



UPDATE NOTE ON LANDSCAPE AND ECOLOGY MATTERS
REDEVELOPMENT OF LEN HOUSE, MAIDSTONE
APPLICATION REF: 20/501029/FULL & 20/501030/LBC

This Update note sets out the Ecology and Landscape proposals that form part of the redevelopment of Len House and seek to provide reassurance as to the net biodiversity gain of the development proposal. The note also explains the approach to the River Len deculverting.

Len House is a Grade II Listed Building of significant historical interest relating to the motor trade. The Council has rightly identified the site for redevelopment as one of its town centre opportunity areas with primary emphasis on ensuring that the site is brought back into use and in a manner that restores and respects the Listed building. In this respect, there is a need to ensure the scheme is viable, that the proposals use high specification materials and delivers a high quality environment.

The viability of the scheme is fundamental to the success of the project. Both the Applicant and the Council (including independent assessment) have worked closely to understand the viability of the scheme and ensure a suitable balance is struck to ensure the renovation the Listed Building meets the necessary requirements whilst also trying to deliver other aspects of the scheme. By way of example, the repair and replacement of the critical windows and external doors alone is estimated to be £2.7 million.

The Culvert of the River Len

The potential opportunity to open the existing culvert of the River Len was identified in the Opportunity Area Briefing note prepared by the Council. The initial concept design and submission identified this as a positive benefit to the proposals both in terms of visual impact and biodiversity. At that time it was believed that the existing culvert was essentially a 'two-piece' having a u-shaped concrete base and sides with a concrete cover. Removing the existing



cover was considered to be reasonably cost efficient and deliverable and the application submitted on this basis.

However, following detailed investigation to review the deculverting requirements, engineers confirmed that the design of the existing culvert was in fact a cast concrete box. On this basis, the 'lid' could not simply be lifted/removed and following further investigations, it was confirmed that the only available solution to open the existing culvert would be to effectively cast a new culvert adjacent and below the existing (by the use of complicated sheet piling) and then remove the box culvert after. Once the costs of this option were ascertained (some £300-£400k) together with the difficulties in removing the existing culvert in a live running river (potentially needing to dam the river) the potential to deculvert the river was both costly and technically complicated to the degree that it could risk the delivery of the project as a whole.

Notwithstanding, the proposed scheme has sought to recreate the routing of water along the existing line of the River Len, albeit at ground level through the creation of a wildlife pond. Water from the Len would be pumped up to the new channel where it would flow through the wildlife pond and allowing it to discharge downstream back into the river and onto the Mill Pond. The wildlife pond will provide an ecologically rich feature with the planting of appropriate flora and with the feature providing a filtering and cleaning process with increased opportunities for wildlife.

This strategy, combined with a well considered landscape scheme still brings commensurate biodiversity benefits to the proposals (detailed further below).

In respect of the proposed boardwalk that fronts the Mill Pond, the construction of this boardwalk is by way of cantilever off Len House and will not touch the water. There will be no detrimental effect to the Mill Pond or any species that enjoy the Mill Pond as a result of the delivery of the boardwalk.



Landscape Proposals

A summary of the landscape proposals are set out in **Enclosure 01** to this note and specifically the proposals for the new water feature above the River Len.

Net Biodiversity Gain

In respect of the overall net Biodiversity gain, the site is situated in an urban context within Maidstone town centre and comprises the building that is Len House with surrounding hardstanding used as car parking space. Vegetation on site is limited to small strips of introduced shrubs with scattered trees around the car park. The River Len runs through the Town Centre and is culverted for approximately 380m of which 60m lies within the south of the site. The River enters the Mill Pond and flows into the River Medway approximately 100m to the south west through a further culverted section.

Ecology surveys have been completed on site. Although the presence of a bat roost has been recorded within the building, the site is almost entirely hardstanding in the form of existing building, car park and hard infrastructure with these habitats having little to no value for ecology.

