RBG Pocket Parks; Pelton Road, Mell Street and Hoskins Street:

SuDS used

- *Retro fitting blue/green infrastructure to replace existing hardstanding areas.*
- *Swale for Highways Drainage with 'inlets' from A206 (at Pelton Road).*
- *Catch pit with perforated land drain, to ensure that the second swale area is linked in beneath the pavement dividing the two areas (at Pelton Road).*
- *Swales for pedestrian area drainage with kerbs designed to allow surface water to flow into the rain gardens.*
- *Porous resin bound surfacing and base to allow permeability to the sub-base (at Mell Street). Note: Generally, the paving is to the adopted standard of either paving slabs or wet laid and pointed granite setts.*
- *Planting in line with best practice such as the UK Rain Garden Guide.*
- *32no. New trees with tree pits designed to accept surface water but not become waterlogged (generally a very sandy subsoil with perforated pipe land drainage where possible). Tree Species have been selected for salinity tolerance, where they are within road areas that may be gritted. Where possible trees have been planted within larger swale areas rather than isolated tree pit, this gives the maximum rooting space possible. Root barriers have been used to protect existing services.*
- *A Green roofed tool store has been constructed at Mell Street. The tool store has been specifically commissioned to fit in with the pocket park to enable the community to produce food locally. The tool store was constructed and installed by Grass Roof Co. The green roof partially attenuates the rain water. The roof planting is already flowering providing sources of nectar and pollen.*

Benefits

- *Retro fitting Blue/Green Infrastructure within a congested dense urban environment*
- *Designed to embrace TfL's Healthy Street Indicators, to make the urban environment more welcoming for pedestrians and cyclists, providing safe spaces where people can stop and feel relaxed, with cleaner air, shade, and shelter.*
- *Reduce reliance on the surface water sewers, providing SUDS in many locations.*
- *Native and naturalised planting enhancing and encouraging biodiversity*
- *Planting also to capture and mitigate particulate air pollution*
- *Planting 32no. Semi-mature trees, to increase the local tree canopy cover and assist reducing local overheating in summer to create spaces where the community can stop and relax.*
- *Community: The local community were involved in the development of the proposals from inception. Consultation took many forms, from targeted mail through doors, to community events and drop-in session plus a website portal where comments could be added and seen by all, at:* https://greenwichpocketparks.commonplace.is/overview *Following completion Local people have taken to watering during this recent hot weather. Mell Street Community Garden events have been held up by the Covid restrictions but community planting will be taking place later in the summer. A Facebook page has been set up. Christchurch Community Garden have been growing seeds that will be planted there shortly by individuals (rather than an organised gathering). Mell Street is in a great location to gain interest from passers-by; we have been able to instruct a community notice board that will be added to the tool store.*
- *Play: Pelton Road Includes 'play on the way' features, designed to add interest for children on the way to the two local schools and nursery school. These include naturally rounded boulders, hop-scotch pattern paving areas, and the granite sett SUDS planting edge. The granite paved 'car free street' is also an ideal place for young children to learn to scoot and play. The Mell street central grass area has play bounders and subtle changes of level. There is also a meadow area with a 'steppingstone' path linking through. The planting in both areas will enable children to explore the natural world.*
- *Fitness: The adjacent gym at Pelton has used the outside street area to conduct fitness classes. Increasingly bikes are seen utilising the many new routes.*
- *Helping the Local Economy: Mell Street Pocket Park will enhance the setting and be a boost for the local café's that overlook the 'green'. The adjacent Tesco's store will benefit for the increased footfall, people buying take out lunches to eat in the park. Phase 2 of Mell Street, enhancing the Street following completion of the current construction project, has been designed to provide mobile stalls for market trader(s).*
- *Reducing Parking: Parking has been reduced by 8 spaces to provide the room for the proposals. This assists toward the TfL goal of Healthy Streets and encouraging modal shift which in turn greatly helps the lowering of emissions and highlights less reliance on private vehicles is achievable.*

1. Location

Pelton Road Pocket Park: 125 Pelton Rd, London SE10 9AN

Mell Street Pocket Park: 1-3 Mell Street, London SE10 9TU

Hoskins Street Pocket Park inc. Old Woolwich Road Junction: 4-2 Hoskins St, London SE10 9TS

Description

PELTON ROAD POCKET PARK:

Pelton Road Pocket Park lies at the junction of A102 and has been closed to traffic since the 1980's. In the intervening time a magnificent London Plane tree has grown. Unfortunately, the streetscape below was tarmac and paving slabs; as a major 'gateway' into historic Greenwich, it was very underwhelming.

The new layout centres around the formation of 3 linked drainage swales. The swale on the corner of the A102 takes surface water from the road via 'inlets' into the swale. A shallow layer of topsoil with a stone filtration bed below breaks down pollutants through a process of anaerobic digestion. Below the filter beds the swales are linked by a perforated pipe land drainage system that allows rainwater runoff to reach a wide area, linking the 3 swales, helping to reduce the stress on the local drainage system and replenish the surrounding ground water. This will both provide water for the existing London Plane tree and eight newly planted trees. The swales are planted in accordance with UK raingarden planting design guidance, with plants that can tolerate a regime of both flooding and drought. These native and naturalised species will enhance biodiversity and increase the tree canopy cover.

