Central Park SuDs Project

Presentation and planning update - 27.05.2020

Present

Jemima Laing (JL)	Stoke Ward Councillor	Plymouth City Council
Jeremy Goslin (JG)	Peverell Ward Councillor	Plymouth City Council
Sarah Allen (SA)	Peverell Ward Councillor	Plymouth City Council
Sue Dann (SD)	Portfolio Holder for Environment and Street Scene	Plymouth City Council
Tony Carson (TC)	Peverell Ward Councillor	Plymouth City Council
Andrew Clanfield (ACl)	Natural Infrastructure Officer	Plymouth City Council
Andy Cottam (AC)	Engineering Design Manager	Plymouth City Council
Sarah Foque (SF)	Natural Infrastructure Officer	Plymouth City Council
Zoe Sydenham (ZS)	Natural Infrastructure Projects and Partnerships Manager	Plymouth City Council

Apologies

Sam Davey (SamD)	Stoke Ward Councillor	Plymouth City Council

Agenda

1. Introductions and meeting format - ZS
2. Presentation of design and how it has been developed to respond to consultee comments - SF
3. Lead Local Flood Authority overview and response - AC
4. Q & A
5. AOB/Close of meeting

Minutes

1. Introductions

ZS introduced Plymouth City Council officers involve in project and their roles.
ZS introduced AC as Lead Local Flood Authority Representative.

ZS outlined agenda and context of meeting, also explaining that the project design has been submitted as a planning application. During the meeting, officers will explain how the project has responded to consultee comments, including the changes made and what changes were or were

not achievable. This has been collated into a number of documents to be submitted to planning. Key dates are:

1st June 2020: Submission of additional documents.
23rd July 2020: Planning application reviewed at Committee.

2. Presentation of design and how it has been developed to respond to consultee comments

SF delivered the Flow Project Presentation to those present. This has been summarised below:

2.1 Overview of the area of Central Park included in the project

Explained context of the project and gave an overview of timeline of developing the design.

2.2 Scheme aims

Balance of:

- Central Park needs
- Wider city needs
- Climate change response
- Reduce localised flooding
- Improve visitor access to Central Park
- Increase wildlife
- Safeguard trees and wildlife areas
- Deliver biodiversity net gain
- Destination area at Barn Park
- Views- formal seating areas
- Some access for pond dipping/education
- Beautiful area.

2.3 Detailed design

Key elements:

- Restore Coronation Ave
- Filter drains make use of existing granite setts and drainage channel routes. Add new swale. Also safeguards trees
- Wildflower meadow area by playing pitches, also create an attenuation area for controlling water
- Wetland complex (2 new ponds) with seating and interpretation
- Ornamental features and gabion terraces- focal areas when you come into Barn Park
- Reservoir Field wildflower meadow
- Raise footpath at Barn Park- raise low point out of area where water pools, creates new viewpoints

2.4 Chosen design strategy

Builds on 2013 and 2017 masterplan. Scheme delivers 38% reduction in runoff, meaning design can contain normal rainfall events. There is an outfall into the woods, but this only comes into effect during storm events, measured as a 1 in 30 year storm.

The new ponds will be large enough to see and engage with; north pond will be 70m long and south pound will be 54m long.

Additional documents to be submitted to planning: Geotechnical report, report on design's relationship to the wooded valley, revised outlet design, design evolution, non-technical Flood Risk Assessment

2.5 Design evolution

The main comments relating to water taken from 2017 consultation on the 2017 masterplan were:

- Stop flooding.
- Increase wildlife.
- Improve amenity.

The 3 pond approach is the best solution in order to retain trees and deliver wildlife gains. There will be amenity benefits and various view points for visitors to enjoy the pond complex.

Stone House Leat is not a viable option for this project as opening it would lead to health and safety issues as it currently takes discharge from the sewer network. Altering the leat would require changes at ward level, putting it outside the scope of this project.

2.6 Excavation/landform design

The project takes account of best practice approach by trying to work with the landscape to create natural perspectives and gentle slopes. Where the landform is too steep for this approach on the north side of the north pond, Gabion terraces have been employed. These will create focal points from Barn Park entrance and overcome constraints of the slope. The gabions will have planting around them to soften their look and will be 1m high at most.

Additional documents to be submitted to planning: Further detail on levels and section drawings, detail about gabions including heights and life span (120 years, certified)

2.7 Pond health

Oxygenating plants will be used to absorb nutrients and oxygenate water, reducing algal bloom. Water lilies will cover two thirds of the surface, to reduce sunlight hitting the water, thus reducing algae growth.

2.8 low maintenance approach

To establish plant seed quickly in certain areas, a hydro seeding technique will be used. The project has taken advice from Sheffield University to aid establishment of planted areas. Temporary stock fencing will be installed for 6 months to 1 year to allow planting to establish.

A Landscape Ecological Management Plan will be submitted to planning. This has been developed from consultation with Street Services, the design engineer, landscape architect and ecologists.

2.9 Tree planting

There will be loss of a small number of trees, but 50 new trees will be planted following the Council's Supplementary Planning Document guidelines. Trees will be large size to ensure impact from day 1 and will be climate change resilient species. A further 94m of wet hedgerow

will be planted along the edge of the sports pitch plateau as mitigation for loss of 15m of hedge bank.

2.10 Gabions

Gabions will incorporate Bee bricks, reclaimed Plymouth Limestone and create spaces for reptile hibernation (this also helps mitigate for loss of the15m of hedge bank).