The Mill Pond does provide suitable habitat for and has the potential to support a range of species/groups including freshwater fish, aquatic invertebrates and commuting and foraging bats and birds. However, the stretch is absent of any extensive vegetation and water clarity suggests that the water quality may be low.

The development proposal includes extensive ecological enhancements across the site which are expected to result in an overall net gain in biodiversity. The proposals include:

- Wildlife friendly landscaping containing drought resilient plant species with known value to pollinators;



- Areas of biodiverse roof providing habitat structure for terrestrial invertebrates as well as valuable foraging resources for birds, bats and invertebrates;
- Enhanced aquatic habitat including improving the water quality of the Mill Pond comprising floating islands with a diverse mix of emergent aquatic vegetation and submerged habitat hanging features which will provide valuable habitat structure for aquatic invertebrates and fish; and
- A new area of open water within an existing hardstanding area in the south east of the site. The aquatic habitat will be planted with emergent vegetation as well as be in an area of tree and shrub planting. Species of plant, tree and shrub with known ecological value will be chosen to be planted in this area, thereby enhancing this area of the site for a range of species/groups of species, in particular, foraging invertebrates, birds and bats.

The proposed habitat creation as whole will result in a biodiversity net gain through the provision of new habitats in areas that are currently dominated by hardstanding as well as the enhancement of existing habitats e.g. the Mill Pond. The green roofs and new area of open water will provide new areas for invertebrates, birds and bats, habitat that is currently not on or in short supply on site.

In addition to the biodiversity value, the habitats proposed, be it the green roof or the new open water area, will also provide increased ecosystem services and climate resilience for the development. Examples of such ecosystem services include:

- Additional flood attenuation on the green roofs and the open water area to minimise the risk of flooding during extreme weather events,
- A reduction of the urban heat island effect from the natural transpiration and evaporation; and
- The health and wellbeing benefits for the users associated with having access to green space, a place to relax and a place where they can connect with nature.



Conclusion

The proposals will deliver a significant uplift to the net biodiversity of the site and create a unique environment in an urban setting.

Regrettably, the delcuverting of the River Len is unfeasible and technically extremely difficult to construct, including the potential need to dam the river. Nevertheless, the landscape proposal have sought to incorporate an innovative design solution to reflect the River Len through the delivery of a watercourse, that in itself delivers net biodiversity gain in this location.

Enclosure 01 : Landscape Strategy Summary

0250-5000 Water Feature R1

Len House Landscape Proposals

The landscape proposals for the development have been sensitively developed and have incorporated extensive ecological enhancements throughout the spaces.

Public Realm

The public realm will benefit from a dramatic increase in trees, shrubs and herbaceous planting. There are a range of species proposed which focus on increasing biodiversity with the use of species of great ecological value thereby enhancing the public realm for people, invertebrates and birds and providing mitigation from pollution and a cooling effect. These proposals will provide a significant uplift in biodiversity.

Mill Pond

Along the Mill Pond and River Len the landscape design proposes a floating Ecosystem of modules which have multiple benefits including habitat creation, urban waterscaping and water quality management. These floating islands will be carefully placed across the Pond and the section of open culvert located at the east of the site. Willow trees are also proposed on selected islands to continue the line of willow trees found at neighboring sections of the River.

The floating islands provide a great opportunity to increase the quality and functionality of the river in this area, which may in turn have benefits for the wider sections of the river and the not too distant nature reserves, by breaking down pollutants in the water and providing undisturbed nesting spaces for birds.

Water Feature

A wildlife pond is proposed above the culverted section of river providing an ecologically rich feature. It is envisaged the water feature will connect on both ends to the river whilst provide an filtering and cleaning process with increased opportunities for wildlife.

Trees and Planting

The Len House soft landscape strategy allows for a verdant, multi-seasonal approach to ensure year around interest and vibrancy to the public and private realm. These will include hedges, shrubs, ground covers, grasses, perennials, bulbs, mature trees and structural under planting.