Emphasis has been placed on a clutter free streetscape with improvements for pedestrians & cyclists; bollards for example, provide both signage, wayfinding and prevent vehicular ingress. The street closure on Pelton Road has been extended, creating an area where young kids can learn to scoot and ride bikes. Informal play boulders and hopscotch patterns are part of a 'play on the way' theme that link to the two local primary schools and nursery. A large circular tree seat encompasses the existing London Plane Tree to provide many seating opportunities in a position that does not negatively impact on local residents.

MELL STREET POCKET PARK:

Mell Street is the largest of the three parks, situated on a corner between two council housing blocks. The proposal includes an improved streetscape for pedestrians & cyclists and a community garden space, where residents and local people can grow food and be involved in the maintenance

of the garden. The garden also features a green roofed tool store which includes a water supply and community notice board.

We were involved in several stages of public consultation for each of the pocket parks. At Mell Street we carried out further engagement events to form a community group who will plant and maintain part of the garden at regular gardening days. These events will initially be facilitated by Ireland Albrecht, with the intention of passing this role on to interested community members in the future.

Unfortunately, the community planting day has had to be cancelled due to the Covid-19 social distancing restrictions. We are leading a process of seed growing at home, so that plants (mainly for food production) are planted out once the restrictions have eased.

We have designed a second phase at Mell Street, which can be taken forward after the major construction projects, requiring access through Mell Street. This will include a shared pedestrian street feel with increased planting within a line of connected swales on the other side of the street, and space for a market stall.

Ireland Albrecht have set up a facebook page for the community garden.

https://www.facebook.com/Mell-Street-Community-Garden-110922713906762/?view_public_for=110922713906762

HOSKINS STREET POCKET PARK inc. OLD WOOLWICH ROAD:

Hoskins street has two major constraints: The air quality monitoring station and a medium pressure gas main that runs to the eastern side of the street. Greening proposals could not interfere with these elements. To maximise the benefit of a reduced scheme we developed proposals that extended further, to spread out the greening to include the Old Woolwich Road street closure.

Similarly, with the other pocket parks the SUDS proposals centres on removing as much surface water run-off as possible off the highway by introducing swale planting areas. The swales include a light free-draining manufactured topsoil and a very sandy subsoil over de-compacted subsoil, to allow rainwater runoff to flow through the swales and either evaporate or slowly drain to the water table (known as Stockholm SUDS principles). The system is designed to retain existing assets such as road gullies, that will only come into use in extreme weather events.

Detailed design on all sites was informed by the following site Investigations and working practices:

- **Surveys:** BRE 365 Filtration Tests, topographic, drainage and utilities surveys including scanning on site to enable SUDs strategy to be developed.
- **Construction:** The hardworks were built by the borough-approved highways contractor with extensive experience and appropriate working practicing for excavating in this setting, liaising directly with service providers, and marking all surfaces on the ground prior to starting works.
- **Planting and Two Years Maintenance:** Are provided by a specialist Landscape Contractor, under supervision from Ireland Albrecht, who provide quarterly site visit reports.

2. Main SuDS components used

The principles of the SUDS were to remove as much surface water run-off as possible off the highway and the combined sewer system in East Greenwich. The approach is to use the surface water to help irrigate the planting, keeping the surface water as close to the surface as possible

through use of Swales/Raingardens. The construction method is to rely on the Stockholm principles of using natural materials to ensure surface water has the ability to flow through the gardens, evaporate and ultimately slowly drain into the existing soils. The system is designed ensuring existing assets such as road gullies are maintained but grate heights are adjusted allowing the underdrains of perforated pipes to connect back into the gullies. The design approach for sub surface materials is to ensure the projects are sustainable through using natural materials, generally recycled, but also to ensure utility companies and the Highway Authority can continue to maintain their assets without having to source expensive materials or undertake specialised construction methods.

3. How it works

Pelton Road: There is a gentle fall across the scheme of 1:50 with the highest area being at the junction with the A206. The new layout centres around the formation of 3 linked drainage swales, the flow moving slowing with the natural fall of the land.

The swale on the corner of the A102 takes water from the road via 'inlets' into the swale. A shallow layer of topsoil with a stone filtration bed below breaks down pollutants through a process of anaerobic digestion. Below the filter beds the swales are linked by a perforated pipe land drainage system that allows rainwater runoff to reach a wide area, linking the 3 swales, helping to reduce the stress on the local drainage system and replenish the surrounding ground water. This will both provide water for the existing London Plane tree and eight newly planted trees. The swales are planted in accordance with UK raingarden planting design guidance, with plants that can tolerate a regime of both flooding and drought. These native and naturalised species will enhance biodiversity and increase the tree canopy cover. All the hard paving is directed to these swale areas.

