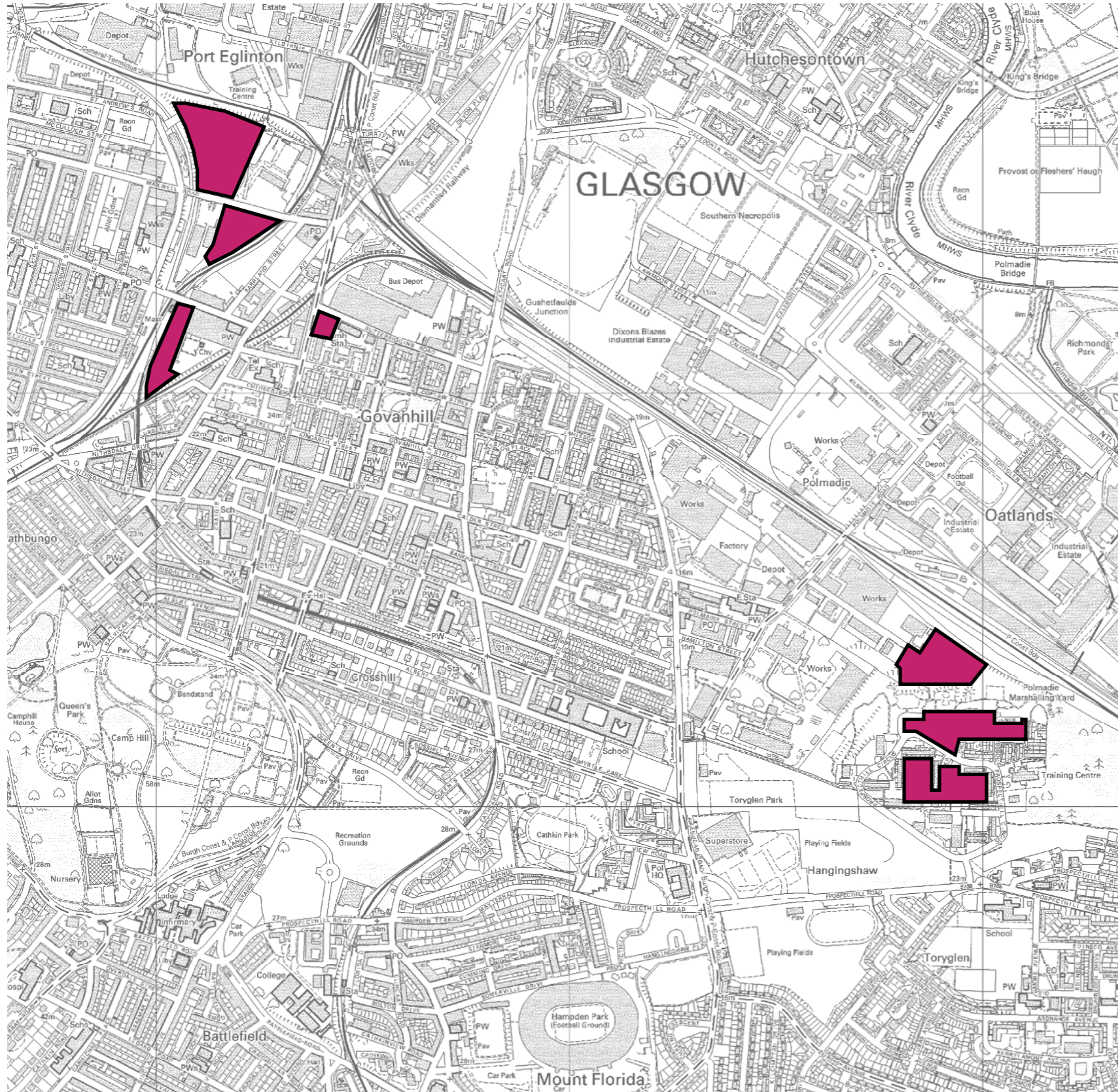
action area: Townhead/Merchant City



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6.0 preliminary scoping of sites: Glasgow:

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6.2 preliminary scoping of sites: Glasgow:

strategy strand 1:

bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse

action area: Pollokshields/Toryglen

6.0 preliminary scoping of sites: Glasgow:

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6.2 preliminary scoping of sites: Glasgow:

strategy strand 1:

bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse

action area: Govan



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6.0 preliminary scoping of sites: Glasgow:

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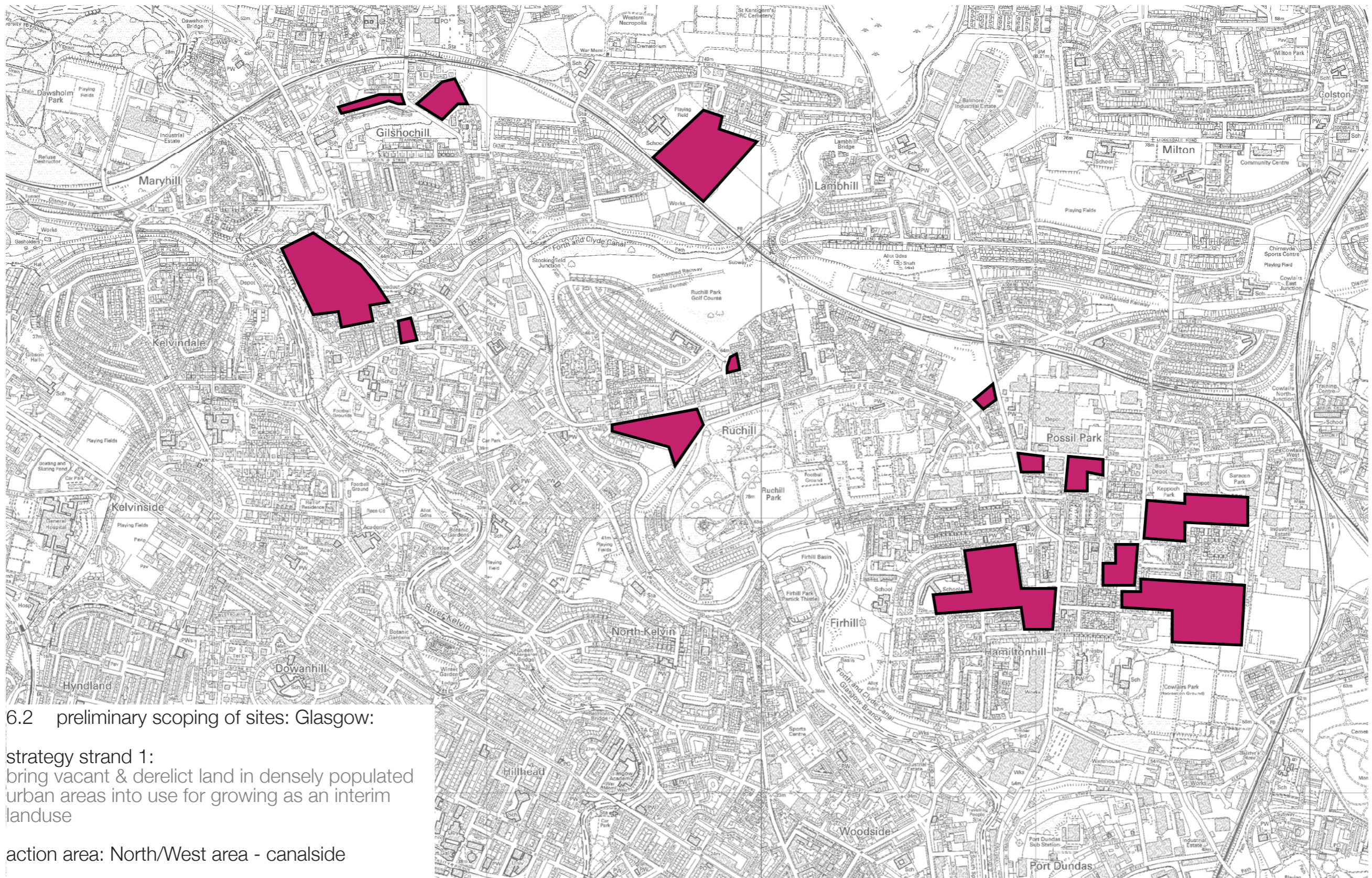
6.2 preliminary scoping of sites: Glasgow:

strategy strand 1:
bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse

action area: North Clydeside

6.0 preliminary scoping of sites: Glasgow:

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6.2 preliminary scoping of sites: Glasgow:

strategy strand 1:
bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse

action area: North/West area - canalside

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6.0 preliminary scoping of sites: project development - next steps

6.3 next steps for project development:

The initial scoping exercise essentially defines a 'shortlist' of potential sites for further investigation.

The possible development of a SAGE project within a given area will include focused research and dialogue with the local community. This will influence the selection of sites within a locality.

Beyond this however, there needs to be a detailed feasibility testing of potential sites to inform the final site selection. The key issues that need to be explored and resolved at a detailed feasibility level are:

ownership/legal matters:

The owner of the site needs to be identified and be supportive of the use of the site for a growing project. For permanent sites it is anticipated that the site owner will also be a partner to the project (for example, the relevant local authority or a housing association).

For the 'interim' use of a site for growing, a legal agreement will need to be put in place for the use of the site: essentially as a temporary right to occupy. The agreement must include an explicit procedure for the 'exit strategy' from the site (how notice is given, how much time is available to clear the site etc.). Ideally the legal agreement should define a 'minimum period' for use of the site. A 3-5 year period is seen as a practical minimum timescale for the interim use of a site for a growing project.

contamination issues:

The investigation of the environmental condition of the sites and the assessment of any risk is a crucial consideration in site selection and development. It is proposed that a 2 stage process is adopted. Stage 1: scoping of shortlisted sites as a desk based exercise informed by available information on past site uses and any previous site investigation/testing that has been undertaken. Stage 2: detailed appraisal of the selected site. The scale/scope of work required may depend upon the nature of the site.

planning/land-use designation:

For permanent growing sites, dialogue will be required with the Local Planning Authority to ensure that there is co-ordination and agreement in terms of wider land use planning and any other local master-planning considerations.

6.4 preliminary project development:

Within the Glasgow City area, NVA has been funded to progress with the delivery of early SAGE projects.

As part of this work, community research is underway to identify groups where there is an existing desire to deliver a growing project.

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7.0 approach to site design:

7.1 broad concepts:

New growing spaces must feel comfortable and encourage people to get involved. The sites must act as a focus for both growing and social activity.

making a space (social & spatial considerations):

The focus of the sites is on the activity that is generated within them. This activity: growing of produce, physical exercise, social interaction, learning, sharing of ideas & information, relaxation - demands a comfortable and appropriate physical setting. New temporary or permanent growing spaces need to take account of the following:

create a human scale:

The growing sites will often be in open areas or bordering urban streets - the creation of a human scale within the site is important.

create a sense of territory & enclosure:

It is anticipated that the sites will be used by families/young children. Creating enclosure to the space, creation a separation from traffic/other potential risks so that it is a safe area for children to play is an important consideration.

moderate the micro-climate:

The creation of a 'permeable' perimeter treatment to reduce wind exposure.

discourage casual vandalism:

Where relationships can be built up over longer periods of time, the need for enclosure or protection from vandalism may be reduced. It is however proposed that efforts should be made to reduce the likelihood of casual vandalism through the design of the modular system and approach to site layout.

demonstrate resource capture & management:

The sites offer the opportunity to demonstrate the careful management of resources and to connect up a number of normally hidden systems in an understandable way.

a local focus for composting:

Make the growing sites a local focus for domestic composting: frequently the household pick up of recycling/compostable waste leaves people wondering where it ends up. The local composting of household/green waste and use in growing offers a clear demonstration of the whole 'cycle'.

on site water capture & storage:

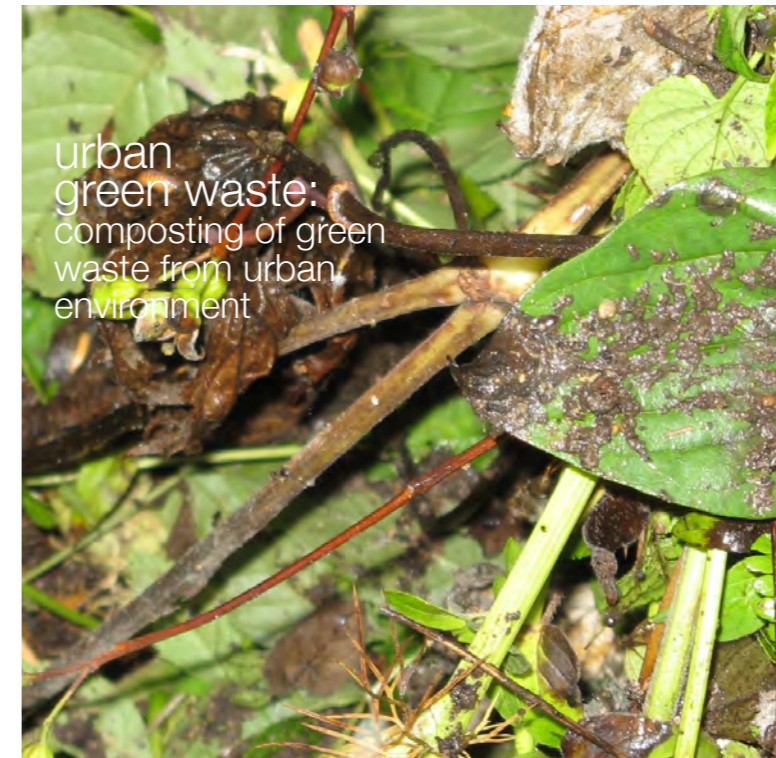
Similarly, it is proposed that the design of the sites incorporates the 'harvesting' and storage of rainwater for use on site.

the 'urban croft'

The approach to the sites is historically informed by the Scottish Highland or Island croft. Crofts were often located to utilise the full range of resources that the landscape could offer: fishing, collecting seaweed from the beach, growing crops on the coastal plain and grazing on the adjacent hill slopes.