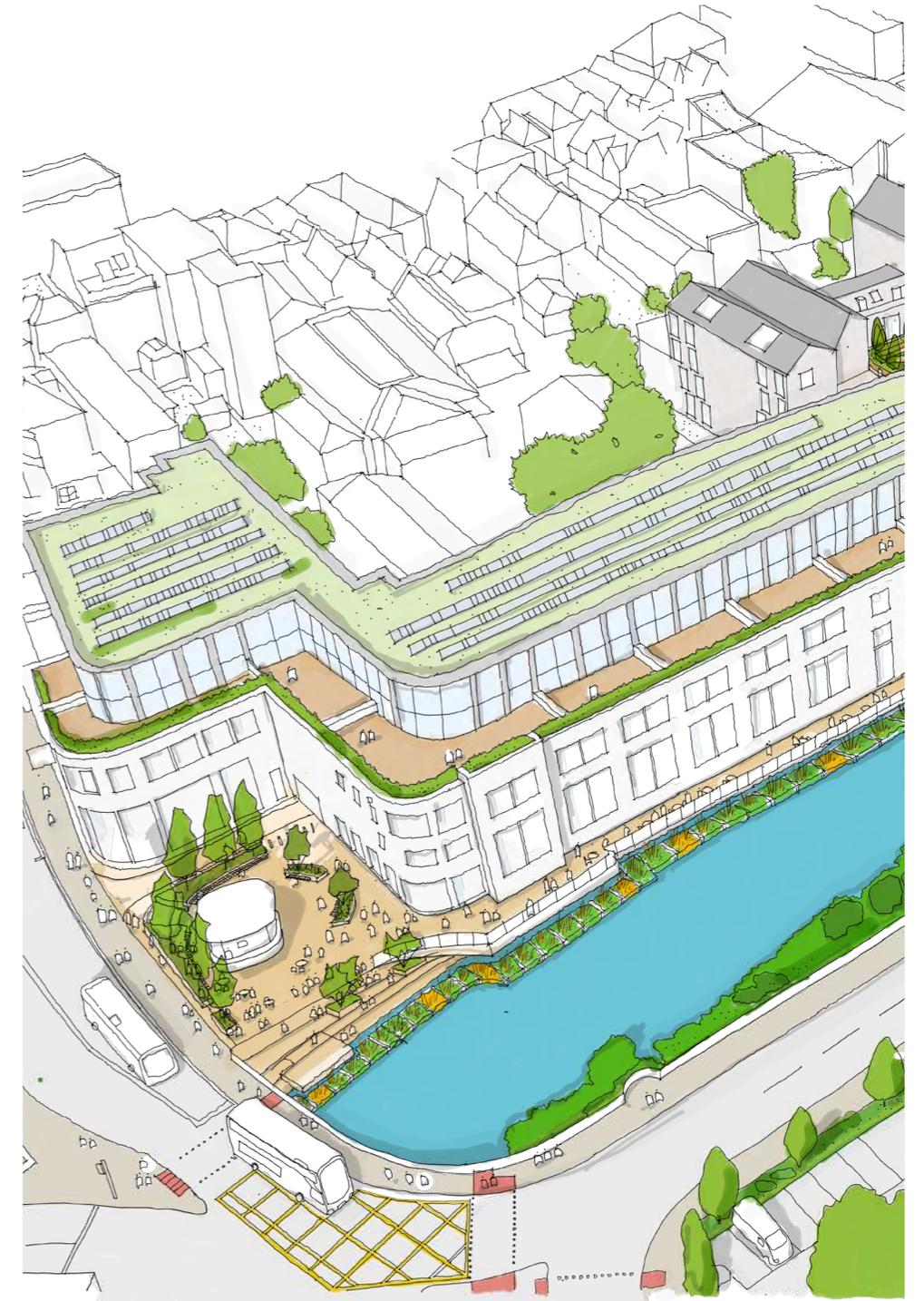
Tree planting in general will include a mix of semi-mature standard and box head trees as well as multi-stemmed trees in order to provide low level interest, structure, and a sense of scale. Ecological recommendations e.g. Bird and bat boxes will be carefully incorporated into the framework of trees with particular reference to species.

