Fann Street 'Mini Forest'

Residents co-design session 09/09/23

Working towards a more resilient City

Contents

Today's co-design session

Presentation – Approx 30 minutes

1. Introduction
    a. City of London Corporation Climate Action Strategy
    b. Environmental Resilience Team's role
        i. Forecasts and Climate Resilience Risks
        ii. Cool Streets and Greening programme
2. The site
    a. Overview of the location
    b. Constraints
    c. Opportunities
    d. Proposed programme
3. Proposal
4. Design Considerations

Questions – Approx 10 minutes

Workshops – Approx 40 minutes

Next steps and final thoughts – Approx 10 minutes

Introduction

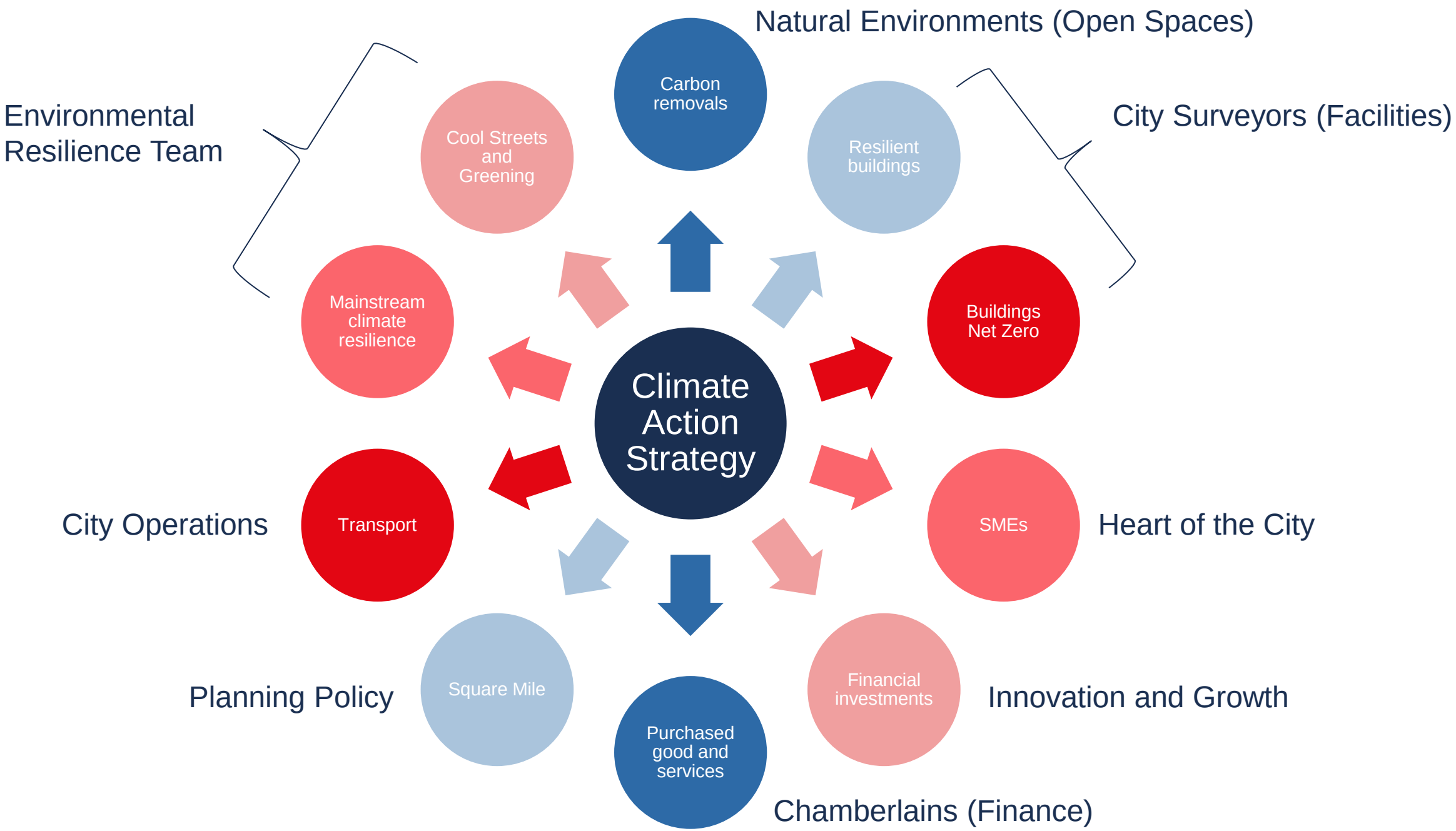
Environmental
Resilience in the City

THROUGH THIS STRATEGY THE CITY CORPORATION COMMITS TO ACHIEVING:

- Net zero by 2027 in the City Corporation's operations
- Net zero by 2040 across the City Corporation's full value chain
- Net zero by 2040 in the Square Mile
- **Climate resilience in our buildings, public spaces and infrastructure**

ACROSS THE SQUARE MILE WE WILL:

- Work with all stakeholder groups to accelerate the transition to net zero
- Support SMEs to reach net zero
- **Invest in making the Square Mile more resilient to extreme weather and flooding**


Natural Environments (Open Spaces)
Environmental Resilience Team
City Surveyors (Facilities)
Carbon removals
Cool Streets and Greening
Resilient buildings
Mainstream climate resilience
Buildings Net Zero
Climate Action Strategy
City Operations
Transport
SMEs
Heart of the City
Planning Policy
Square Mile
Financial investments
Innovation and Growth
Purchased good and services
Chamberlains (Finance)