A contemporary urban model can similarly draw resources from a range of environments.

7.0 approach to site design:



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7.0 approach to site design:

7.2 supply strategy:

It might be reasonably assumed that local production of food is always environmentally the best choice. The topic of food production and food miles is however more complex than it may at first appear.

For example, certain crops demand specific climatic conditions (distinct from that of the west of Scotland) to thrive and it may arguably be more efficient in terms of overall fuel/energy consumption to grow them elsewhere and to transport to the UK than to grow them in an artificial (heated) environment here. The minimum impact option for food production and consumption is for us all whenever possible to eat a bio-regional and seasonal range of produce.

In terms of local food production in the Glasgow Metropolitan Region through the SAGE strategy, the total carbon footprint/embodied energy of the project must be carefully considered. Although the proposals reduce the 'food miles' as such on any produce, there is the potential for a significant carbon footprint depending on the specification and source of the materials used: both in hard construction and the growing medium/additives.

It can readily be observed that for many existing domestic and communal gardens and allotments, that many of the soil additives (eg: compost, fertiliser and other soil ameliorants) are purchased in out of town garden centre/DIY stores, the products having been transported there over considerable distance by road, brought to the site by car and are wrapped in plastic. The SAGE programme must strive not to default to such practices. The long distance transport of bulk materials for growing should therefore be avoided wherever possible.

The supply strategy will involve a co-ordinated set of moves that include:

- local sourcing of all materials within a local authority area/the wider region
- co-ordination of local authority/housing association landscape management and composting activities
- the creation of social enterprise businesses to generate the materials required within the region to support the SAGE programme and to provide a local alternative to existing commercial retail suppliers

materials supply:

construction materials:

It is proposed that the modular growing system for the strategy is as far as possible fabricated of recycled timber. This has been a core consideration in its design.

There is an existing supply route for the material and for the fabrication of the modular system, through the Glasgow Wood Recycling group based in Drumchapel, who have fabricated the prototypes shown in section 8.0. The design of the units utilises material that they hold and receive in bulk volume (namely: scaffolding boards and timber palettes).

If the SAGE modular system is to be produced in volume, the Wood Recycling Group or any similar organisation would need the certainty of volumes required over known timescales in order to scale up operations accordingly.

It is recommended that as a longer term goal, a regional social enterprise 'Resource Recovery Centre' should be established.

growing medium:

As one of the major 'bulk' materials at the implementation stage of each site, the sourcing of the soil/growing medium and the distance it is 'carried' is key.

Soil as a growing medium is remarkably complex and cannot be directly substituted by composts etc.

Topsoil for landscape projects is typically sourced from development sites where soil is being stripped or from specialist suppliers.

A reliable local source of a good quality 'composite' growing medium would minimise environmental impact. A 'composite' growing medium could be generated through the mixing of a range of components:

- subsoil/topsoil
- composted green waste
- ameliorants/fertilisers (seaweed / composted farm manure etc.)
- mineral/other additives

The local production of a 'composite' growing medium could be delivered through a social enterprise business, established to support the strategy as well as selling to the wider market.

7.0 approach to site design:

compost/additives:

In addition to the materials required at the implementation stage (for fabrication of the modular system, surfaces, growing medium etc.) there will be an ongoing requirement for soil ameliorants/fertilisers.

A range of potential supply strategies are proposed, that suit differing contexts:

peripheral estates/housing association areas:

Where lower density housing/extensive areas of green space exist, and the maintenance of this 'landscape estate' is controlled/co-ordinated by a housing association or similar agency - the 'green waste' arising from maintenance operations offers a great opportunity to generate compost for use by projects in the area.

core urban areas - centralised processing:

In core urban areas where domestic compostable waste is picked up from households by the relevant local authority - it is proposed that the material arising from this centralised composting (once sterilised) is made available to urban core growing sites (eg. as demonstrated in Balfron, Stirlingshire).

on-site composting of domestic waste:

It is proposed that SAGE sites could act as a local focus for composting activity, whether through the incorporation of specialist composting equipment or worm boxes.

locally sourced fertilisers/ameliorants from the wider landscape setting of urban areas:

Local links to stables and farms are well demonstrated in many of Glasgow's allotment sites. Such sourcing of farm manure for composting could be established for SAGE growing sites. Similarly, the collecting of seaweed for composting/ producing fertiliser has a long history in the west of Scotland.

7.3 detailed feasibility testing of sites:

The geographic scoping exercise identifies broad action areas for different strands of the strategy (section 5 of the report). A further preliminary scoping of sites has been undertaken for the Glasgow City area focused on the 'core urban derelict and vacant sites' (section 6).

The possible development of a SAGE scheme within a given area, will include focused research and dialogue with the local community. This will influence the shortlisting of sites alongside a detailed feasibility exercise (considering issues of ownership/legal access, physical condition, planning/land-use designation etc.) One of the major risks is the condition of the site in terms of contamination and the associated level of risk to plants (phyto-toxicity) and people (toxicity).

There are essentially 3 forms of response to a site dependent upon its condition:

- on the basis that there is no contamination and soil is present on the site: planting and cultivation can be undertaken directly in existing ground. Such sites will be the most cost effective to bring into use, but within core urban areas are likely to be fairly unusual.
- on the basis that there is contamination that does not present a risk if capped and if the site has formerly been developed and cleared: cultivation can take place in modular raised planters. The growing medium is imported and separated from contact with the ground.
- where there is a form of contamination that potentially presents a significant risk to human health and has the potential to be disturbed and to contaminate growing areas then the site should be avoided.

The investigation of the environmental condition of the sites and the assessment of any risk is a crucial consideration in site selection and development.

It is proposed that a 2 stage process is adopted.

Stage 1: scoping of shortlisted sites as a desk based exercise informed by available information on past site uses and any previous site investigation/testing that has been undertaken. This exercise will demand the active involvement and support of the relevant local authority departments.

Stage 2: detailed appraisal of the selected site. The scale/scope of work required may depend upon the nature of the site.

Where all information points to a clean and uncontaminated site, with existing soil still present - a series of soil tests would be proposed to check/verify the status of the growing medium.

Notably, the Macaulay Land Use Research Institute in Aberdeen has recently started to offer a cost effective 'postal' soil testing service.

Where there is the potential for risk, or a lack of information on a formerly developed site, further investigation and site testing may be required.

It is proposed that where any doubt exists, an appropriately skilled and qualified environmental engineer should be commissioned to undertake a focused assessment of the site.

The cost of such research/investigation must be factored into the project development costs.

Once the site condition and the associated issues are fully understood, the appropriate design response (using existing ground or bringing in the modular raised growing system) can be determined.

It is anticipated, as described earlier in the document that there will be a broad geographic correlation between the urban context and type of site treatment.

Essentially it is anticipated that the bulk of core urban sites will require the use of the modular growing system, whilst peripheral housing areas are likely to demonstrate a larger potential for direct cultivation in existing ground.

8.0 modular system design:

8.1 design description:

The design of the modular system is driven by a number of considerations:

defining a space/forming an edge:

It is proposed that the modular system should exist in a number of variations of the basic form - and that one version should incorporate the perimeter treatment for the site.

self supporting/no foundations:

Given the potential variety of site conditions and possibility of contaminated ground - the system has been designed to be self supporting - using the soil filled growing element as a 'bulk weight' for stability and avoiding the need for foundations. This also represents a cost effective solution.

a co-ordinated language of elements:

There can be resistance to the idea of new growing sites in urban areas, where neighbours are concerned about the potential ramshackle nature of a site. The modular system has been designed to offer a coherent palette of elements, materials and a consistent edge treatment. The range of variations of the basic form include: the perimeter units, smaller growing units, shelters and storage.

constructed of recycled material:

The infill screens and other elements of the modular system are fabricated of recycled timber (scaffolding boards/wooden palettes). The main 'cube' frame is to be fabricated of Scottish timber. There are notably within Glasgow emerging social enterprise organisations focused on the supply of locally felled and processed timber. In addition, in the longer term, a resource recovery centre (as discussed in the previous section), would generate the possibility of a stockpile of suitably sized timbers for re-use.

moveable/demountable:

The design of the timber structure is such that it can be 'flat-packed', brought efficiently to site, assembled in-situ and also moved to another site at a later date.

It is anticipated that the modular system will be on a site for a minimum period of 3-5 years and thereafter moved to a second site. The system should deliver as a minimum 10 years of use, incorporating at least one 'relocation' if required.

typical components:

There are a range of typical modular elements that form the infra-structure to the more complex SAGE growing sites, as follows:

Raised planters:

The raised planters (see following pages) can be modified to a number of different applications:

1. perimeter raised planters:

These are designed to enclose the edge of the site and 'make the space'. They incorporate a full height screen edge that is visually permeable, but that offers a degree of security. These are the largest scale units that are important in mediating between the urban scale and the human scale within the site.

2. 'greenhouse' planters:

In terms of broadening the range of produce and creating more interest, alongside the need for covered space to germinate and harden off young plants - a proportion of the standard planters are to have clear plastic sheet infill - to create a 'greenhouse' type growing space. This is accommodated within the standard modular design.

3. internal smaller scale planters:

Within the site, the planters can be reduced in scale and do not require the full overhead frame or edge detail. These smaller units again follow the standard language of the modular system. These planters can vary in height, for instance reducing in height specifically for use by young children.

Shelter:

Using the same modular units, it is proposed that each site has a covered shelter. Given the West of Scotland climate, it is important to be able to take shelter from the rain. These structures do not need to be complex or fully enclosed. Again it is proposed that growing beds are used as a self weight to secure the shelter (avoiding the need for foundations etc.).

Storage:

For the secure storage of tools/equipment and moveable furniture etc., it is proposed that a standard metal container is used. the container can be integrated into the language of the other elements through the construction of an external frame and roof to house the unit.

Rainwater harvesting & storage:

The design of the shelters and housing to the storage containers incorporates a green roof (planted with sedum). Water harvested from the green roofs will be collected in recycled whisky barrels on site.

There is a direct relationship between the area of 'green roof' and the associated volume of rainwater that can be harvested and the number of growing units on the site.

Average rainfall through winter months in Glasgow is circa 8cm/month. Each shelter green roof is circa 11.5 sq.m in area - and gathers circa 920 litres of water/month (winter average).

Water storage is in reclaimed whisky barrels - each barrel holds approximately 500 litres

Therefore, roughly 2 barrels of rainwater can be collected per month in the winter. Over a 6 month period it is assumed therefore that 12 barrels of rainwater can be harvested.

Average rainfall through the growing season in Glasgow drops to circa 4cm/month. Using this as a baseline it is assumed that to grow produce - this volume of water will be required. Each planter is therefore assumed to require 230 litres/month (0.5 barrel).

Assuming a baseline storage capacity without replenishment - this would mean that the storage capacity from the roof area shown and stored in the barrels (allocating 1 barrel per raised growing unit) - would sustain growing without rain for 2 months.

Allowing for leaks, evaporation etc. - the water harvesting and storage as designed should sustain growing through a 4-6 week rain free period.