Mell Street and Hoskins Street: Similarly, with the other pocket parks the SUDS proposals centres on removing as much surface water run-off as possible off the highway by introducing swale planting areas. All the swales include a light free-draining manufactured topsoil and a very sandy subsoil over de-compacted subsoil, to allow rainwater runoff to flow through the swales and either evaporate or slowly drain to the water table (known as Stockholm SUDS principles). The system is designed to retain existing assets such as road gullies, that will only come into use in extreme weather events.

High resolution images are available here:

https://www.dropbox.com/sh/emog95k8cqkoq9v/AAAZFaRlPT48kd2DwFmVWA55a?dl=0

4. Specific project details

Please see, Description item above.

5. Maintenance & operation

The Pocket Parks will be maintained for two years, by the same landscape contractor that planted them; Gavin Jones Limited. Maintenance will include: Watering to aid establishment during dryer months. Trees in particular will fail if left unwatered during the first summer. As the roots develop all

planting becomes more established. The grasses and perennial planting are draught tolerant and will need less water to establish. The contractor will remove weeds to all the planting to establish and thrive. Meadow and long grass swale area will be strimmed once a year in late summer, with arisings removed (to keep the soil low).

Ireland Albrecht will be producing quarterly site reports to issue back to RB Greenwich. The performance of the Swales including signs of pollution will be fed back to the borough flood risk team, who will also be monitoring closely to establish principles to follow in future projects.

6. Monitoring and evaluation

Quarterly inspections and reports from Ireland Albrecht landscape Architects informed by weekly maintenance visits for the first 2 years from Gavin Jones ltd.

7. Benefits and achievements

The value of the pocket parks projects is to show how several small incremental improvements can create a larger net gain in green infrastructure; and how following proven SUDS techniques and well thought out design ideas, developed through effective consultation, can make great enhancements for both city life and biodiversity. It also demonstrates that green infrastructure and SUDs drainage are mutually beneficial; with each requiring the other to maximise the potential benefit.

The parks are a delightful improvement to the tight, traffic dominated fabric of east greenwich, providing opportunities for meeting, sitting and playing in what were previously hostile sites.

Quotes on Social Media:

From Dusty Gedge: https://www.facebook.com/dustygreenroof/posts/10158019452487629

Rain gardens in east Greenwich have now been planted. -went be last week to take photos and so simple #pocketparks but make streets look better and store rainwater. Very cool. Need more of these across London and cities across the world.

And how simple a couple of boulders are for play. Two kids from Christchurch Primary School just having so much fun climbing on them. On twitter I have been told that each afternoon there are children playing on the boulders. V cool.

From Greenroofshelters: https://www.instagram.com/p/CAv04HsHJcg/?utm_source=ig_web_copy_link

Passers through also said they really appreciated this small park, whilst we were installing #greenroofshelters.Well done #irelandalbrechtlandscapearchtects. Just need a bit of rain now !

From The Murky Depths: https://www.fromthemurkydepths.co.uk/2020/03/13/welcome-additions-to-a-greenwich-street/

Comment by Graham:

I think this is a huge improvement for Blackwall Lane and along Trafalgar Road the pocket park looks great. Well done to Greenwich Council. Looking forward to more pocket parks and tree planting in the future around the Borough of Greenwich.

8. Lessons learnt

- Each project was re-designed probably three times, with the brief developing significantly. For example, initial proposals for a 'parklet' area in Hoskins Street (with seats and tables) were not wanted by residents and the street safety team within the borough. There was real

concern that a large street drinking problem would cause issues for local houses. The lesson learned was that sometimes a complicated mix of aspirations will take time to deliver.

- Robustness also feed into the materiality. Early proposals involving wood and steel planters were eventually rejected. In the end only the existing adopted materials of concrete and stone were accepted by the highways department.

9. Interaction with local authority

Designed in Liaison with Owen Davies, former RBG Flood Risk Manager. Owen made comments on the suitability of the SUDS concept design in relation to the permeability tests and later approved the detailed design. He also encouraged the wider use of green infrastructure and community involvement.

Construction completed: March 2020

Cost: *£400K for the 3 pocket Parks, including 2 years maintenance.*

Extent: Pelton = 750m^2, *Mell = 1,300m2, Hoskins and Old Woolwich Road = 660m2 , Total = 2,710m2 for the 3 Pocket Parks.*

10. Project team

Funders	• TFL – Low Emissions Neighbourhood	
Clients	• RBG – Highways • Project Managers: Simone Saviantoni & John Lynn • Flood Risk Manager: Owen Davies • Site Engineer: Jack Carlisle	
Designers	• Ireland Albrecht Landscape Architects • Project Team: Don Albrecht & Kerrie McKinnon	
Contractors	• Hardworks – JB Riney and Sons • Softworks – Gavin Jones Ltd	

Hoskins Street 1

Hoskins Street 2

Mell Street 1

Mell Street 2

Pelton Road 1

Pelton Road 2

Pelton Road 3

Pelton Road 4

Old Woolwich Road