Climate projections for the Square Mile

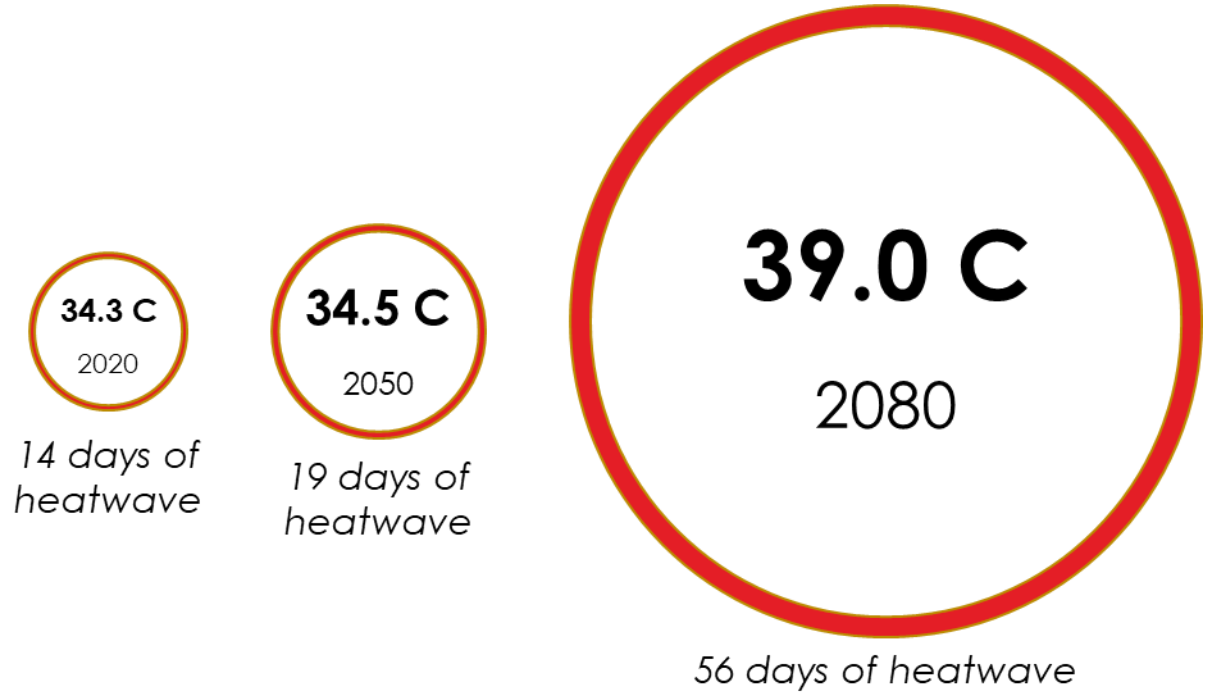
2080 compared to 2020

Hotter, drier summers
Maximum temperatures to increase around 5°C by 2080.

Warmer, wetter winters
20mm additional rainfall in wettest five days in 2080.

Sea level rise
Flood risk exacerbated by rising levels of tidal Thames approaching 1m.

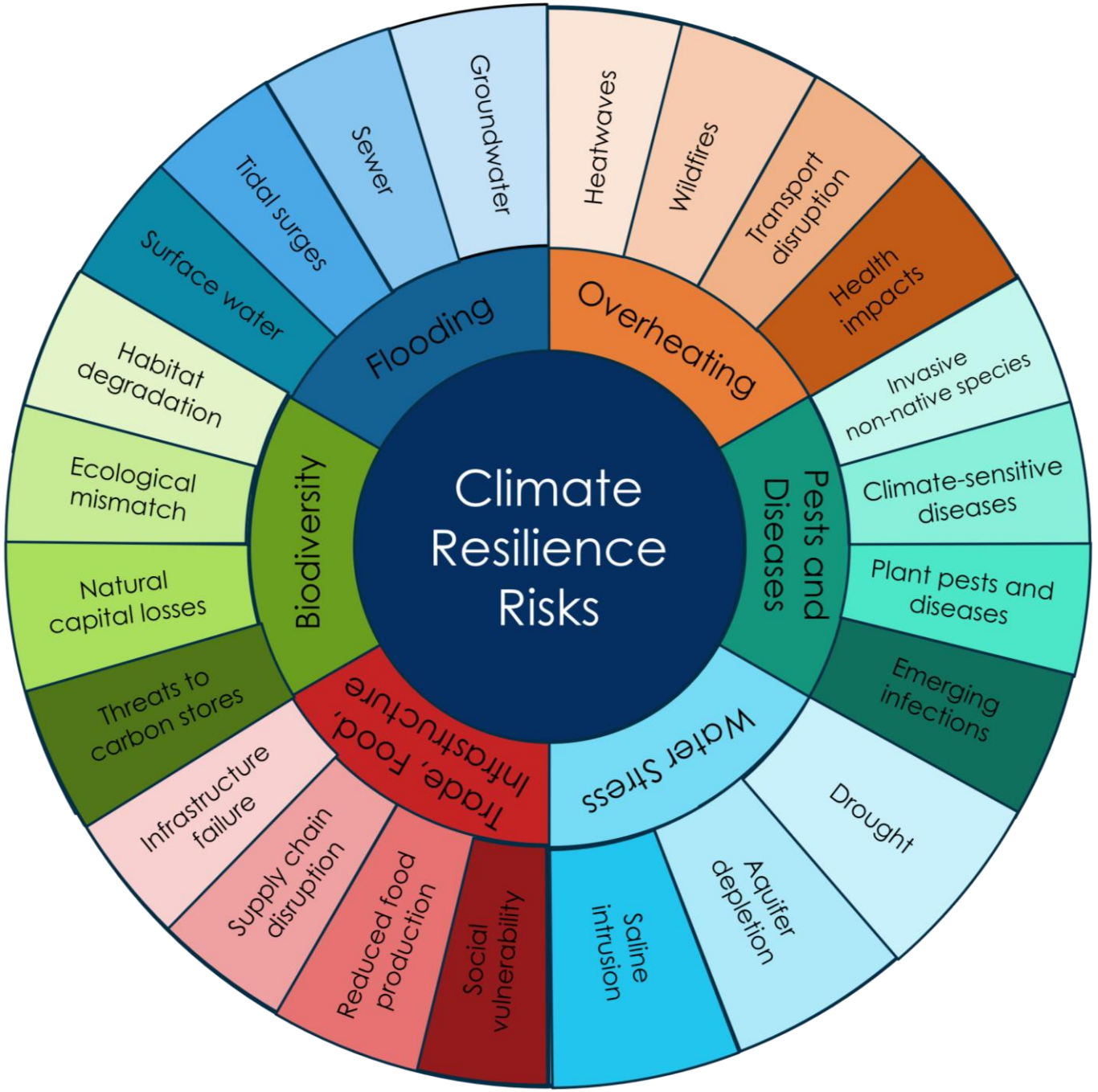
Extreme weather events
Double the days of drought.
Heatwaves lasting up to 3 weeks.
Extreme rainfall.



Forecast

Climate risk wheel

Warmer wetter winters, hotter drier summers, more extreme weather events, and sea level rise.