Although it would require to be tested, the aim would be to avoid the need for a mains water supply to be established for each growing site.

8.0 modular system design:

Composting equipment:

There are a range of different systems that could be implemented for on-site composting. These can be off the shelf systems or could take the form of vermiculture composting boxes.

The preferred system is vermiculture ('worm box') based which demands a degree of support in establishing the system but offers substantial benefit.

The 'worm box' can be fed by domestic compostable waste and the output of 'hot box' composting of green waste.

The process is faster and produces a particularly high quality compost/fertiliser.

The physical infrastructure required is as follows:

- hot box: for composting green waste
- worm box for composting of output of hotbox/domestic waste
- storage box for maturation of composted material

Surface treatment:

Subject to desk based research and any invasive testing of soil/ground condition, it is proposed that there is minimum disruption of existing ground/surfaces.

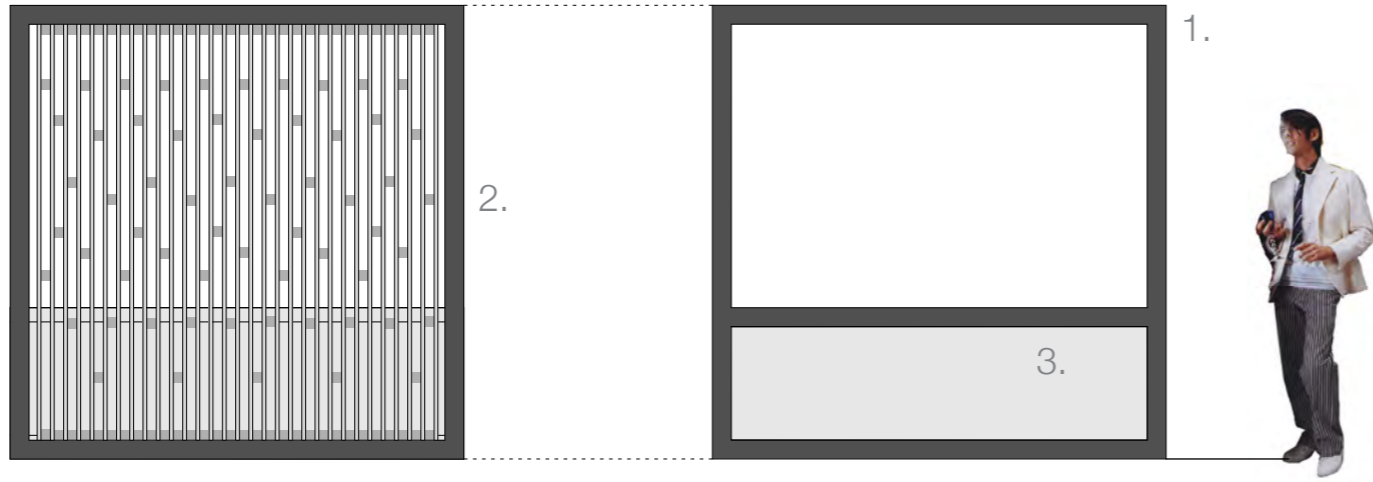
Where a reasonable, stable surface exists, it is proposed that it is simply overlaid with a geotextile and 75mm of crushed sea-shells. An alternative material would be crushed, locally sourced, post demolition rubble.

Entrance/information board:

It is important that information and signage be incorporated at the site entrance to enable passers by to find out about the site and the wider SAGE programme and get involved.

8.0 modular system design:

perimeter raised planter:

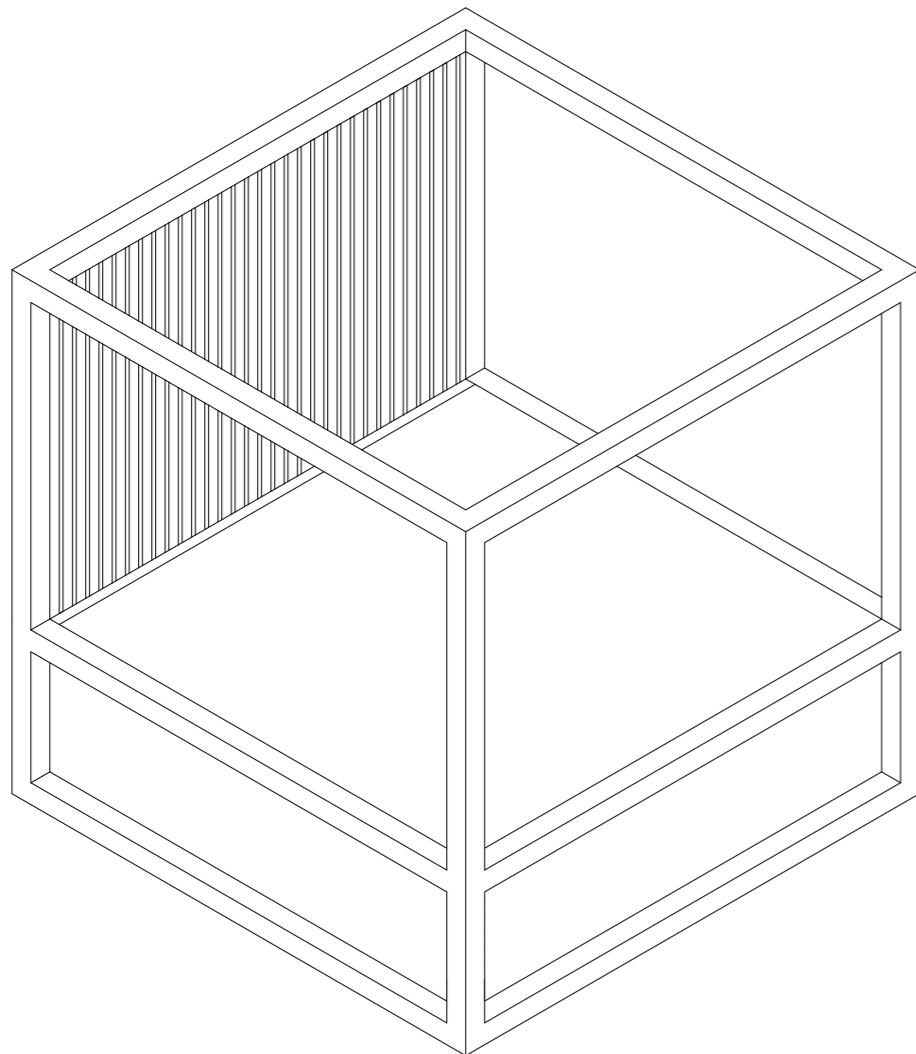


1. pressure treated and painted timber outer frame: preferably reclaimed timber or from local Scottish source. Painted finish (black) water based wood stain (Ecos organic paints - or similar). Joints to be 2 or 3 way notched/lapped timber joints.

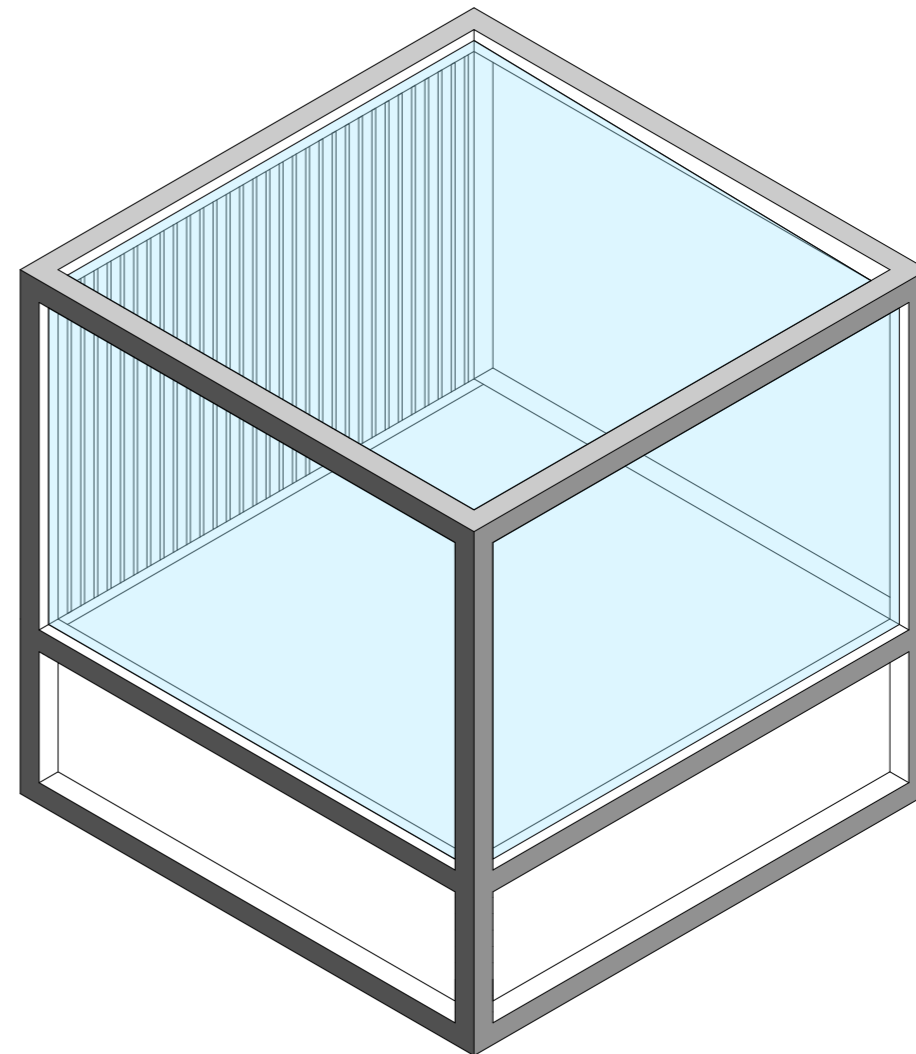
2. reclaimed pallet wood infill to 1 side: reclaimed pallet boards secured at junctions with spacer blocks (also from dis-assembled pallets) - to form vertical screen spacing of boards and positioning of spacer blocks to avoid forming easy hand/foot holds. Screen fixed within outer frame.

3. textile 'bag' hung in frame filled with growing medium: 'growing bags' bespoke local manufacture. Growing medium (for prototypes in advance of longer term supply chain): bulk volume 50% imported topsoil (local & approved source), 50% composted green waste (local & approved source) - plus ameliorants.

4. 'green house' version: twin wall clear plastic sheeting (re-cycled plastic?) secured within outer frame incorporating hinged openings for access/ventilation etc.

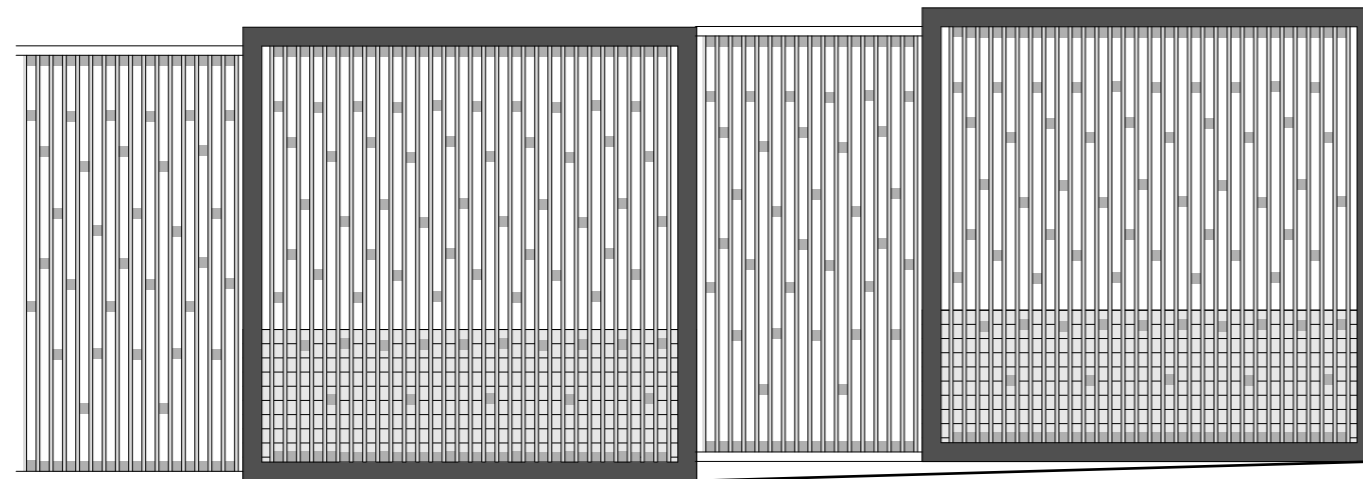
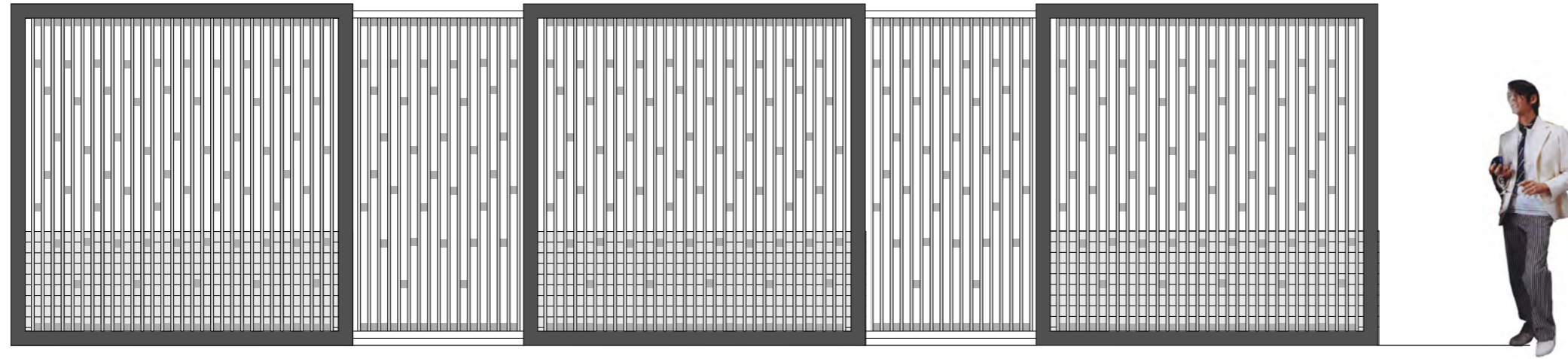