Soft landscaping across the site will optimise wildlife benefits and the potential for habitat creation which will give considerable scope for biodiversity provision by promoting the use of native species and ecologically appropriate planting for localised growth conditions.

Podium Garden and Green Roof

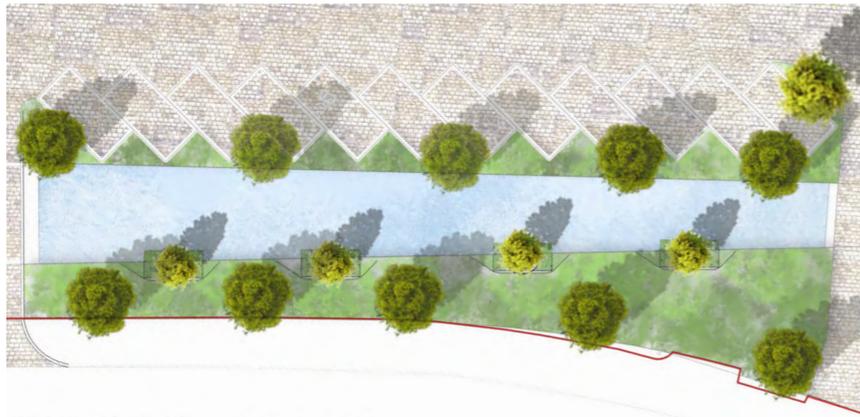
The garden contains verdant swathes of herbaceous, structural and grass planting, with hedges providing privacy to private gardens. There are variety of multi-stem and standard trees that define the edges and contain the central lawn.

On the roof there are areas of biodiverse roof providing habitat structure for terrestrial invertebrates as well as valuable foraging resources for birds, bats and invertebrates.