Cool Streets and Greening Programme

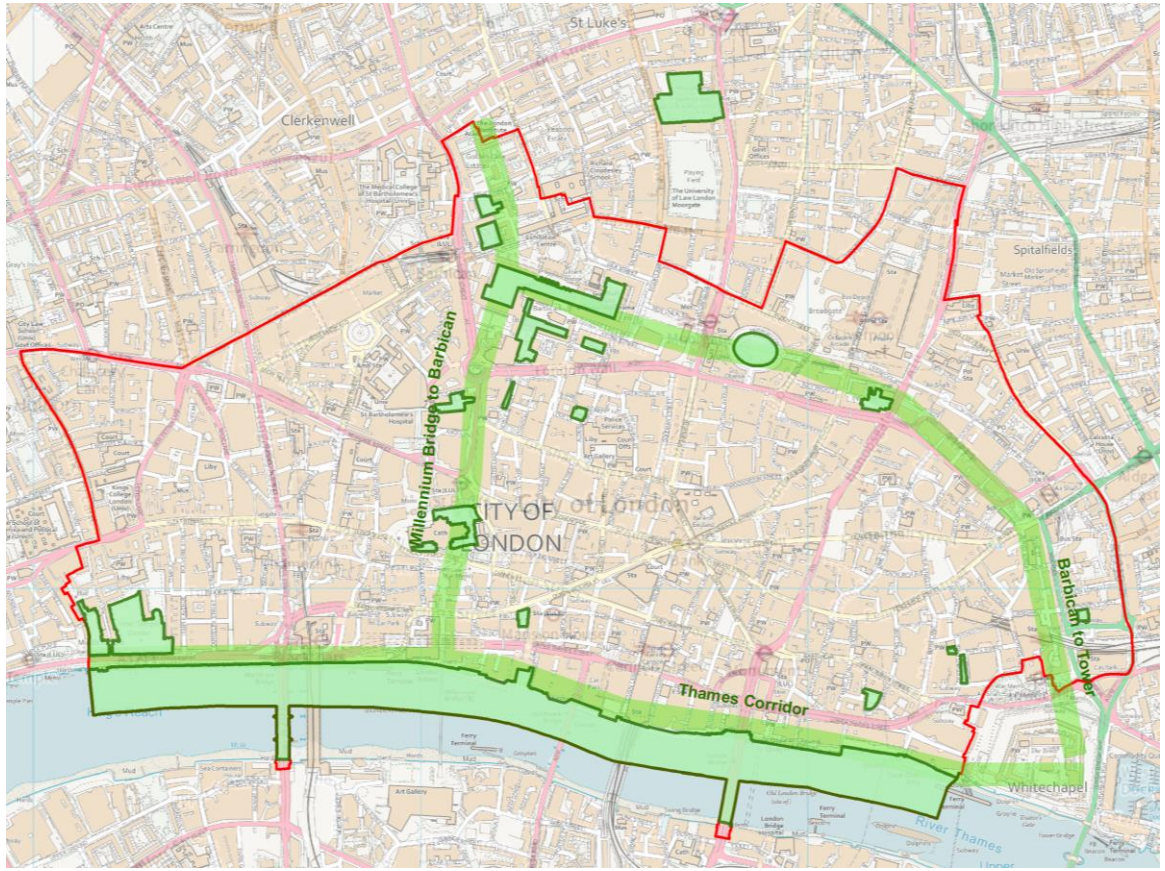
Five-year programme trialling resilient measures

Public Realm interventions to trial a range of climate resilient measures.

- Incorporating measures into existing proposals
- Citywide greening and biodiversity corridors
- Sustainable drainage systems and tree planting

Challenges:

- ➢ Equitable distribution of maintenance costs
- ➢ Below ground constraints
- ➢ Scope slippage



The three green corridors generally follow the City's Sites of importance for Nature Conservation (SINCs). A prioritisation exercise was carried out to select project sites. This included: biodiversity criteria (proximity to SINC, greenspace deficiency, proximity to habitat, proximity to BAP species) and pedestrian criteria (air quality, thermal comfort, pedestrian flow).

City Greening & Biodiversity

Fill the City's streets with trees

Aims

- Plant 100 new street trees
- Ensure these are future proof and resilient
- Create shaded and cooler streets
- Increase connectivity and create green corridors

So far, we have completed several tree planting sites, including an avenue of trees on vine street of species include Japanese zelkova and Pride of India that are fast growing and resistant to a range of tree pests and diseases. Once grown, these will provide shade from canopy cover for pedestrians and cyclists along Vine Street to combat street level overheating.

City Greening & Biodiversity

Planting for Climate Resilience

Aims

- Replacement of failing planting
- Review of management plans
- Increase sustainability and reduce dependence on traditional irrigation schemes
- Provide improved habitats for urban biodiversity

The riverside planting outside the City of London Boys school was completed in 2022. It showcases an experimental way of planting using species tolerant of a Mediterranean climate. This project utilised a range of planting mediums, with the aim of testing the different substrates beyond the establishment period without irrigation, only watering when required.

City Greening & Biodiversity

Biodiversity monitoring

Aim

- Set a baseline to monitor improvement to biodiversity following CS&G interventions
- Improve biological recording
- Support the BAP
- Develop understanding of urban biodiversity and climate change

National Volunteer Schemes

- Big Garden Birdwatch
- Pollinator Monitoring Scheme (PoMS)
- City Nature Challenge
- Big Butterfly Count
- BCT Sunset Sunrise survey
- The Great Stag hunt

This year we have encouraged local people to take part in supporting biodiversity monitoring efforts at sites across the City. This has included the Natural History Museum's City Nature Challenge, to coordinate a City-wide bioblitz. As well as getting people to take part in the 'Big Butterfly Count' which is over a few weeks and aims to take natures pulse and track butterflies across the UK.

The Site

Fann Street Tree avenue

Location

Site overview

Existing site

- Nine trees; two species, three cultivars
- Canopy cover = up to 72m2
- 12 planters
- Two benches
- South facing with internment shading through the day

Species

False Acacia, Robinia pseudoacacia
'Frisia' & 'Bessoniana'

- Four, 12 – 18m
- Three Frisia, one Bessoniana
- Status – Non-native

Hornbeam, Carpinus betulus
'Fastigiata'

- Five, 5 – 8m
- Status - Native

Constraints

Ownership and statutory duties

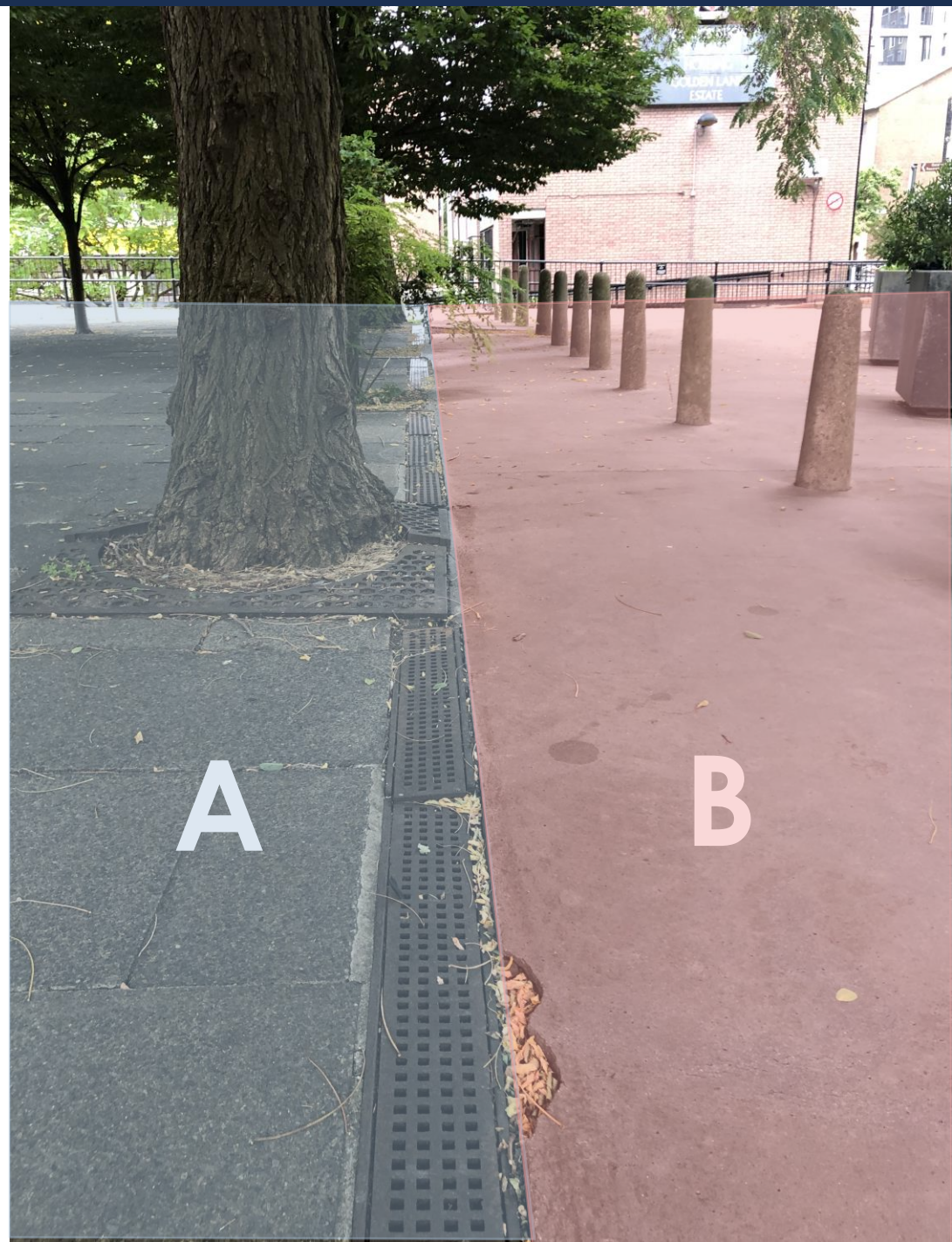
Responsibilities:

A. City of London – Housing Land

B. City of London - Highway

Further considerations:

- Highways Act 1980
- Conservation Area
- Golden Lane Estate Designed Landscape Grade II Park and Garden (works likely to need Listed Buildings Consent)



Constraints

Open space maintenance

Maintenance

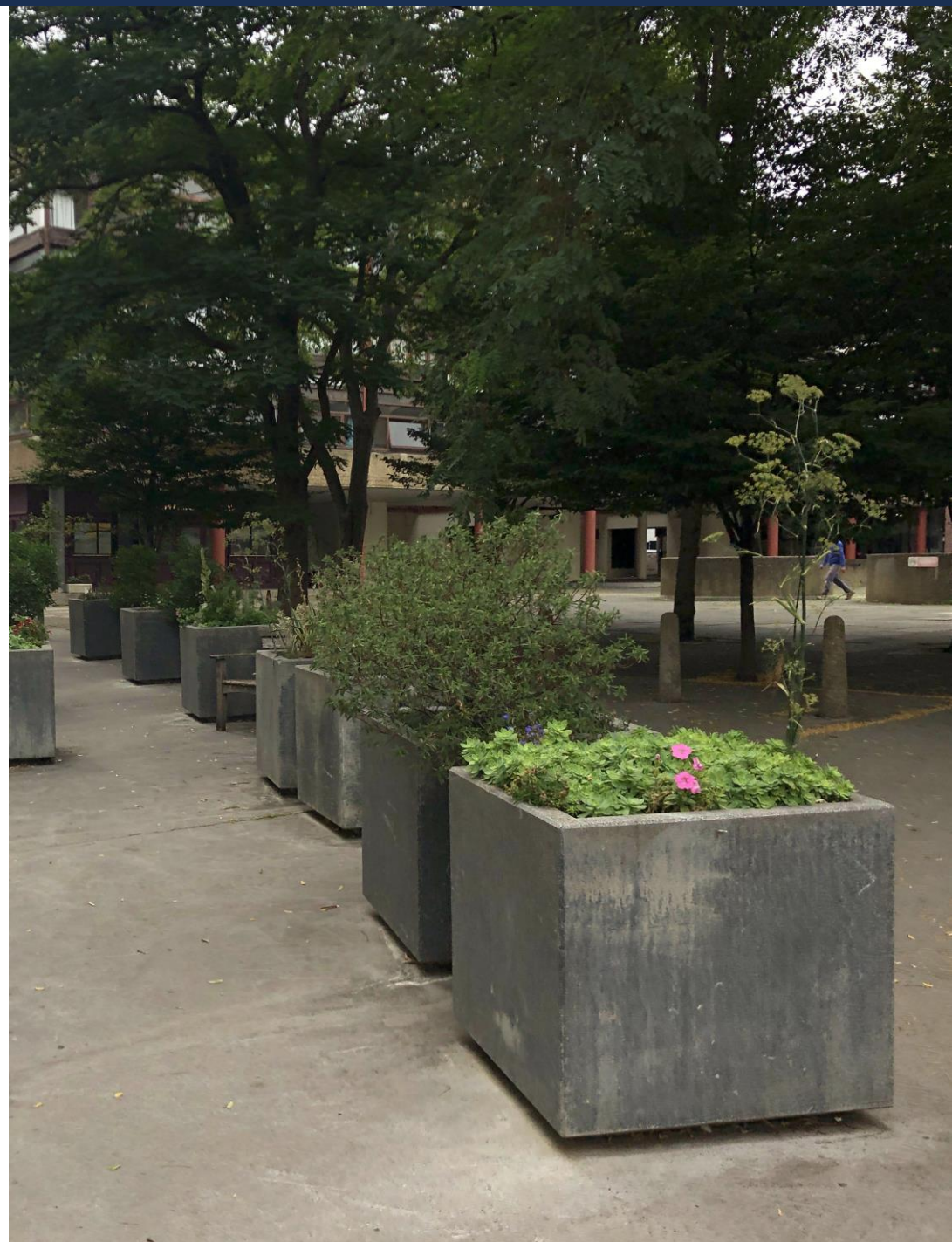
- Soft landscaping carried out by private grounds maintenance contractor
- Tree health inspection carried out by City Gardens
- Planters are primarily cared for by residents

Decision making

- Any additional tree planting subject to Listed Building Consent, provided by City of London Planning team
- Listed Building Management Guidelines set out the informal position between stakeholders, including owners, occupiers, LPA and English Heritage

Highways and Cleansing:

- City Operations



Constraints

Sub-surface

A ground penetrating radar survey has been commissioned.

Physical limitations

- Basement **car park** to north of site and below 'Public Court'
- **Access** route
- The **road surface** of Fann Street which is out of scope
- A band of **utilities** more congested along the highway (some maybe no longer in use)