4.

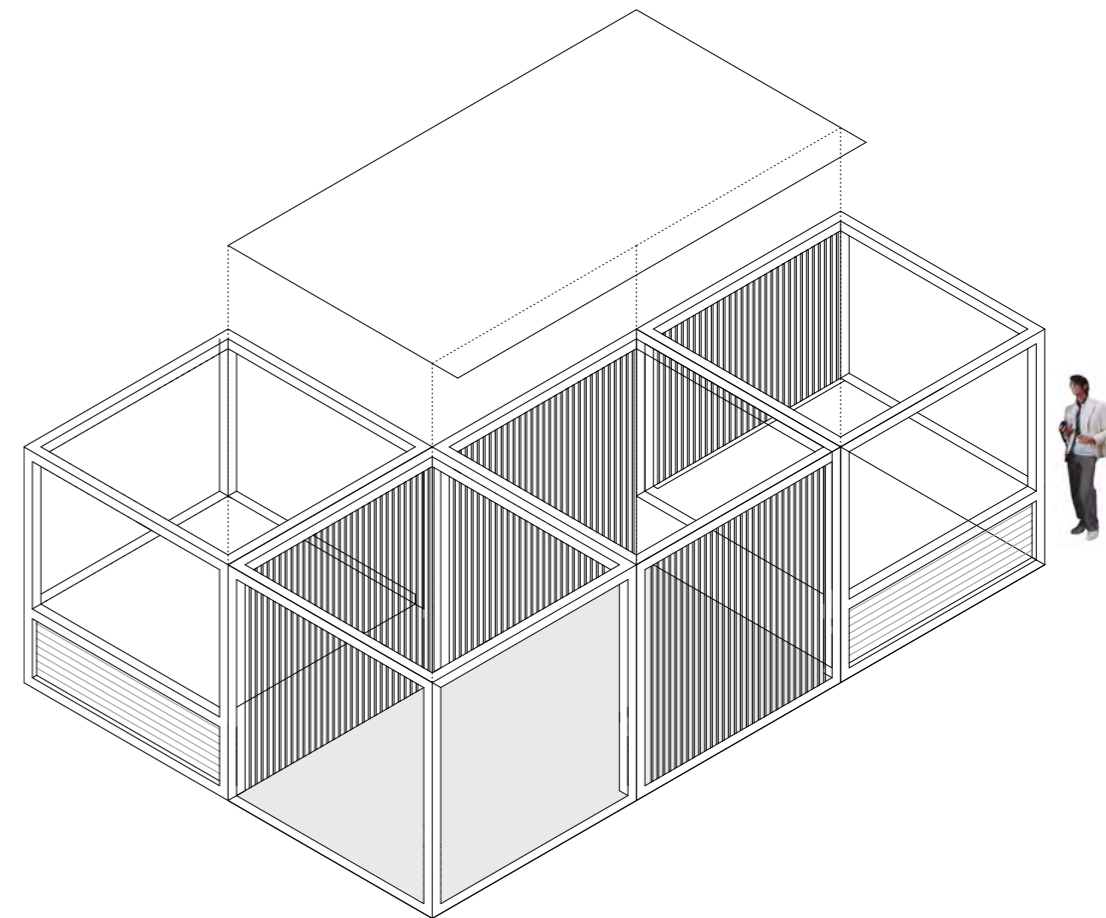


8.0 modular system design:

perimeter raised planter: site perimeter elevation



1:30



shelter:

sow and grow everywhere

8.0 modular system design: prototype



Proto-type perimeter raised planter with screen - under construction. The screen is fabricated of waste palette wood and scaffolding boards.

8.0 modular system design:

8.2 modular system indicative costs:

The modular system as described is primarily constructed of recycled timber, collected as a waste material within the Glasgow Metropolitan Region and fabricated by a social enterprise / training organisation.

Proto-types of one of the forms of the raised bed have been made by the Glasgow Wood Recycling group at Drumchapel. Indicative unit costs have been advised by them.

Dialogue has also been held with a local bag manufacturer, one of the last in the UK. Dixons of Rutherglen have advised on appropriate materials and indicative costs - which are notably significantly determined by the volume ordered.

The cost breakdown below has been compiled by Armour Construction Consultants, Quantity Surveyors.

perimeter cube raised planter with screen:
(2.4x2.4x2.4m cube with screen & 800mm high planter)

- timber frame & screen £450.00
- soil/compost (4.6 m3) £150.00
- bag (to hold growing medium) £15.00

Total indicative unit cost: £615.00

5.76m² growing area

see also:

note 1: costs of growing medium

note 2: perimeter treatment cost comparison

greenhouse planters:

The 'greenhouse' versions of the cube planters have an associated 'extra over' cost for the twin-wall clear plastic infill and associated framing of circa £460.00 per unit.

reduced size raised planter within site:

(1.2x1.2m, 600mm high raised bed)

- timber frame, soil/compost (0.9m³) & bag:

Total indicative unit cost: £70.00

1.44 m² growing area

shelters - with green roof:

(4No. 2.4m cubes (2 as growing planters) & green roof)

- 2 No. cube growing beds £1,230.00
- 2 No open frames & 'green roof' £1,400.00

Total indicative cost per shelter: £2,630.00

storage container - with green roof:

(standard container & external frame & green roof)

- standard metal container £800.00
- timber frame, cladding & 'green roof' £800.00

Total indicative unit cost: £1,600.00

water storage:

recycled whisky barrels: unit cost £70.00

see also: note 3: costs of water harvesting & storage

note 1: costs of growing medium:

The soil/compost costs are based on a standard commercial supply route. Notably the growing medium represents about 25% of the unit cost. As recommended earlier, the local production of suitable growing medium (as a social enterprise) would be a better option both in terms of cost and carbon footprint. It would be expected that with the successful establishment of the supply chain that the unit cost will drop.

note 2: perimeter treatment cost comparison:

A further point of comparison is the design/cost efficiency of incorporating the perimeter enclosure detail with the raised planters. Comparing linear meter rates for an 'edge' formed of the raised planters against the cost of a basic stand alone expanded metal mesh fence system (including foundations etc.) - the fencing represents roughly 40% of the total cost of the planter option. This duality of function of the perimeter units can therefore be considered to generate a saving that represents roughly 40% of the total cost of the planters.

note 3: costs of water harvesting & storage:

Again the combination of function: incorporating the water capture (green roof) with the shelter and storage elements demonstrates design/cost efficiency. The 'green roof' costs are not wholly additional.

Furthermore, the goal is to avoid the need for a mains water connection. Other than the difficulties of establishing this for a temporary use, the costs associated with this are anticipated to be in the order of £3,500.00.

Assuming 2 green roofs (on a shelter and a storage container) and 24 No barrels to store the water - the total 'additional' cost for on site rainwater harvesting & storage is in the order of £2,500.00 - 3,000.00. This potentially offers a relative saving, over and above the visual, design and educational benefits.

typical site costs: cost comparison:

The exemplar projects that follow have been considered in detail and have had outline costs prepared for each site.

For the 'interim use' sites, using the modular system and allowing for all other site works, this exercise suggests a site cost of about £50-£60/m². By way of comparison, a recently created new allotment site in central Glasgow cost over £100/m².

This comparison must however also be put into context, whilst the modular system is approximately half the cost of a permanent solution - the 2 have substantially different roles.

The modular system is vital to open up sites for interim growing that would otherwise not be accessible (ie: not impacting on future development intentions and being able to grow on brown field sites without usable growing medium).

As a further point of comparison, a basic site treatment, not using a modular system has been costed, as follows:

- broken stone & geotextile break layer
- 450mm depth imported topsoil spread over site area
- expanded metal mesh fence to perimeter
- basic path route, water connection & storage container

This basic treatment may be relevant to certain sites, however it is likely to have a much more restricted application in core urban areas.

Using the 'generic' exemplar site (see following pages) as a basis for calculation, this treatment would have an overall associated cost of circa £50/m². This is directly comparable to the modular system treatment (as detailed), which totals £55/m².

The cost benefit of the modular system becomes clear when a full 'lifecycle' cost is considered. A 10 year design life for the modular system and one relocation of the activity part way through this period is assumed.

For the 'basic treatment' option, the soil spread & fencing installation is a 'one off' investment that is essentially lost when the growing activity has to be relocated. The modular system, even assuming replacement bags and moving costs, enables a second use (on another site) to take place at a much lower cost. The 10 year lifecycle cost of the modular system is estimated to be 30-40% lower than the alternative basic treatment.

9.0 exemplar projects:

9.1 overview:

The overall strategy has 4 parallel strands of activity, as follows:

strategy strand 1: bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse

strategy strand 2: bring underused land (amenity space) in peripheral estates & social housing areas into use at scales up to market garden growing

strategy strand 3: bring underused private garden space in suburban or outlying areas into use for growing

strategy strand 4: bring underused public land into active use for growing (focused on schools throughout the area)

To exemplify the range of project types, 3 sites have been investigated and proposals developed. The approaches illustrated are applicable across the study area.

The three exemplar projects are as follow:

9.2 exemplar projects & outline costs:

1. 'generic' urban derelict/vacant site:

This site aims to demonstrate strategy strand 1: growing as an interim landuse on derelict/vacant land in core urban areas.

This example is broadly modelled on a cleared, formerly developed site on Victoria Road in Govanhill in Glasgow. It is one of the sites identified through the preliminary scoping exercise. There is a local partner that could aid the delivery of the project (the Hidden Gardens). However, there has to date been no direct dialogue with the local community to test demand/views.

The site is geographically and strategically well situated and is very visible, fronting onto Victoria Road.

No information has been gathered to date on ownership or site conditions. however, from visual inspection it offers a fairly level cleared site with no immediate evidence of a development intention.

2. North Glasgow Community Market Garden:

This site has been selected to demonstrate strategy strand 2: bringing under-used amenity land in peripheral estates and social housing areas into use for market garden scale growing.

The North Glasgow Community Food Initiative has been developing proposals for the creation of a market garden scale community growing site in Milton.

Presently, this scheme is developed to a sketch scheme level and considerable work has been undertaken to develop and refine the brief, scope of physical infra-structure required and method of operation for the site. The group are currently seeking funding to deliver the project.

The site is an 'underused' piece of grassed space in Milton - a peripheral social housing area in the north of Glasgow. Dialogue has been undertaken with Glasgow City Council and it is understood that a 'lock out agreement' is in place for the site whilst feasibility work is undertaken.

The site is understood to be un-contaminated and has not formerly been developed.

The scale and location of the site, within a residential area, bordered by housing on 2 sides and with several points of access for vehicles and pedestrians is well suited to the proposed use.