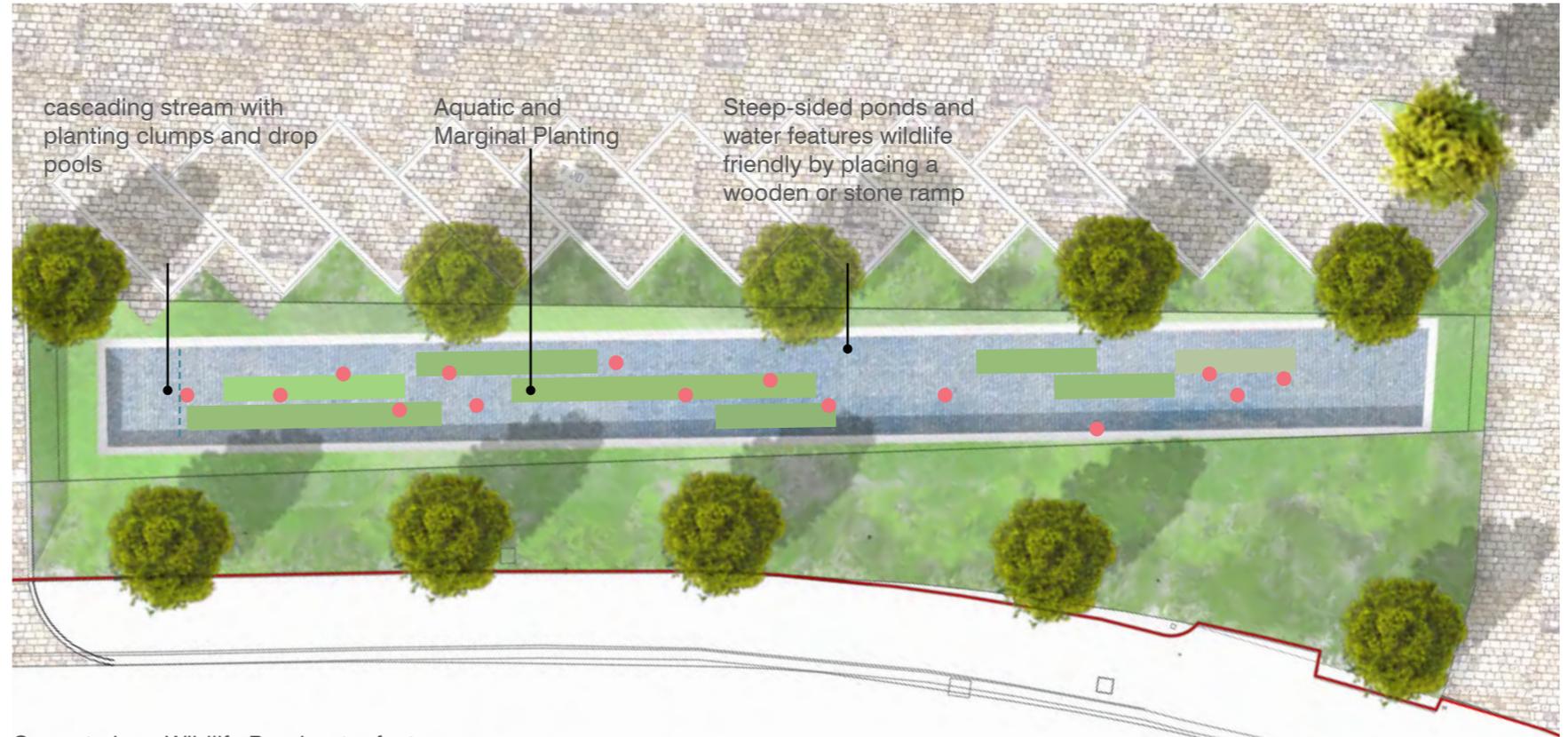


Water Feature

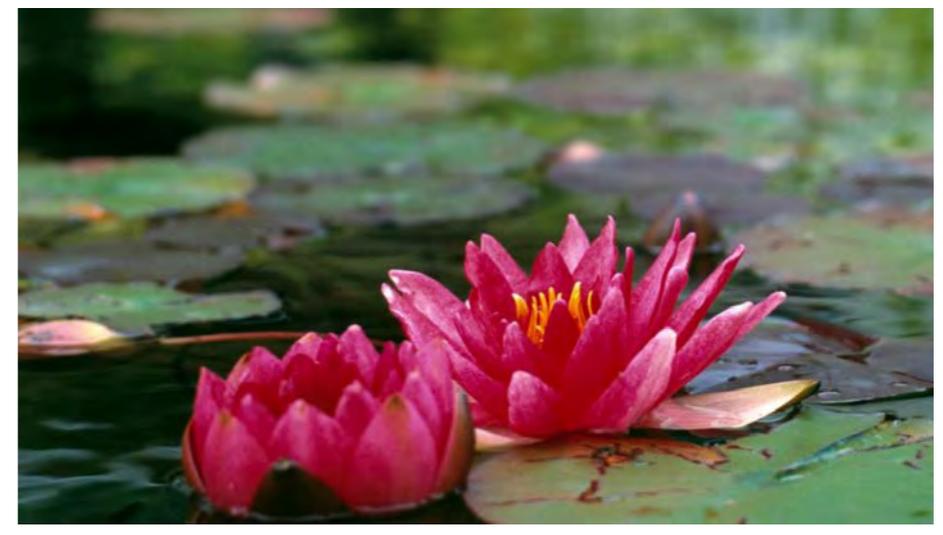
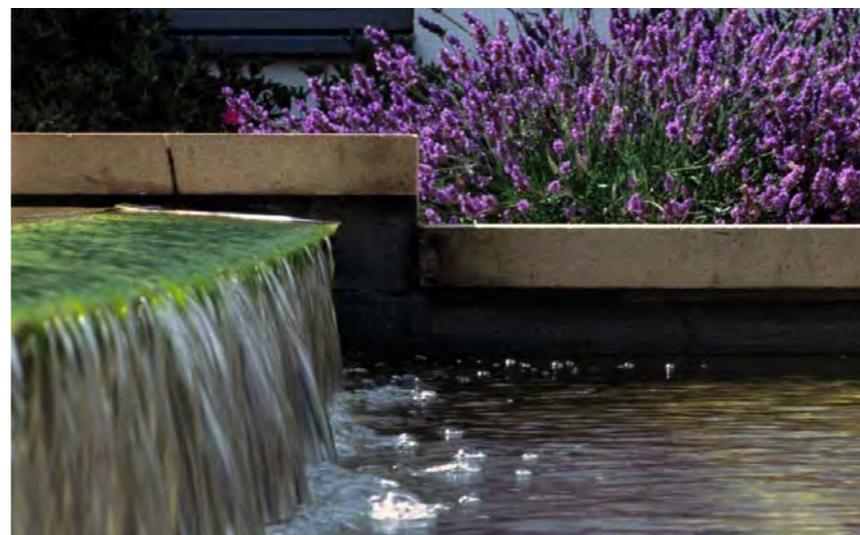
The water feature will span the approximate length and width of the culvert underneath with a cascading stream with dedicated planting pockets and drop pools. The planting concept within the feature will use specially selected species to filter the water and restrict the growth of algae.