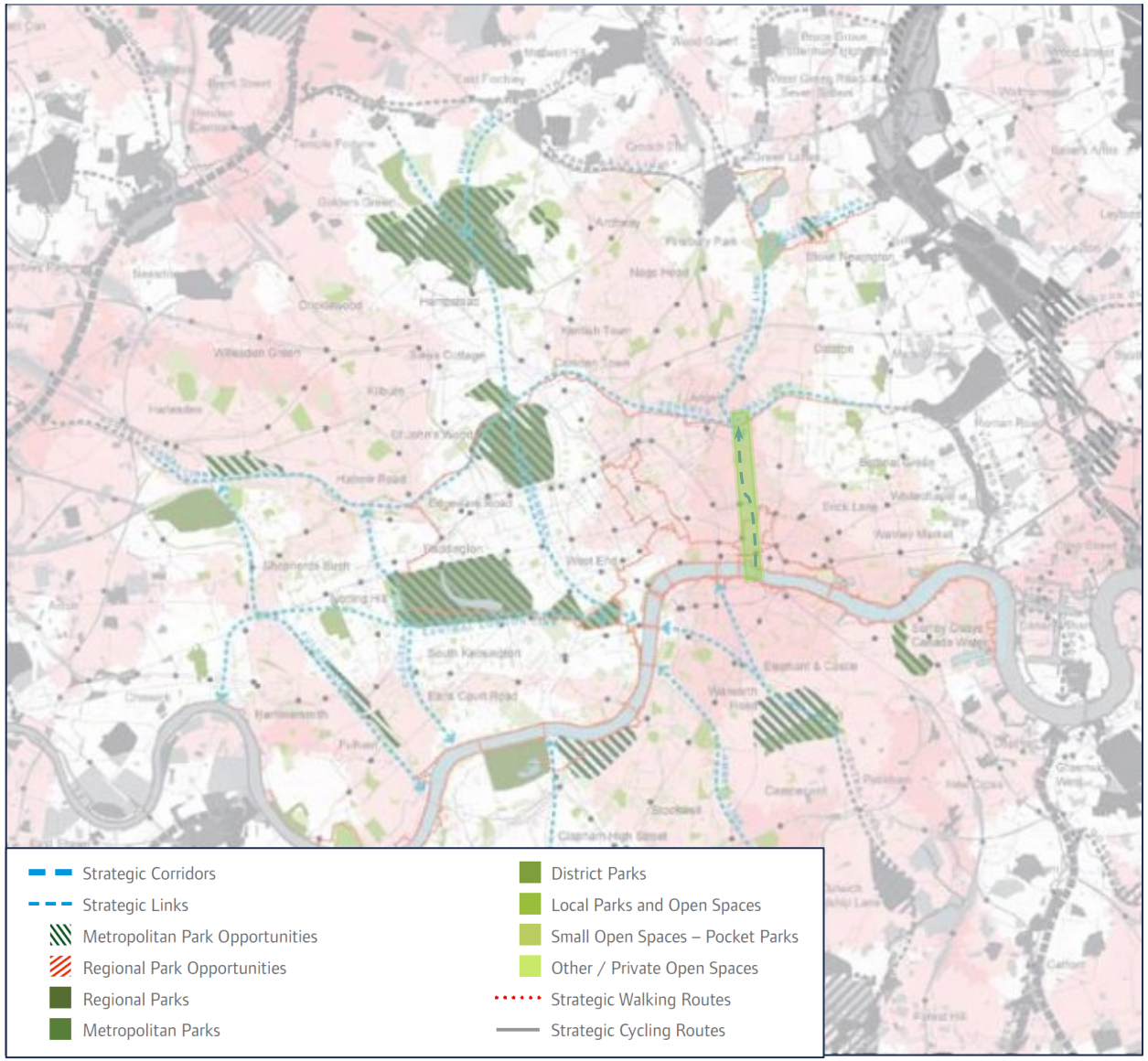
Conclusion:
A clear opportunity to re-open ground around trees and create soft landscaping

Opportunities

Greening and connectivity

How can the project contribute biodiversity?

- A new ‘biodiversity’ focused space
- Expanding the Barbican Wildlife Garden
- Extending green corridor creating a route out of the City towards to Grand Union Canal/ New River
- Strengthen Sites of Importance for Nature Conservation (SINCs) network in the City
- Increase greenspace and quality of green infrastructure in a residential area



Excerpt from the All-London Green Grid

Opportunities

Community and custodianship

The creation of a new natural space within GLE offers a chance to create a more inviting gateway into the estate which can be cared for by the local community.

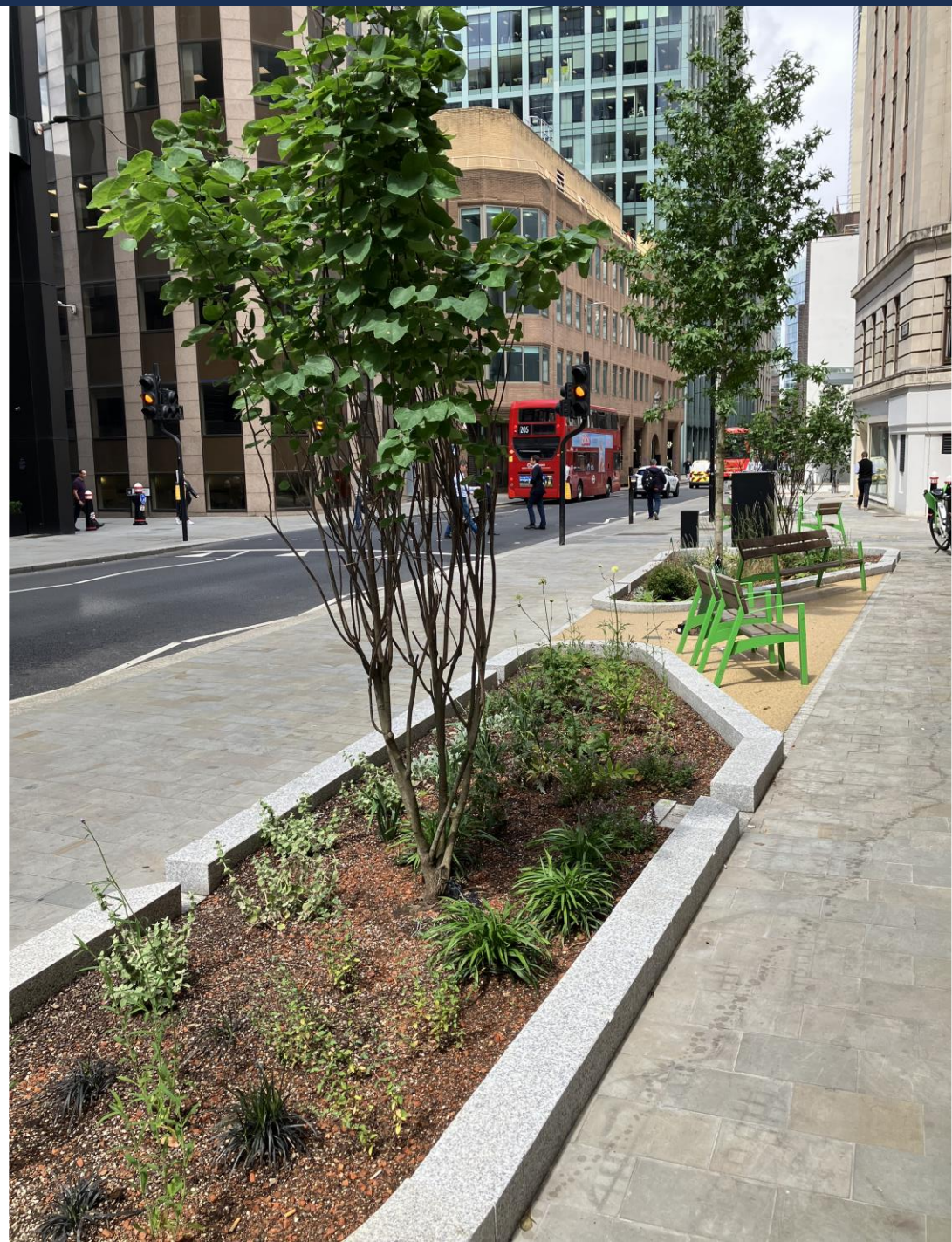
- The approach planting proposed can be carried out by residents and is accessible to all
- The maintenance and custodianship of the site could offer regular volunteering
- A space for residents to be proud of

Opportunities

Climate resilience

Removal of hardstanding and creation of a new 'forest style' planting bed will help address the risks of climate change and address the City's climate resilience risks.