Copyright of the scheme lies with the North Glasgow Community Food Initiative. The costings as outlined are based on standard rates etc. and the group is aiming to substantially reduce these costs through volunteer effort to preapre the land etc.

3. Oxgang Primary School:

This site has been selected to demonstrate strategy strand 4: bringing public land into active use for growing - focused on a school site.

This primary school in Kirkintilloch (East Dunbartonshire) has an active project underway driven by school staff and the local community to significantly re-organise and improve the school grounds.

There has been a process of dialogue with the school community to develop the overall master-plan for the school site, including the growing area.

There is active interest in establishing a 'growing' project and this forms part of the school's master-plan for the redevelopment of the grounds. The school are currently seeking funding to deliver the scheme.

The site offers a good example of how part of a school site can be redefined as a shared community/school growing space. This principle is supported by the school community and the physical form of the site is a good fit.

As part of the preliminary risk assessment for the works a soil test was undertaken which has indicated that the concentration of nickel in the sample exceeds the permissible levels as identified in the Soil Guideline Levels (for residential sites with plant uptake) and 'Contaminated Land Exposure Assessment (CLEA)' guidelines.

As a result, the proposed growing activity has been designed / laid out on the basis of raised planters (using the modular system) rather than through cultivation of existing ground.

Notably there is no exemplar project for strategy strand 3 as the landshare network idea is not focused on direct physical works. There may be use of the modular growing system in some instances and this is demonstrated by the other project examples.

9.0 exemplar projects: project 1- 'generic' site:

1. 'generic' urban derelict/vacant site:

1. perimeter raised planter unit: pressure treated and painted timber outer frame, reclaimed pallet wood infill to 1 side, 'bag' hung in frame filled with growing medium
2. perimeter infill panel: reclaimed pallet wood infill panel
3. perimeter raised planter - with 'green house' infill twin wall plastic sheet enclosure incorporated within outer frame
4. shelter with green roof & associated raised growing areas: configuration of standard timber outer frames, with reclaimed pallet wood infill & growing bags as indicated. Green roof (timber supporting beams, profiled aluminium roof sheets, layer of compost, broken slate or similar top layer & sedum planting). aluminium gutter /pipe system connecting to barrels
5. standard storage container with green roof: standard metal storage container - with external timber frame supporting green roof - as above

6. barrel water storage: recycled whisky barrels (as supplied by Glasgow Wood Recycling centre or similar). Barrels fed by gutters/pipes from green roofs and interconnected by pipes to fill sequentially.
7. compost storage and composting equipment: standard frames & infill for storage, or bespoke composting equipment
 - a. composting hot boxes
 - b. compost maturation
 - c. vermiculture boxes
 - d. bulk material storage (soil/sand etc.)
8. textile/frame only low planters (use by children): lower and simplified timber frame & bag filled with growing medium
9. entrance & information board: lockable timber gate & externally mounted board for information etc.
10. crushed shell surface ground surface: levelled & seperating membrane (geotextile) beneath layer of crushed seashells as surface (recycled waste product from shellfish processing)

site location/area:

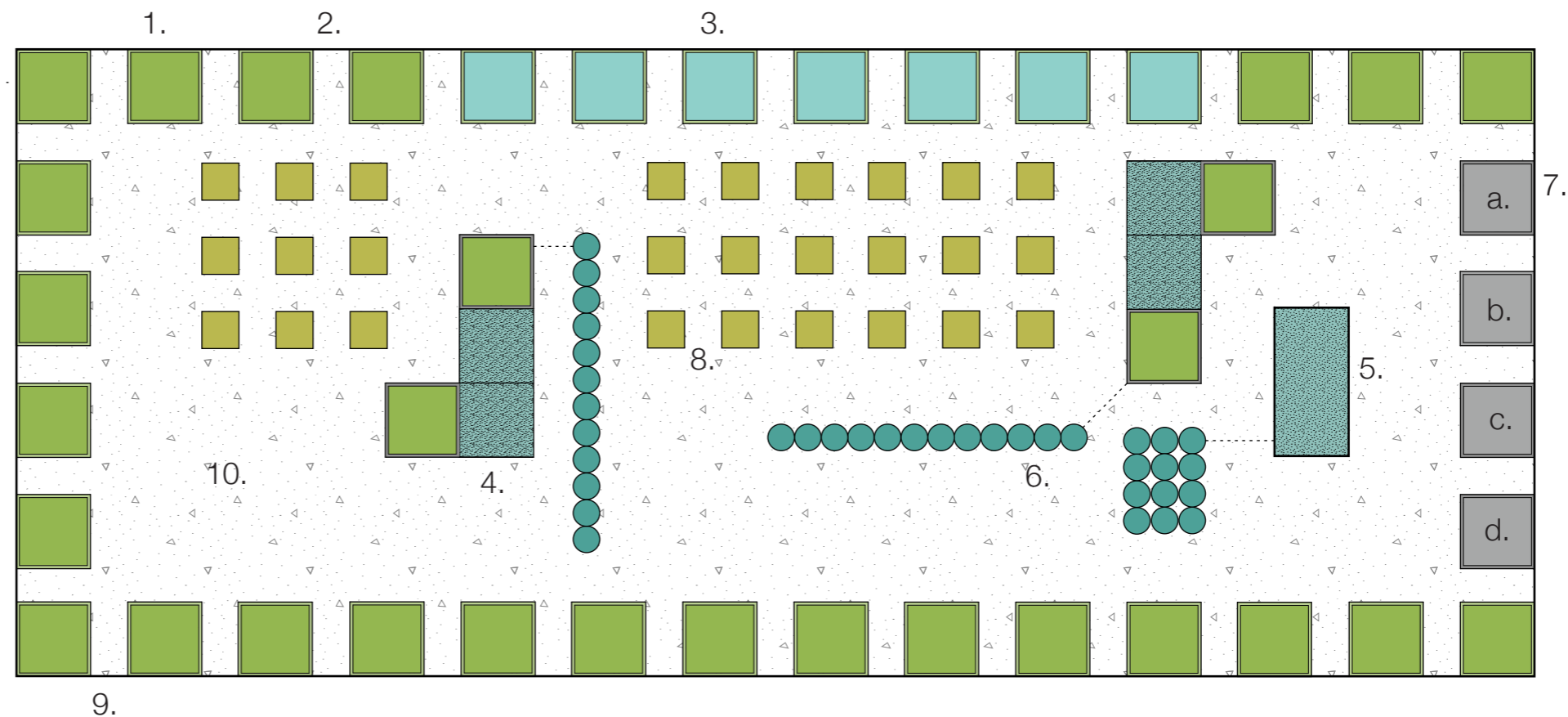
The site on which this proposal is modelled is at the corner of Victoria Road & Butterbiggins Road.

Total site area estimated circa 50mx40m = 2,000 sq.m (0.2 Hectare)

Area shown brought into use: approximately 50% of this: 50mx20m = 1,000 sq.m (0.1 Ha)

level of provision/number of users:

36 No. full size raised growing units are accommodated of which, 7 No. have clear plastic enclosure (greenhouse spaces) there are in addition 27 No. small/lower growing beds (for children)



9.0 exemplar projects: project 1- 'generic' site:

1. 'generic' urban derelict/vacant site:



9.0 exemplar projects: project 1 - 'generic' site:

1. 'generic' urban derelict/vacant site:



sow and grow everywhere

9.0 exemplar projects: project 1 - 'generic' site:

1. 'generic' urban derelict/vacant site:

The cost breakdown below has been compiled by Armour Construction Consultants, Quantity Surveyors and has been informed by dialogue with the Glasgow Wood Recycling Group.

perimeter raised planters etc.:

perimeter growing boxes: 32 No. @ £615.00	£19,680.00
'green house' units - extra over cost: 7 No. @£460.00	£3,220.00
compost storage boxes: 4 No. @£465.00	£1,860.00
infill panels to perimeter: 35 No. @£85.00	£2,975.00

total: £27,735.00

shelters (2 No.):

growing boxes: 4 No. @£615.00	£2,460.00
shelter support & green roof: 2 No. @£1,400.00	£2,800.00

total: £5,260.00

storage container:

standard metal container with timber frame, cladding & green roof:	£1,600.00
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barrel water storage:

36 No. @£70.00	£2,520.00
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low planters:

timber frame, bag & soil/compost 27 No. @£70.00	£1,890.00
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surface material:

geotextile membrane and crushed shell or equivalent over 50% of site area 500 m2@£17.00	£8,500.00
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sundries:

information board	£250.00
entrance gate	£100.00
delivery of all timber items	£1000.00

total: £1,350.00

Total of items: £48,855.00

preliminaries @ 7.50% £3,664.13

contingencies @ 5.00% £2,625.96

Total cost £55,145.08

site area: 1000 m2

cost/m2: £55.15

NOTES

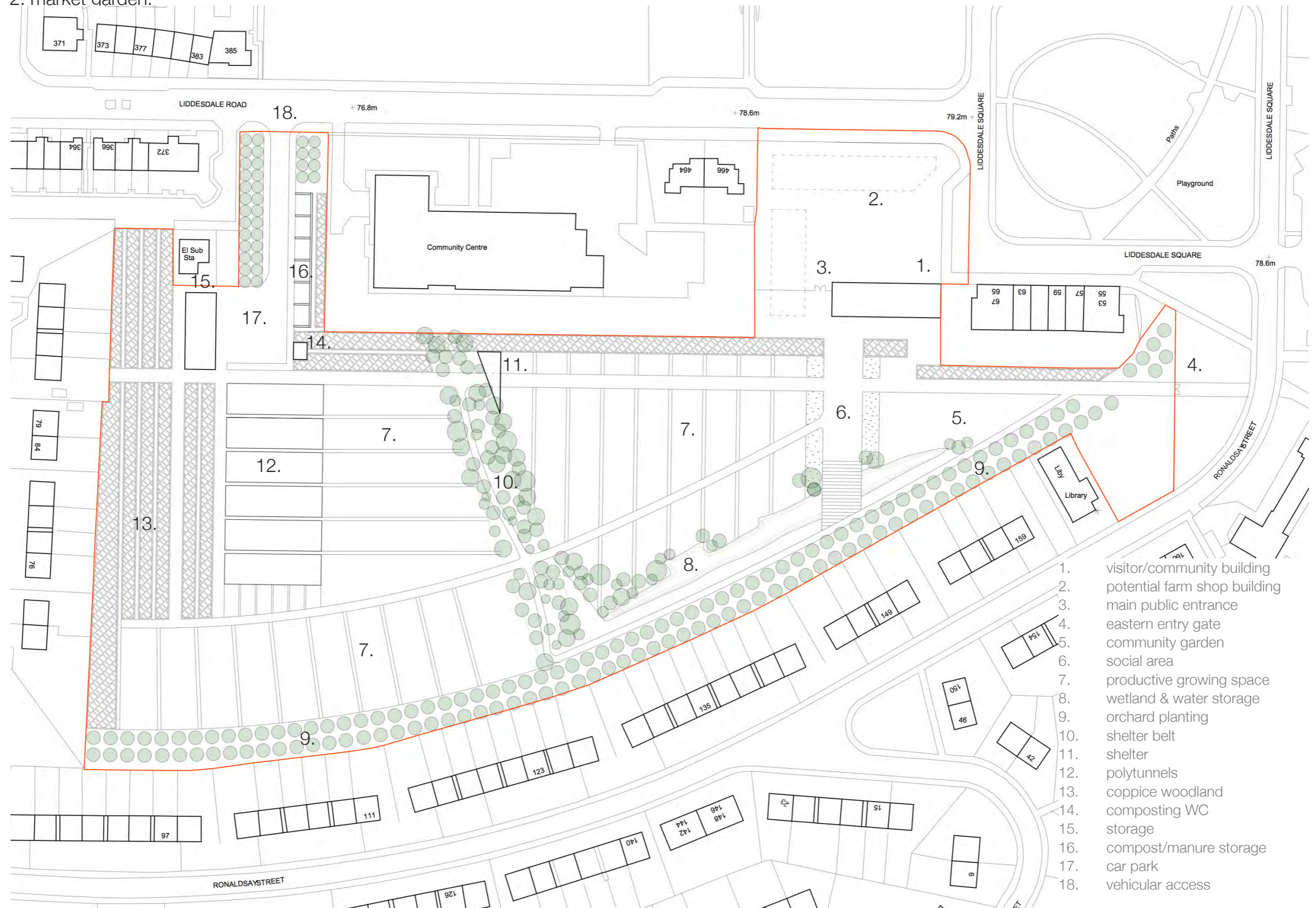
The above Indicative Cost is inclusive of appropriate allowances for Preliminaries and Contingencies but exclusive of the following items: -