2.11 Community Engagement

Project officers met with representatives of the Friends of Central Park Plymouth at least 7 times and have attended meetings and site walkovers. The Friends of Central Park Plymouth have fed into design of the project including the filter drains, swale design and Reservoir Field meadow. The design was presented to community volunteers and takes on board the 2017 masterplan consultation feedback.

Additional documents to be submitted to planning: Statement of engagement and design evolution

2.12 Biodiversity gain

A qualified ecologist has been involved in the project. Biodiversity gains resulting from the project have been measured using a DEFRA metric, which currently shows a 15% net gain. This is 5% over the government target for developments.

Additional documents to be submitted to planning: Landscape Ecological Management Plan, Ecological Mitigation and Enhancement Strategy

2.13 Access and views

There will be views from Barn Park entrance over north pond, 2 x accessible areas with seating and a view point from the sports plateau. There are further viewpoints giving different experiences of the design and water. 2 locations have been identified for creating safe access to the water's edge for pond dipping and education.

3. Lead Local Flood Authority overview and response

AC outlined the Lead Local Flood Authority position relating to the design:

The design has been reviewed in the same context as any planning application, to ensure it meets design standards set out for developments in the city.

The Lead Local Flood Authority Flood is particularly concerned with flooding around Pennycomequick and Central Park Avenue. Currently water escaping from Central Park is contributing to these issues, leading to flooding events. These offsite requirements are key as well as amenity improvements and reducing localised flooding in the park.

The design sits in a critical drainage area and the existing sewage system has little capacity to take new flows. The Flow Project team has been consulting with the Lead Local Flood Authority to ensure its strategy meets requirements. The aim of the design is to slow the passage of water and to store surface water, so it can drain away in a controlled way through infiltration. The scheme is designed so any flooding is only in extreme events i.e. reducing frequency of flooding

events to 1 in 30 year events. Therefore, the design meets climate change requirements while making best use of water for amenity.

4. Q & A

4.1 Question from SD: How have the Council worked with South West Water on this project

AC explains that the Lead Local Flood Authority policy is to separate surface water from the sewage system, especially in the critical drainage area. They are working with South West Water to develop a system of surface water sewers to achieve this. This network will then be available for new developments to connect into. Currently, the Lead Local Flood Authority insist 2 systems (1 for surface water, 1 for sewage) are included in new developments.

If this approach is successful, it might be possible (someway off in the future) to look into opening up certain watercourses and separating them from the sewage system. It also has multi-partner benefits (Plymouth City Council, South West Water, Environment Agency) e.g. Treatment works- Currently rain water is ending up at treatment plants even though it doesn't need to be cleaned.

4.2 Question from SD: Inclusion of information about wider strategies in the Flow Project planning documents

SD explains Sustainable Drainage Solutions are part of a city wide strategy, so needs to be mentioned in the presentation and other documents. This is part of the urban network, hence the need for a Sustainable Drainage Solutions approach. SF suggests inclusion in design evolution.

4.3 Question from TC: How will design retain water in ponds to stop them drying out?

SF explains that there is a 1m minimum depth in ponds, so unlikely water will fully evaporate unless there is extreme drought. Ponds will have a "self-healing" clay liner to aid retention.

4.4 Question from SA: Are Friends of Central Park Plymouth supportive of design?

ZS explained the project team have engaged with the Friends of Central Park Plymouth and made changes to the design in response to their comments. It was noted by officers that when the design was presented to the Friends of Central Park Plymouth there were varying opinions about the project. The Council recognise that some members of the group have different aspirations to the design of the Flow Project, so have tried to find points of compromise as already mentioned. The Council hope to keep working with the Friends of Central Park Plymouth in a collaborative way even if this project does not meet expectations of some members of the group. Notably, other groups such as community volunteers have been involved in discussions about the design of the project as well.

ZS outlines Green Minds involvement in the project. Partners and volunteers will be involved in supporting long term care of the project once it's delivered, bringing extra capacity and developing positive engagement.

JL adds that the design sounds great and is positive, especially the pond elements.

SD adds that the presentation responds well to planning comments and has led to positive improvements in the design and associated documents. Good to consider this sits in strategic context.

JG adds that it's good to see softening of the gabions. Sounds like ponds will be beneficial, robust and designed to hold water. There have been site visits with Luke Pollard and the chair of the Friends of Central Park Plymouth to discuss the project, and while it would be great to bring the leat into use, this would be very expensive so not really feasible. The design improves Barn Park entrance, where as a large lake is not feasible. JG has shown local residents the design of the Flow Project and received positive responses about it. It's good to have standing water for biodiversity.

4.5 Question from TC: Is there potential for a model boating area, which has been requested by the chair of the Friends of Central Park Plymouth?

Group discussed that this is a phased project, but the focus should be on the benefits of the design in planning, so messaging needs to be clear that there will not be a boating area. A boating lake will also not achieve biodiversity gains.

ZS has spoken to the model boating club who currently use the area by the Civic Centre and is working with them to look at alternative sites for model boating in the city.

4.6 Question from ZS: Is TC happy with information provided today?

TC confirms he is satisfied with the presentation and information provided and will be supporting the project.

5. AOB/Close of meeting

ZS reiterates that the project team will be submitting additional documents discussed in this meeting to planning on 1st of June 2020.