Submitted landscape plan - open culvert

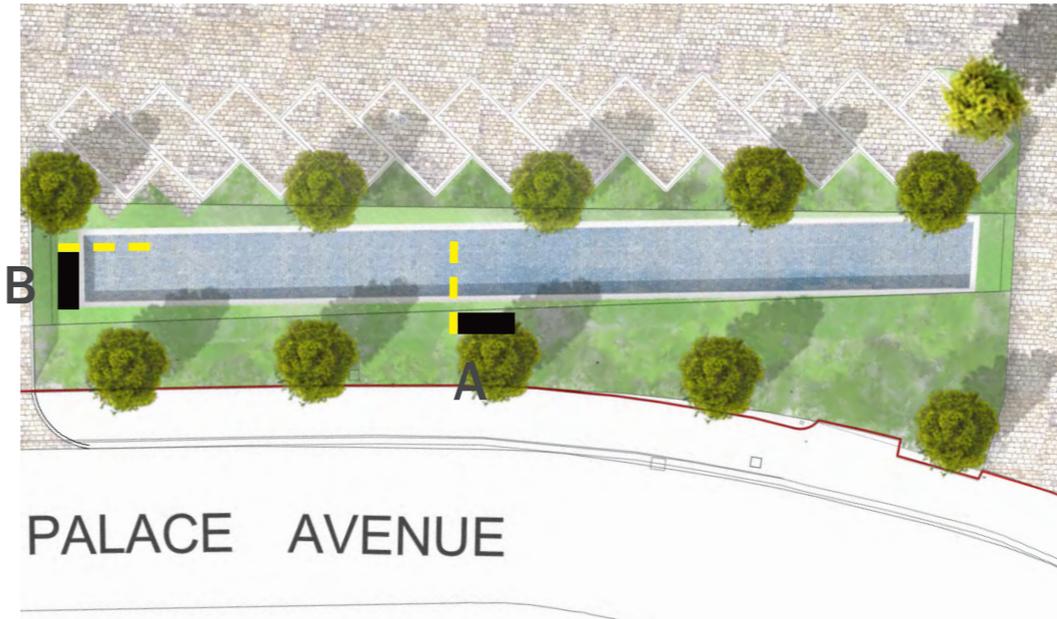


Current plan - Wildlife Pond water feature

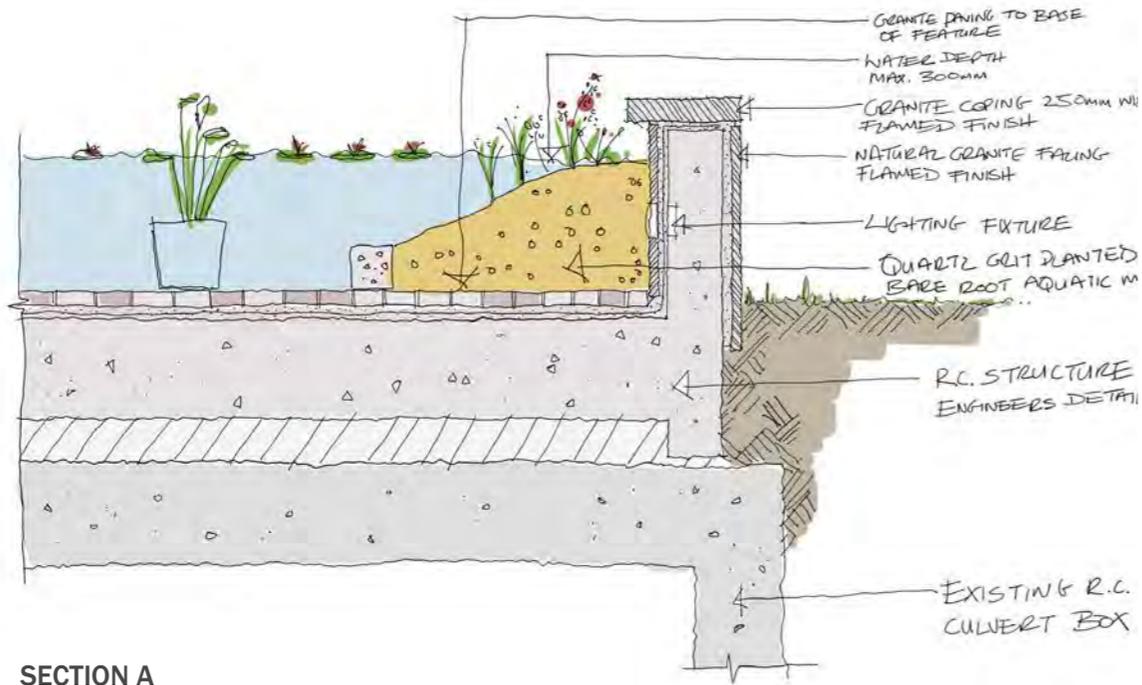




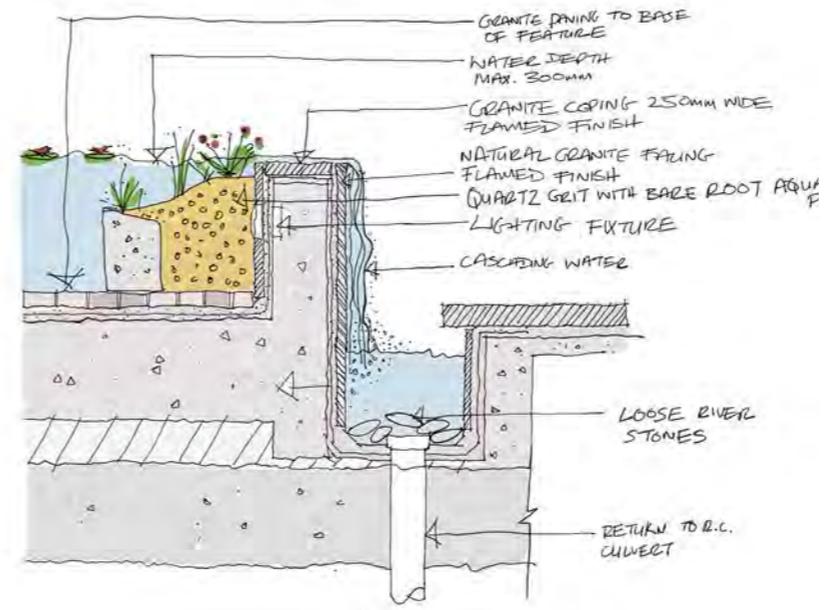
SITE PLAN



LOCATION PLAN



SECTION A



SECTION B