- a) ground levelling/preparation (assumes all sites to be level and suitable for the Works with only 50% of the area requiring to be surfaced)
- b) garden furniture.
- c) garden tools/equipment.
- d) site leasing costs etc (if any)
- e) water supply
- f) professional fees
- g) statutory approval costs
- h) fluctuations in labour and material costs beyond the current date
- i) VAT (where applicable)

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9.0 exemplar projects: project 2 -north glasgow community market garden:

2. market garden:

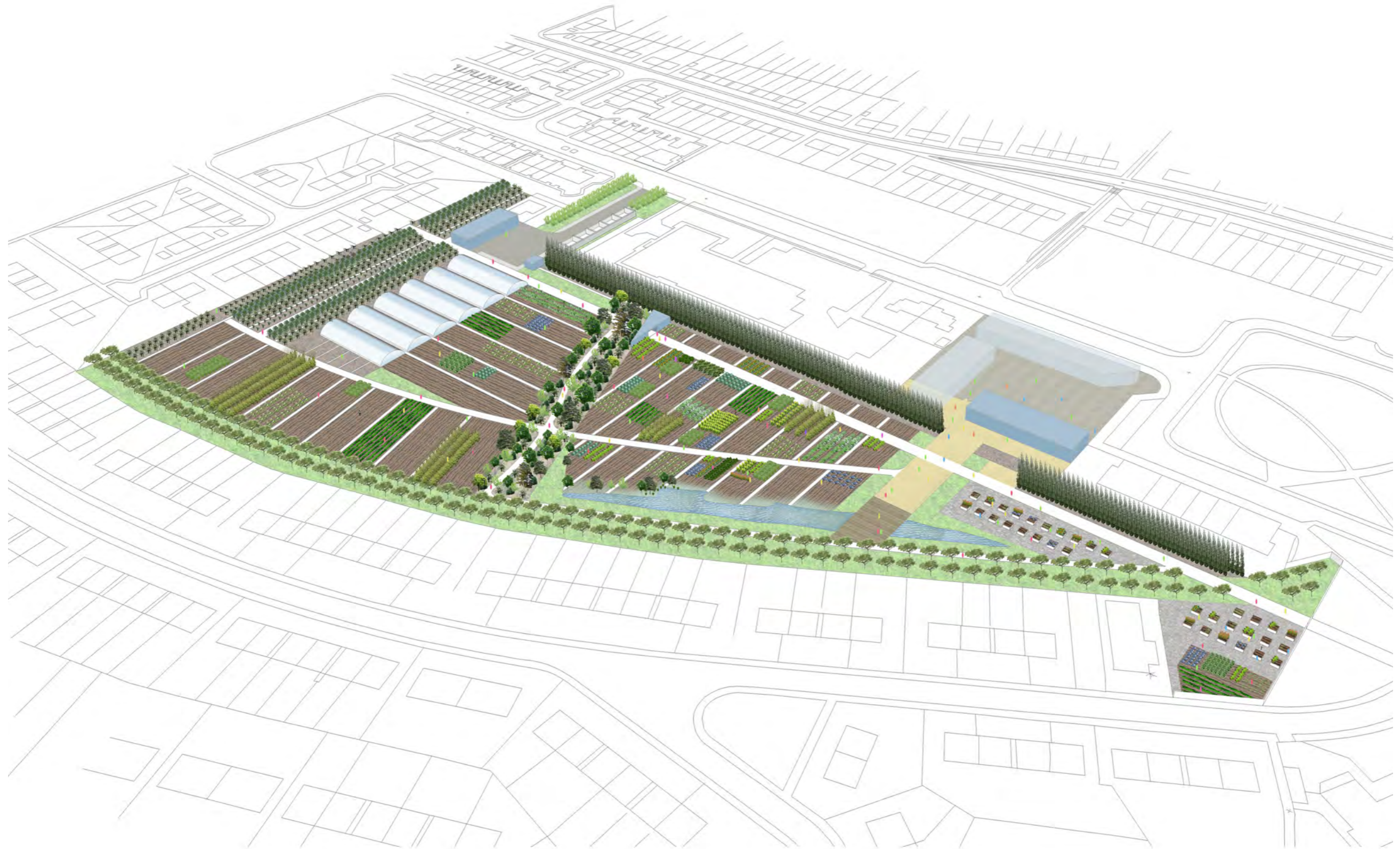


1. visitor/community building
2. potential farm shop building
3. main public entrance
4. eastern entry gate
5. community garden
6. social area
7. productive growing space
8. wetland & water storage
9. orchard planting
10. shelter belt
11. shelter
12. polytunnels
13. coppice woodland
14. composting WC
15. storage
16. compost/manure storage
17. car park
18. vehicular access

sow and grow everywhere

9.0 exemplar projects: project 2 -north glasgow community market garden:

2. market garden - aerial view:



9.0 exemplar projects: project 2 -north glasgow community market garden:

2. market garden - outline cost:

The cost breakdown below has been compiled by Armour Construction Consultants, Quantity Surveyors.

building costs:

Straw bale educational centre & integral greenhouse.	£201,960.00
Packing & storage building.	£327,940.00
Plant & equipment building.	£33,410.00
Composting WC & enclosure	£3,710.00
Timber shelter	£9,280.00
Open silos for bulk material storage	£18,560.00

total: £594,860.00

land drainage:

perforated land drains, excavation etc.	£318,530.00
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services:

service supplies to buildings	£37,130.00
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water distribution:

piped supply & standpipes:	£32,860.00
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site preparation:

regulating/reshaping ground & spreading compost/sand soil additives	£173,240.00
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pond:

forming pond & overflow	£37,130.00
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orchard:

grass seeding	£16,460.00
fruit trees (50 No.)	£6,190.00
chicken fencing enclosure	£31,400.00

total: £54,050.00

coppice woodland:

planting of trees for coppice	£22,910.00
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trees to vehicular access:

planting of trees	£3,400.00
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structure planting:

planting of trees	£14,550.00
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shelter belt planting:

tree/shrub planting	£32,180.00
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community garden:

raied planters & in ground planting	£12,660.00
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polytunnels:

poly tunnels approx 30x10m - 6 No.	£44,550.00
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paths:

main paths: bitmac	£35,880.00
kerbing/founds etc.	£27,080.00
gravel paths	£55,020.00
timber edeging	£36,680.00
solar lights	£5,890.00

total £160,550.00

vehicular access/courtyard:

porous paving & make-up	£308,320.00
concrete kerbing	£25,560.00
general planting	£4,330.00

total £338,210.00

social area:

porous paving & make-up	£38,980.00
concrete kerbing	£3,490.00
deck/bridge	£33,410.00

total £75,880.00

furniture etc.:

allowance	£21,660.00
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site perimeter:

security fencing & allowance for gates	£190,270.00
forming vehicle/pedestrian accesses	£17,330.00

total £207,600.00

assumed cost saving thro' volunteer labour: -£85,000.00

total cost £2,096,950.00

site area approx: 3.2 Hectares

cost/m2: £65.53

NOTES

1. The above Indicative Cost has been calculated on the basis of the following assumptions: -

a) that no abnormal ground conditions will be encountered over the area of the proposed construction works

b) that suitable service supplies exist within the proximity of the site of the proposed development from which supplies may be taken to serve the new facility.

2. The above Indicative Cost is inclusive of appropriate allowances for Preliminaries and Contingencies but exclusive of the following items: -

a) specialist technical fit-out, including specialist lighting and audio/visual installations etc

b) telecoms/data equipment (i.e. telephones and computers)

c) loose furniture and equipment within building

d) soft furnishings within buildings

e) landscaping tools and equipment

f) diversion of any underground services found within areas of the site affected by the works

g) site investigation costs

h) site acquisition costs (if any)

i) professional fees

j) statutory approval costs

k) fluctuations in labour and material costs beyond the current date

l) VAT (where applicable)

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9.0 exemplar projects: project 3 - oxgang primary school:

3. Oxaana Primary School:



1. perimeter raised planter unit: pressure treated and painted timber outer frame, reclaimed pallet wood infill to 1 side, 'bag' hung in frame filled with growing medium
2. perimeter infill panel: reclaimed pallet wood infill panel
3. perimeter raised planter - with 'green house' infill twin wall plastic sheet enclosure incorporated within outer frame
4. shelter with green roof & associated raised growing areas: configuration of standard timber outer frames, with reclaimed pallet wood infill & growing bags as indicated. Green roof (timber supporting beams, profiled aluminium roof sheets, layer of compost, broken slate or similar top layer & sedum planting). aluminium gutter /pipe system connecting to barrels
5. standard storage container with green roof: standard metal storage container - with external timber frame supporting green roof - as above
6. barrel water storage: recycled whisky barrels (as supplied by Glasgow Wood Recycling centre or similar). Barrels fed by gutters/pipes from green roofs and interconnected by pipes to fill sequentially.

7. compost storage and composting equipment: standard frames & infill for storage, or bespoke composting equipment
 - a. composting hot boxes
 - b. compost maturation
 - c. vermiculture boxes
 - d. bulk material storage (soil/sand etc.)

8. textile/frame only low planters: lower and simplified timber frame & bag filled with growing medium

9. street entrance & information board: lockable gate & externally mounted board for information etc.

10. crushed shell surface ground surface: levelled & seperating membrane (geotextile) beneath layer of crushed seashells as surface (recycled waste product from shellfish processing)

11. lockable gate - access point from within school site

12. pre-cast concrete unit surface

13. existing retaining wall

14. existing burn

15. wildlife/habitat area

16. existing tree

17. janitor's house

site location/area:

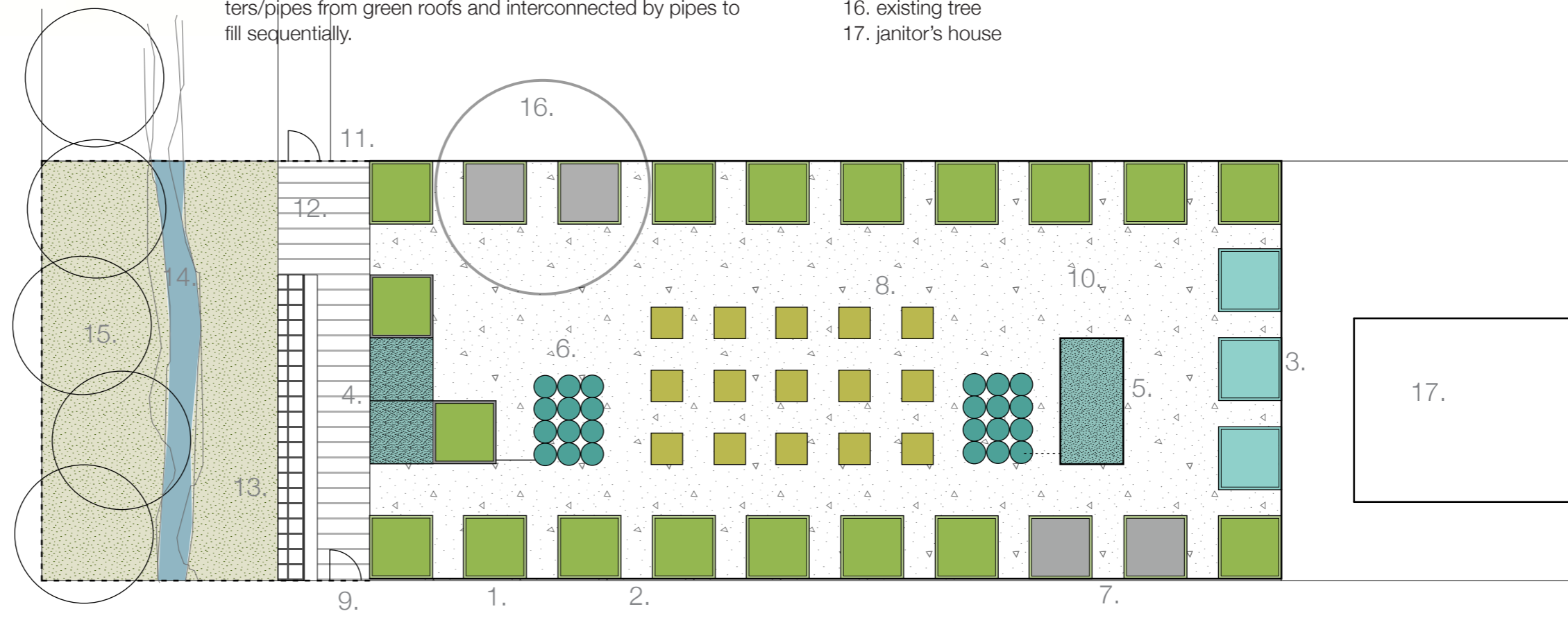
the site is at the edge of the school campus where it borders Lammermoor Road

total site area estimated circa 750 sq.m

level of provision/number of users:

21 No. full size raised growing units are accommodated of which, 3 No. have clear plastic enclosure (greenhouse spaces)

there are in addition 15 No. small/lower growing beds



9.0 exemplar projects: project 3 - oxgang primary school:

3. Oxaana Primary School:



sow and grow everywhere

9.0 exemplar projects: project 3 - oxgang primary school

3. Oxgang Primary School - outline cost:

The cost breakdown below has been compiled by Armour Construction Consultants, Quantity Surveyors and has been informed by dialogue with the Glasgow Wood Recycling Group.

perimeter raised planters etc.:	
perimeter growing boxes:	
19 No. @ £615.00	£11,685.00
'green house' units - extra over cost:	
3 No. @£460.00	£1,380.00
compost storage boxes:	
4 No. @£465.00	£1,860.00
infill panels to perimeter:	
22 No. @£85.00	£1,870.00
total:	£16,795.00
shelter:	
growing boxes:	
2 No. @£615.00	£1,230.00
shelter support & green roof:	
1 No. @£1,400.00	£1,400.00
total:	£2,630.00
storage container:	
standard metal container with timber frame, cladding & green roof:	£1,600.00
barrel water storage:	
24 No. @£70.00	£1,680.00
low planters:	
timber frame, bag & soil/compost	
15 No. @£70.00	£1,050.00
fencing:	
'Fastrack' expanded metal mesh fencing system, 2.4m high, inc. foundations etc. & allowance for 2 lockable gates	£3,470.00
wildlife area planting:	
trees, shrub & meadow	£1,480.00
surface material:	
geotextile membrane and crushed shell	
608 m2 & 45 m2 pre-cast slab surface	£12,136.00

sundries:	
information board	£250.00
delivery of all timber items	£1000.00

total: £1,250.00

Total of items: £42,091.00

preliminaries @ 7.50% £3,156.83

contingencies @ 5.00% £2,262.39

Total cost £47,510.22

site area: 752 m2

cost/m2: £63.18

NOTES

The above Indicative Cost is inclusive of appropriate allowances for Preliminaries and Contingencies but exclusive of the following items: -

- a) ground levelling/preparation (assumes all sites to be level and suitable for the Works with only 50% of the area requiring to be surfaced)
- b) garden furniture.
- c) garden tools/equipment.
- d) site leasing costs etc (if any)
- e) water supply
- f) professional fees
- g) statutory approval costs
- h) fluctuations in labour and material costs beyond the current date
- i) VAT (where applicable)

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10.0 organisational structure & delivery:

10.1 overview:

As a starting point, it is worth restating the findings of the consultation.

Key findings:

- the public profile of existing organisations is extremely low, making it difficult to find out about and make contact with groups
- lack of co-ordination/shared activity between groups
- lack of knowledge/co-ordination of action by different public agencies
- gap between policy and action at several levels
- level of activity on the ground is not of a significant scale
- lack of support to overcome common barriers
- lack of infra-structure to make links between national, regional or local authority organisations and community groups
- lack of accessible funding

Recommendations:

- create a common forum/focus for information and contact
- co-ordinate activity between public agencies in a strategic manner
- bridge the gaps between agencies and groups through focused support
- encourage groups to be properly structured with a core team rather than lone individuals driving forward the project
- co-ordinate local authority activity

The 'organisational' issues need to be addressed if a step change in activity in community food growing is going to be delivered.

2 scales of organisational structure:

Given the nature and scope of the issues under consideration, there is a need to co-ordinate aspects of the strategy on a regional level as well as working with a large number of communities on a 'grass roots' level.

The strategy needs to be driven and supported at a community level - but with the necessary support infrastructure and supply chain established on a regional level.

2 stages of delivery:

To ensure long term sustainability, the strategy cannot be dependent upon ongoing centralised implementation and support. In future years, projects should be instigated and driven by individual communities across the Glasgow Metropolitan Region.

The strategy needs to kick start this process by delivering a spread of inspiring early projects across the region and by establishing the necessary support framework to enable groups to develop and deliver their own projects.

Accordingly, the delivery of the strategy and the associated organisational structures surrounding this are considered in 2 stages:

1. the implementation and establishment phase: years 1 - 5
2. the ongoing instigation of projects by communities: year 5 on

10.2 regional organisational structure:

As described in the diagram on the facing page, it is proposed that there are 2 key 'structures' active on a regional level to re-align the strategy, these are:

- the strategic co-ordination agency
- the region wide hub/network for organisations/ community groups

The role of the strategic co-ordination agency is as follows:

- to establish & manage partnerships with all national, regional & local authority level organisations
- to co-ordinate region wide project delivery and the necessary associated supply chain

This draws in a broad range of strategic partners and co-ordinates activity to support community food growing in a way that is not happening at present. This structure is key to the successful delivery and co-ordination of projects across the 8 regional local authorities. Although there will be an ongoing strategic co-ordination role, the activity required is perhaps most strongly focused on the implementation phase of the strategy.

The role of the regionwide hub/network is very different. This structure is envisaged as a long standing organisation that acts as a direct point of contact/access to information for any group active or interested in community food growing.

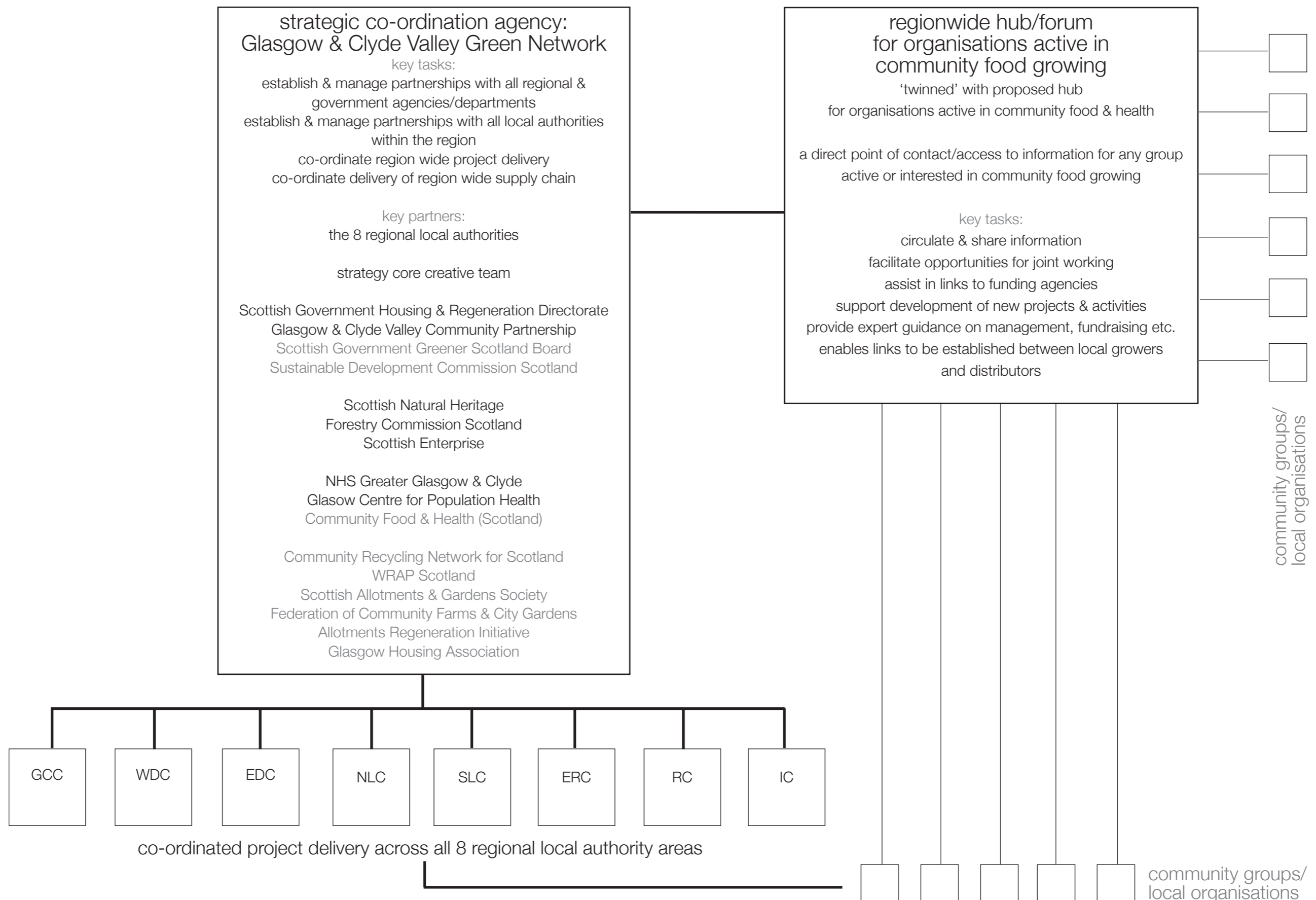
Essentially, this will become the focus for groups on an ongoing basis after the initial 5 year implementation phase. Once the main centrally co-ordinated delivery of early projects comes to an end - this organisation will be able to provide all of the support and information necessary to enable groups to realise their own projects. It's role will include the following:

- to circulate & share information
- to facilitate opportunities for joint working
- to assist in links to funding agencies
- to support development of new projects & activities
- to provide expert guidance on management, funding etc.
- to enable links to be established between local growers and distributors

It is proposed that this organisation is 'twinned' with the anticipated hub for organisations active in community food & health. It is a key objective of the strategic co-ordination agency to establish the regional forum in the early stages of the implementation/ establishment phase.

10.0 organisational structure & delivery:

regional organisational structure:



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10.0 organisational structure & delivery:

10.3 local authority area - structure:

Delivery of projects in the implementation and establishment phase will need to be substantially driven by each of the 8 regional local authorities within their geographic area of responsibility.

The starting point for this is obtaining the political and organisational support for the strategy within each local authority - alongside the allocation of an appropriate level of funding.

The delivery of projects will demand the close co-operation of a range of different council departments. The individual officers accordingly need to be 'enabled' to support the strategy.

This is perhaps best achieved through the strategy having a high profile champion within the organisation (either at councillor or senior officer level). This individual must have the authority to brief and direct officers across a range of departments to support delivery of the SAGE projects.

It is proposed however, that the delivery of the projects is undertaken by a 'delivery agent' that is distinct from the council itself.

The cross cutting nature of the SAGE strategy and projects does not fall neatly into the typical subdivision of council departments and activity.

Because of the need to liaise with a wide range of both council departments and external organisations and the specific expertise required: organisational, environmental, design and artistic - it is thought that a carefully selected delivery agent (with these skills) should be appointed.

Alongside the support required from the local authority, other key partnerships anticipated in the project development phase are:

- local housing associations
- existing local community organisations
- existing local food growing organisations

It is proposed that the actual fabrication of the modular system and the implementation of works on site is undertaken by social enterprise and training organisations. Notable examples are the Glasgow Wood Recycling group (to manufacture the kit) & the WISE group for groundworks etc.

The series of tasks and partnerships required to move the projects from the strategy level to implementation on site are outlined on the facing page.

delivery process for different strategy strands:

It is anticipated that the 4 strategy strands will be delivered essentially through the same sequence and set of partners. However, there will clearly be different emphasis and focus between them.

Strategy strand 1: bring vacant & derelict land in densely populated urban areas into use for growing as an interim landuse:

Process as per facing page.

Strategy strand 2: bring underused land (amenity space) in peripheral estates & social housing areas into use at scales up to market garden growing:

This strand of the strategy will be delivered through essentially the same steps, however the social enterprise focus of the end use will require specific expertise and input. This may be delivered through the local authority or another organisation with expertise in this field.

Strategy strand 3: bring underused private garden space in suburban or outlying areas into use for growing:

This strand of the strategy doesn't have a physical implementation outcome as such. It is anticipated that this strand of the strategy would be delivered by the regional strategic co-ordination agency and co-ordinated on an ongoing basis by the regionwide hub/network.