- Softer landscape to help slow the flow of surface water, reducing the impact of **flooding**.
- Native and diverse understory planting, to increase **biodiversity** and provide habitat for urban wildlife.
- Increased density of planting will help regulate temperature through shading and cooling, creating respite during **overheating**.
- Diverse planting palette to reduce the risk of future **pests** and **disease** proliferation.



Proposal

Mini Forest

Proposal

Programme

Consultation

Autumn 23

- Internal agreements
- Residential co-design

Design

Autumn/Winter 23/24

- Submit designs for approval
- Acquire Listed Building Consent

Contractor

Spring 24

- Agree programming
- Finalise any engineering /construction details

Works begin

Late Summer 24

- Removal and re-use of paving
- Creation of planting area

Planting

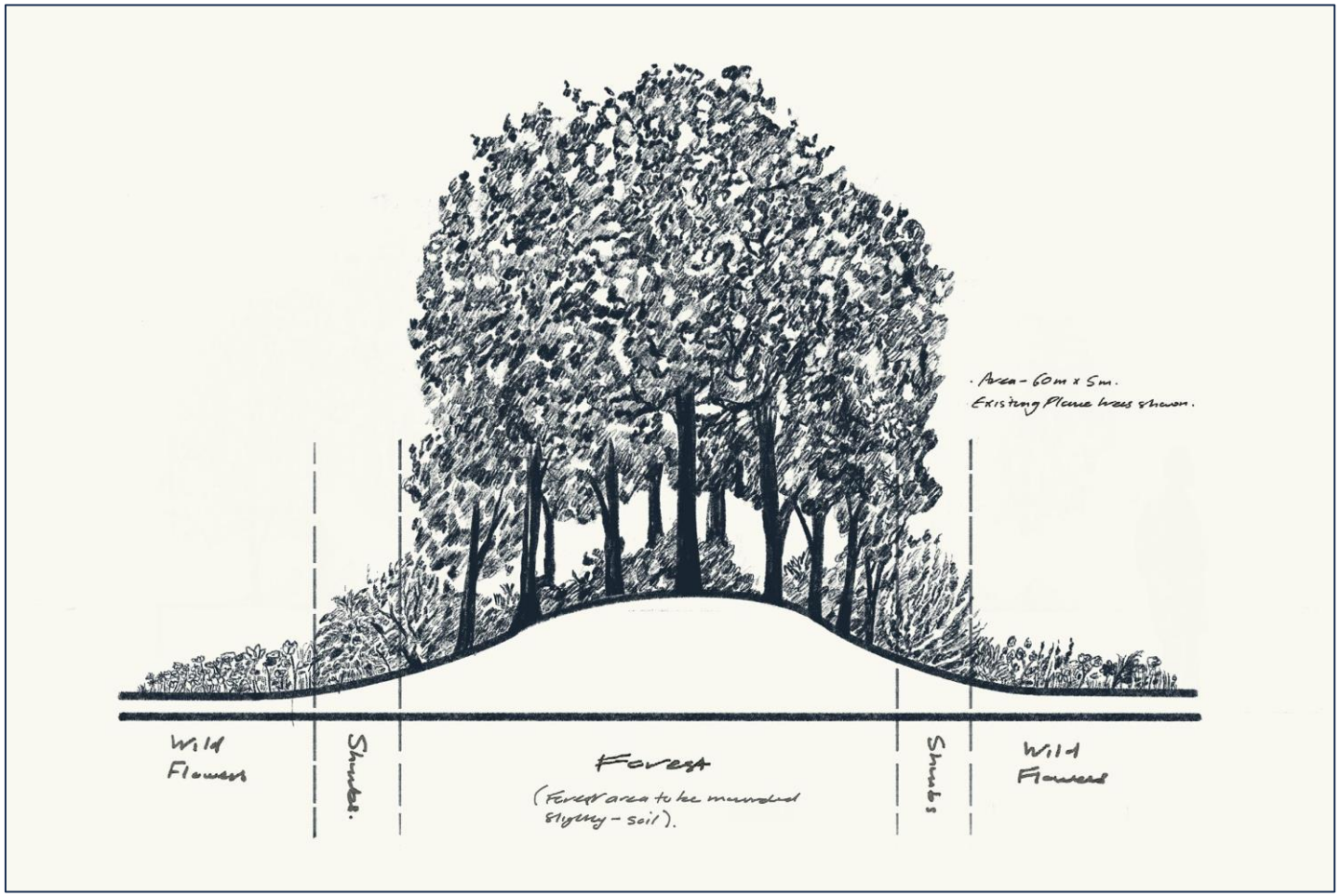
Autumn/Winter 24

- Introduce substrates/soils
- Community planting day

Proposal

‘Miyawaki Forest’

- The Miyawaki method aims to maximise **tree planting**.
- The method uses **different sized** saplings including whips, feathers and standards.
- Here we would use **shade tolerant** tree species to create a diverse understory
- It would provide **undisturbed areas** and different forest layers for **biodiversity**.
- This method allows the trees to **naturally develop** and succeed, recreating natural woodland processes.
- The edges of the space can be softened with **woodland edge shrubs** and meadow habitat.



SUGI ‘Kensington Mini Forest

Proposal

Fann Street Project

The Fann Street Mini Forest will deliver the following outputs:

- A co-designed ‘mini forest’ in partnership with residents and community groups.
- Remove and reuse any hard standing
- Build a new bed that incorporates the existing drainage gully
- Plant, standards, feathers and whips in the understory of existing trees
- Create a woodland edge area
- Have a community planting day
- Monitoring of project impacts and success

Proposal

Planting style

To maximise the space, the bed will extend out from the canopy into the public realm to replace existing planters.

Mini forest:

- Understory shrubs and trees
- Successional tree planting
- Shade tolerant ground planting (woodland species) such as anemones, primrose, ramsons, foxglove, etc.

Woodland edge bed:

- Woodland edge planting
- Incorporate climate resilient species
- ‘softer’ meadow/prairie style planting with a gradient of tall herbs and shrubs to lower swards.