Strategy strand 4: bring underused public land into active use for growing (focused on schools throughout the area):

Again this strand of the strategy could be delivered through essentially the same steps, however given the close alignment of this strand with other local authority activities it may be that there is a greater emphasis on direct implementation by the local authority (particularly for projects within existing public open spaces etc.). The focus on school sites would demand the involvement of the relevant education department.

10.0 organisational structure & delivery:

key actions & partnerships to project implementation: within each of the 8 regional local authority areas:

1	2	3	4	5	6
<p>tasks:</p> <ul style="list-style-type: none"> adoption of strategy by local authority commit funding to project delivery commission delivery agent <p>undertaken by: local authority</p> <p>supported by: Glasgow & Clyde Valley Green Network Partnership</p>	<p>tasks:</p> <ul style="list-style-type: none"> detailed scoping of sites in action areas <p>undertaken by: the delivery agent</p> <p>supported by: local authority planning/regeneration/ parks departments housing associations</p>	<p>tasks:</p> <ul style="list-style-type: none"> community research & dialogue to build local partnerships & active community involvement <p>undertaken by: the delivery agent</p> <p>supported by: local authority existing local community organisations existing local food/growing organisations housing association</p>	<p>tasks:</p> <ul style="list-style-type: none"> undertake detailed feasibility testing to make informed final site selection establish legal right of access and relevant consents as necessary <p>undertaken by: the delivery agent</p> <p>supported by: local authority: planning/regeneration/ parks departments local authority: estates/legal departments housing association site owner (if other)</p>	<p>tasks:</p> <ul style="list-style-type: none"> site design & layout <p>undertaken by: the delivery agent</p> <p>supported by: local authority: planning/regeneration/ parks departments local authority: estates/legal departments</p>	<p>tasks:</p> <ul style="list-style-type: none"> implementation on site <p>co-ordinated by: the delivery agent</p> <p>undertaken by: social enterprise/ training agencies: eg: Glasgow Wood Recycling Group the WISE Group</p>

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10.0 organisational structure & delivery:

10.4 the role of the delivery agent:

As described, the delivery agent has a specific role in the implementation stage of the strategy. Essentially, working in collaboration with the local authority and other partners, the delivery agent is the 'common thread' driving the projects forward to implementation.

Key areas the delivery agent needs to take forward include:

- establish the funding for SAGE infrastructure
- establish relationships with key stakeholders locally and regionally
- establish the local supply chain for implementation (materials, compost, production of growing kit, production of support materials and website, guidance for new projects, promotional materials,)
- establish SAGE projects in local communities (find suitable projects, liaise with local stakeholders, establish legal entity to manage project if community not constituted, establish management plan for sites once established, put into place legal agreements around access to land, coordinate design and installation of SAGE projects, ensure support packages well implemented)
- promote SAGE locally and regionally (in collaboration with strategic partners)
- ensure ongoing co-ordinated support for established projects
- capture learning and feed into regional and strategic structures

This role demands a specific skill set and a continuity of input. The skill set of the delivery agent needs to include:

- experience of delivery of greenspace and/or landscape projects
- experience of and understanding of developing horticultural projects
- experience of delivering cutting edge cross cultural projects
- experience of working with local communities
- experience of project management
- experience of working with a range of stakeholders on implementation
- experience of fundraising at scale

Once the individual projects are implemented on site, the delivery agent has a further role in the co ordination and management of support to the new growing site.

It is anticipated that support should be provided in the following areas, to build knowledge and skills and to deliver the greatest possible outcomes from the sites:

- horticultural expertise & support
- composting (possibly vermiculture) expertise & support
- artist involvement/projects
- cooking/diet/health advice
- supporting active links to the developing regional forum

This support may be offered in part by existing programmes / individuals across most of the areas.

The most crucial support initially and over the first 2-3 years of any new project is horticultural advice. Many of the people involved will not have any experience of growing.

Ongoing horticultural advice from a dedicated SAGE gardener which can tail off in subsequent years as confidence grows will ensure projects develop successfully. Once projects are established and networked with other working projects this advice can be gained on a peer level. However, initially there is a need to ensure a quality of advice and support.

11.0 strategy for measuring outcomes:

11.1 overview:

An issue that became apparent through dialogue with various government agencies and with small community groups is the 'communication gap' that often exists between them.

To be able to support community level activity, it is a common requirement of larger funding organisations to demonstrate:

- baseline need
- outputs of the community activity
- how the activity aligns with the organisation's goals

Small, voluntary community groups typically don't have the skills to engage with such requirements.

As noted earlier in the document, the gaps between agencies and groups can be bridged through focused support (for example introducing standardised and supported forms for assessing project outcomes).

11.2 why measure outcomes:

The ability to measure outcomes in an easy and consistent way, is important for the following reasons:

- it bridges this practical gap between individual community groups and funders and thereby enables projects to take place
- it provides useful evidence for groups for their own learning
- it demonstrates the difference that a group or project is making
- it influences others, demonstrating the benefits and importance of the project

The measuring of outputs is clearly beneficial to individual groups, but it will also be crucial for the SAGE programme overall to demonstrate what it has achieved.

A well structured approach to measuring project outcomes could deliver an invaluable set of information that helps to inform the ongoing evolution of the programme. This information could provide a basis for decision making on such projects both within the Glasgow Metropolitan Region and further afield.

11.3 standardised template

An opportunity exists through the SAGE strategy to develop a standardised approach to measuring the baseline position and the outcomes of each project.

The development of this standardised approach/template needs to be led by the regional co-ordination group. This group will have representation from all of the key strategic agencies (such as NHS Greater Glasgow and Clyde) and offers an ideal forum to agree a standard approach.

Once established, this template can be embedded in the planning and delivery of SAGE projects and be carried forward via the regional hub/forum as projects are increasingly instigated and delivered wholly by communities.

method:

Clearly establishing the baseline position before the project has been undertaken is crucial as a point of reference.

Although the exact criteria and basis for collating information needs to be agreed with key agencies, it may include:

- review/collation of published social/health/economic data
- secure questionnaire responses on relevant matters (eg: health, lifestyle, diet) from local people
- photographic record of the physical environment and possibly also of participants at the start of the project

After a period of operation of the project, the same data can be collected for comparison.

12.0 next steps / action plan:

12.0 next steps/action plan:

ACTION:	WHO:	TIMESCALE:
1. adopt strategy & recommendations	Glasgow & Clyde Valley Green Network P/tnership	autumn 2009
2. present & get buy in from 8 regional local authorities	GCVGNP/study team/local authorities	autumn 2009
3. establish strategic co-ordination group	GCVGNP & partners	autumn 2009
4. secure funding & commission demonstration projects	GCVGNP/partners/local authorities	commission demo projects (5 sites?) autumn 2009 delivery of demonstration projects spring 2010
5. secure funding, define project champion, agree action plan & delivery timescale for programme of early action projects with each local authority	strategic co-ordination group	winter 2009/2010
6. research & feasibility work to establish supply chain/network: secure funding to establish social enterprise activities etc.	strategic co-ordination group/local authorities	feasibility/research winter 2009/2010 start implementation spring 2010
7. agree standard approach to measuring of project outcomes	strategic co-ordination group	winter 2009/2010
8. commission delivery agents within each of 8 regional local authorities - to deliver early action projects (project development, site design & implementation, support network)	strategic co-ordination group/local authorities	commission early action projects (20 sites?) spring 2010 delivery of early action projects spring 2011
9. secure funding & establish regional forum: co-ordinate with efforts of Community Food & Health	strategic co-ordination group/partners	development phase 2010 forum operational by spring 2011
10. rolling programme of funding & implementation of projects over minimum 5 year period: aim to deliver the equivalent of 1 project for every 10,000 people within the Glasgow Metropolitan Region by 2014	strategic co-ordination group/local authorities	ongoing commissioning (50 sites per year) 2011-2013 delivery of minimum total 175 projects by 2014
11. potential shift from implementation & establishment phase to ongoing community driven model	the regional hub/network	ongoing

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list of consultees:

client group:

Glasgow & Clyde Valley Green Network
 Scottish Natural Heritage
 Glasgow Centre for Population Health
 Glasgow City Council: DRS

Alastair Corbett / Max Hislop
 Jimmy Hyslop
 Russell Jones
 Derek Dunsire/Martin Curzon

strategic/regional agencies:

Community Food & Health (Scotland)
 EKOS consultants (working for CFH)
 Greater Glasgow Health Board
 Scottish Education & Action for Development
 Scottish Allotments & Gardens Society
 Federation of Community Farms & City Gardens
 Allotments Regeneration Initiative

Anne Gibson
 Rick Rijsdijk
 Anne Gebbie Dibben / Paula Barton
 Lorraine McCauley
 review of strategy
 review of material
 Ian Welsh

local authority officers:

West Dunbartonshire
 East Dunbartonshire
 North Lanarkshire
 South Lanarkshire
 Renfrewshire/East Renfrewshire
 Inverclyde
 Glasgow City: DRS
 Glasgow City: LES
 Glasgow City: Education

Peter Morris / David Hartley
 Lesley Scott
 Lyndsay Noble / Craig McIntyre / John White / Brian Thomson
 Hamish Neilson / Liz Dunlop / Jim Fowler
 Steve Edwards
 Charlie Cairns
 Alan Davidson
 Robert Watson
 Mark Erwin

local authority area agencies:

West Dunbartonshire Environment Trust
 Glasgow Housing Association
 Glasgow Allotments Forum

Alan McMullen
 Taroub Zahran / David Fletcher / Lorraine McLaren / Lynne Guthrie
 Judy Wilkinson

wider west of Scotland:

Organic Growers of Fairlie

Ron Gilchrist

recycling/composting focused agencies/initiatives:

Glasgow Wood Recycling
 Community Recycling Network for Scotland
 the Wise Group: composting scheme
 Dumbarton Road composting project
 WRAP

Hannah Clinch / Peter Lavelle
 Pauline Hinchion
 researched
 researched
 researched

list of consultees:

local area agencies/community organisations:

Glasgow City:

North Glasgow Community Food Initiative
Castlemilk Environmental Trust
Toryglen Environment project
Community Orchards / Children's Garden
Milton Food Project
Coach House Trust
Molendinar Housing Association
Riddrie/Balornock Urban Garden Scheme
Playbusters
Wellhouse Community Trust/Allotment Society
Cranhill Community Project
Kennyhill Allotments/Kelvin Clyde Greenspace
Linthouse Housing Association
The Hidden Gardens
Yoker allotments

Inverclyde:

Inverclyde Association for Mental Health: nursery
Parklee Branching Out project
Larkfield Community Garden
Riverside Inverclyde
Inverclyde/Stepwell

South Lanarkshire:

TACT Blantyre: community garden
Whitehill Hamilton / Threshold West Scotland
Phoenix Futures: Chatelherault
Clyde Valley Orchard Group
Hamilton Grammar School
Clyde Organics

West Dunbartonshire

Clydebank Re-built
EKO McKenzie Growers Hardgate
Knowetop Community Farm
Dalmuir allotments project
Faifley project / resource centre
Rosshead Community Garden

East Dunbartonshire

Silver Birch (Scotland) social enterprise project
Oxgang primary School

North Lanarkshire

Renfrewshire
East Renfrewshire

Greig Sandilands
Chris Gourlay
Abi Mordin
John Hancox
researched
researched
Rob Joiner
researched
Margaret Layden
Pauline Smith / Eddie Andrews
Lean Geer
James McMahon
John McBride
Rolf Roscher / Angus Farquhar
Derek Dunsire

Margaret Tait
Sharon Gemell
researched
Geoff Gregory
researched

Hugh / Ella McNeil
Peter Ramsay
Gareth Morgan
Rose Clarkson - SNH
researched
researched

Eleanor McAllister
researched
Eleanor Mitchell
Maureen Scullion
researched
Michael Birkit

Mark Williams
Lorna Sweeney

research only: no information from local authority
research only: no information from local authority
research only: no information from local authority

references:

key documents referred to:

Scoping Study: options for collaborative working in Glasgow: Community Food & Health (Scotland) / EKOS: 2009

Market Assessment of the Potential for Developing a Social Enterprise Market Garden Business: GCC-DRS / CEIS: 2009

Draft Consultative Strategy for Allotments: GCC-LES: 2009

Finding Scotland's Allotments: Scottish Allotments & Gardens Society: 2007

Allotments in Scotland: Guidance Notes for Scottish Councils: COSLA/CEC: 2007

Let Glasgow Flourish: Glasgow Centre for Population Health: 2006

Continuous Productive Urban Landscapes: ed: Andre Viljoen: Architectural Press: 2005