SUGI ‘Kensington Mini Forest

Proposal

Benefits

Access to nature

Biodiversity gain

Volunteering opportunities

Climate resilience

A new gateway

Design considerations

Mini Forest

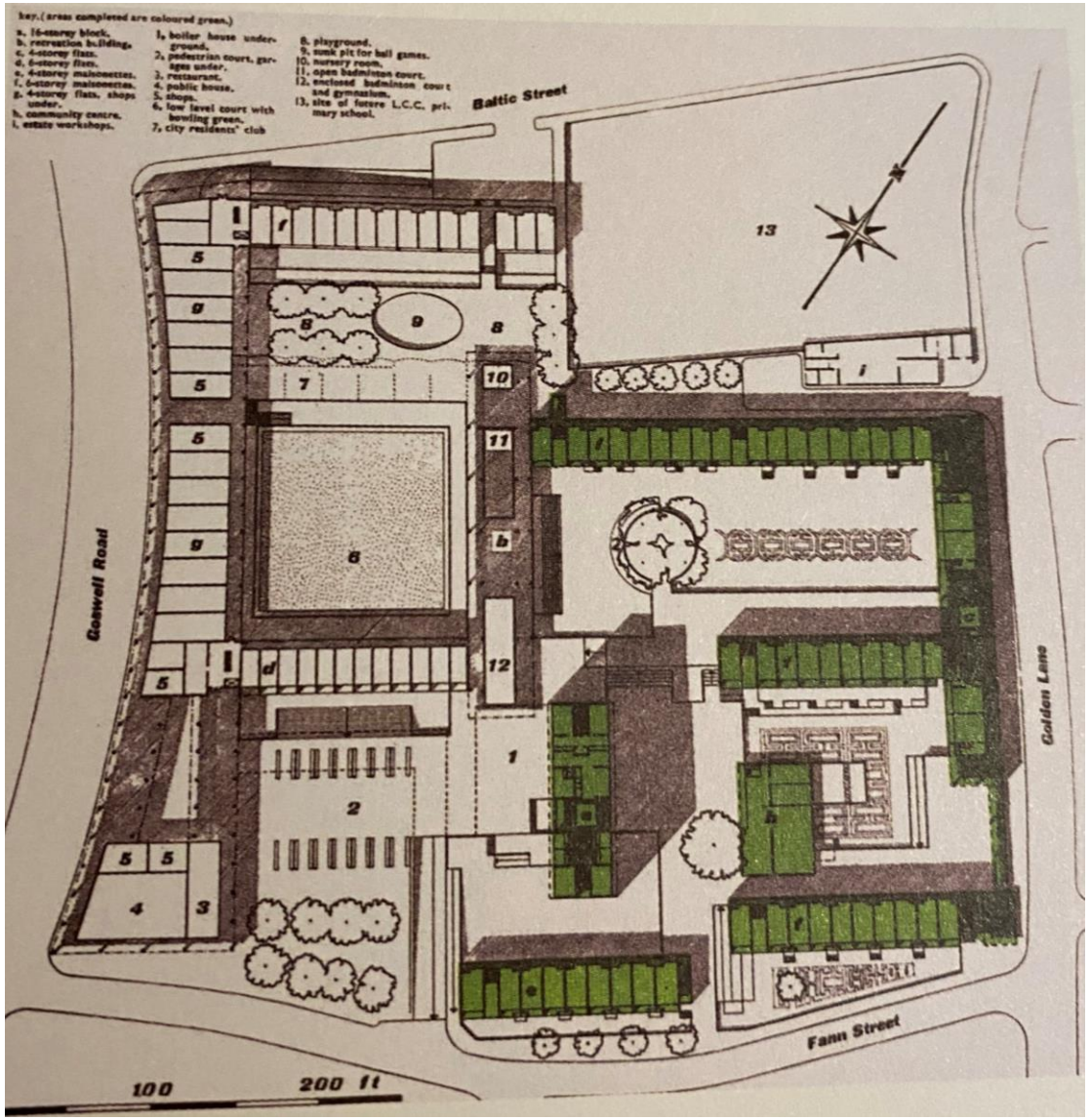
Design considerations

Responding to heritage

The site is within the Barbican and Golden Lane Conservation Area and partially within the Golden Lane Estate Listed Landscape.

- **Urban** feel of the Estate (specifically intended to be '**non-Gardenesque**')
- **Grid system** on block placements around 'courts'
- Site is the southern side of the '**Public Court**' designed as the main approach to the estate from Goswell Road.
- Notable **view** from Blake Tower towards Great Arthur House

Listed Building Management Guidelines (2013)
Barbican and Golden Lane Conservation Area SPD (2022)



Uncredited early plan taken from Golden Lane Estate: An Urban Village – Stefi Orazi

Design considerations

Drainage

A central drainage gully runs between housing and highway land to prevent surface water flow on to the highway as per the highways act.

- Not proposing a sustainable drainage scheme (SuDS), but the site will capture excess water and reduce localised flooding
- Drainage gully is likely to be retained within the design of the bed
- Site design should consider the surface flow and drainage
- A raised curb will retain surface water and soil on the highway side

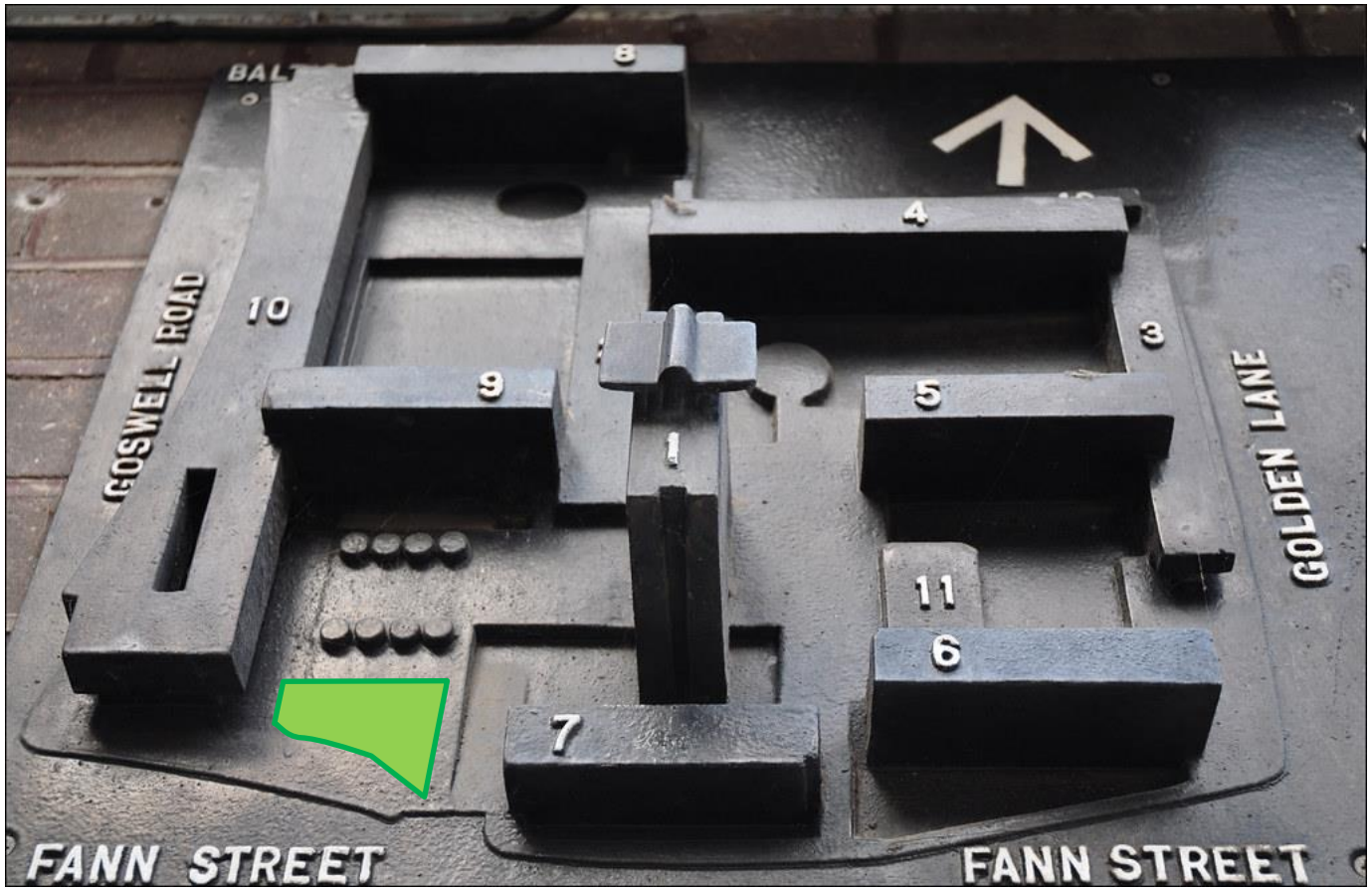
Design considerations

Use of space

The space below and around the avenue of trees presents an opportunity to introduce ‘mini-forest’ planting, but the size and shape need to be decided.

Other considerations:

- Maximising the opportunity for de-paving and the size of the planting area
- Desire lines across and around the area, maintaining the feel of permeability
- The outline of the site to reflect the layout of the site, straight edges for the internal grid of the estate, curved like Crescent House to reflect boundary



Design considerations

Ecology and species

Species selection should consider the estates existing trees to ensure that additional planting enhances the existing open space look and feel.

Species

- *Fagus sylvatica 'Dawyck'*, Dawyck **golden beech**
- *Robinia pseudoacacia*, **False acacia** (Fann St)
- *Cedrus deodara*, **Cedar**
- *Prunus sp.*, **Cherry**
- *Catalpa bignonioides*, **Indian bean tree**
- *Carpinus betulus*, **Hornbeam** (replaced false acacia)

From London's largest oldest forest, to its newest smallest forest

Design considerations

Materials and materials re-use

Considerations of materials choice and reuse:

- Estate texture and colour palette to be considered
- Curb stones could be granite or other material to reflect estate, could include breaks to increase run-off capture
- Ward board would be at the centre of the design and will be utilised as a focal point
- Paving is to be retained and reused throughout GLE
- Concrete planters can be removed and utilised in other projects or throughout the estate where possible.

Design considerations

Other features

What else could we include in the design:

- Standpipe to allow for watering for establishment
- Interpretation and information boards
- Seating
- Wildlife enhancement features; bird boxes, bug hotels, log piles
- Monitoring equipment

Questions

Feedback

Workshops

Split into two groups

Workshops

Co-design session

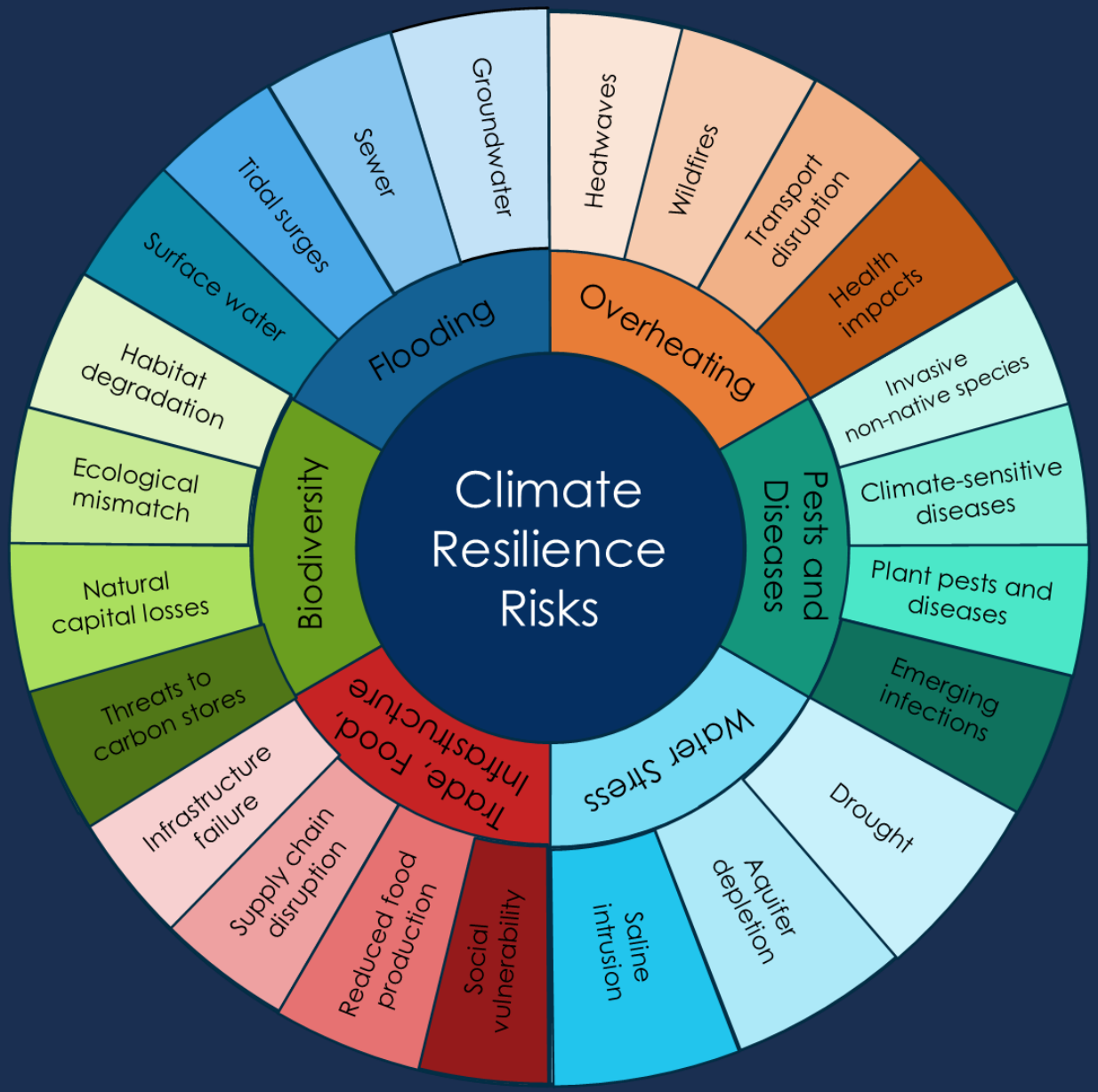
Split into two groups

1. Outline – how should we address the constraints to design the bed
2. Planting styles – what would we like to achieve through the style of planting we incorporate which species would we like and what would their benefit be (Woodland, biodiversity, fruiting, visual and impactful)
3. Division – how should we divide the site up into uses and planting types
4. Features – which should we include and where would be best to place them

	Group A	Group B
Session 1 11:40-11:50	Outline	Planting styles
Session 2 11:50-12:00	Planting styles	Outline
Session 3 12:00-12:10	Features	Division
Session 4 12:10-12:20	Divison	Features

Next steps

And final thoughts



Further information

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See our webpages:

www.cityoflondon.gov.uk/services/environmental-health/climate-action/climate-resilience