

### **CITY WIDE DESIGN OBJECTIVE**

### **Catchment management plan**

Water quality and quantity (flood control) problems in the Apies River can only be addressed through proper management of the catchment.

According to Vosloo (1990) on De Meire & Van de Putte, the aims of a catchment management plan includes:

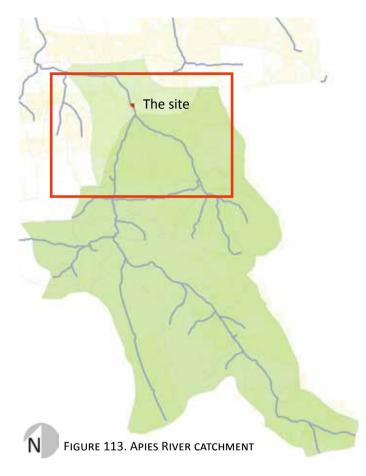
- Flood control through reducing peak discharge
- Water quality control: reducing erosion and sedimentation; remove floating debris with screens and filters; remove suspended materials through

- ponds and wetlands; remove solutes through wetlands
- Utilise amenity value of aquatic systems through ensuring a controlled volume of water and managing levels of water contact
- Optimise production and employment in the catchment

Figure 113 delineates the relevant catchment area for the Apies River on site.

In the context of the Apies River, the associated catchment area, and the Nelson Mandela student framework

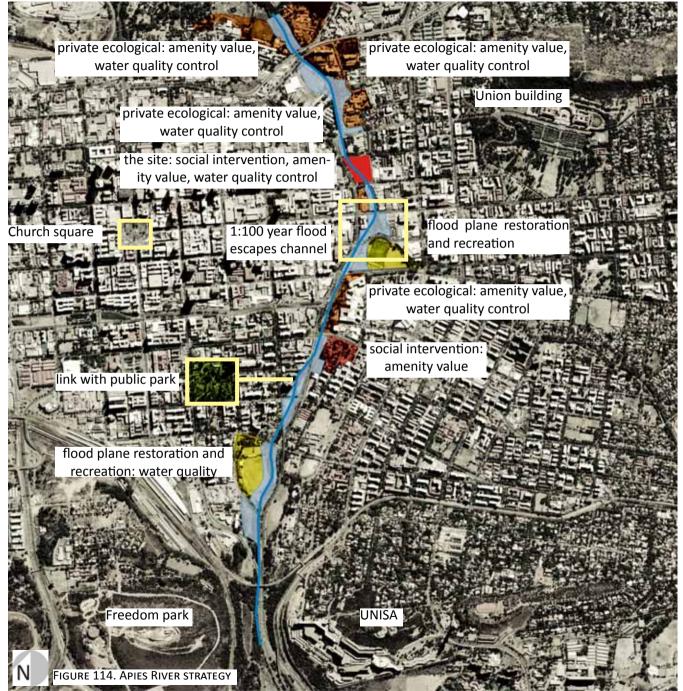




the proposed project cannot function as a stand alone entity.

The proposed Urban Water Centre is a pilot project for amending the Apies River channel and connecting people to the river.

Figure 114 identifies a series of projects along the channel to be implemented. The different projects addresses ecological, social and recreational functions that should be taken into account in the context of the river and proposed frameworks.

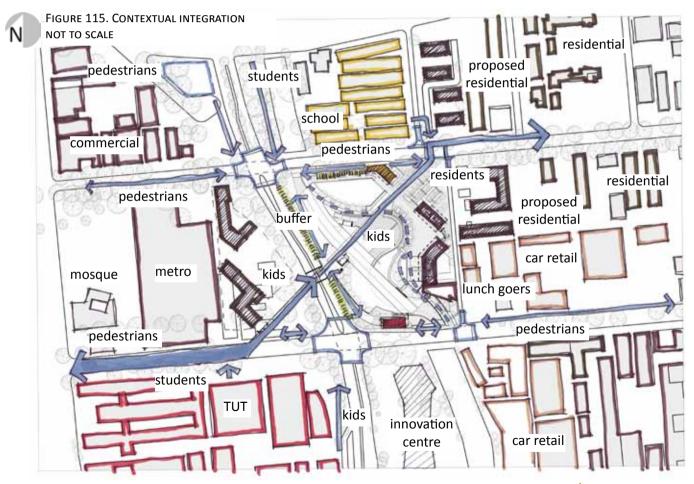


# **SKETCH PLAN**

The site provides for school kids, students, pedestrians, residents and lunch goers.

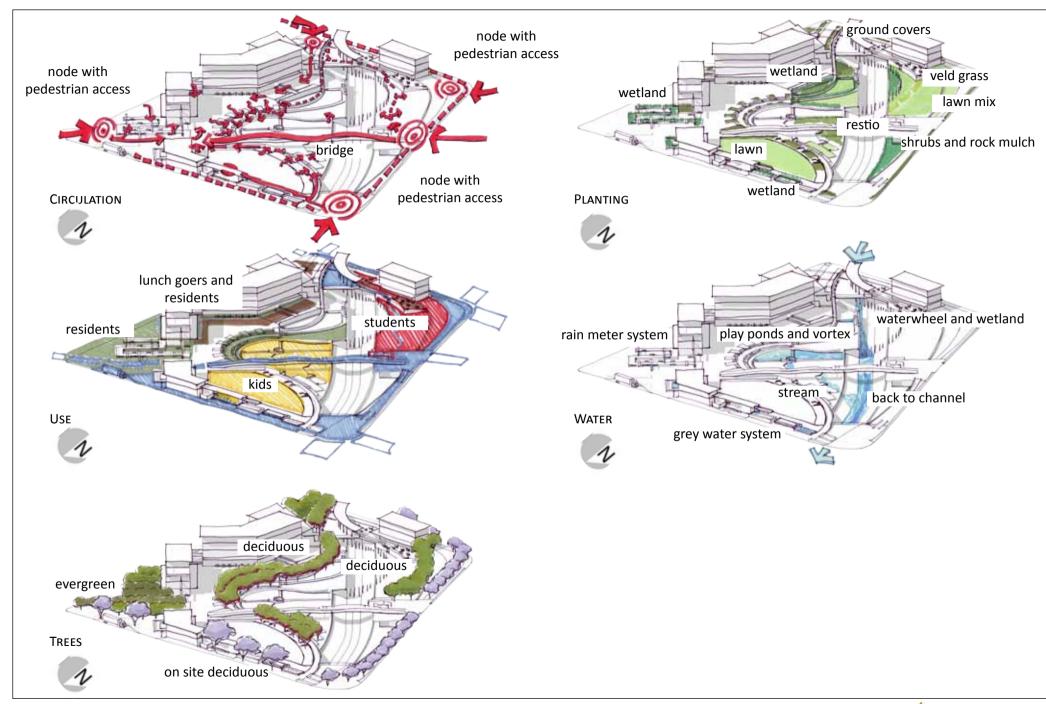
Figure 115 illustrates how the site relates to the context. The design will be explored in light of each user and the areas each will frequent.

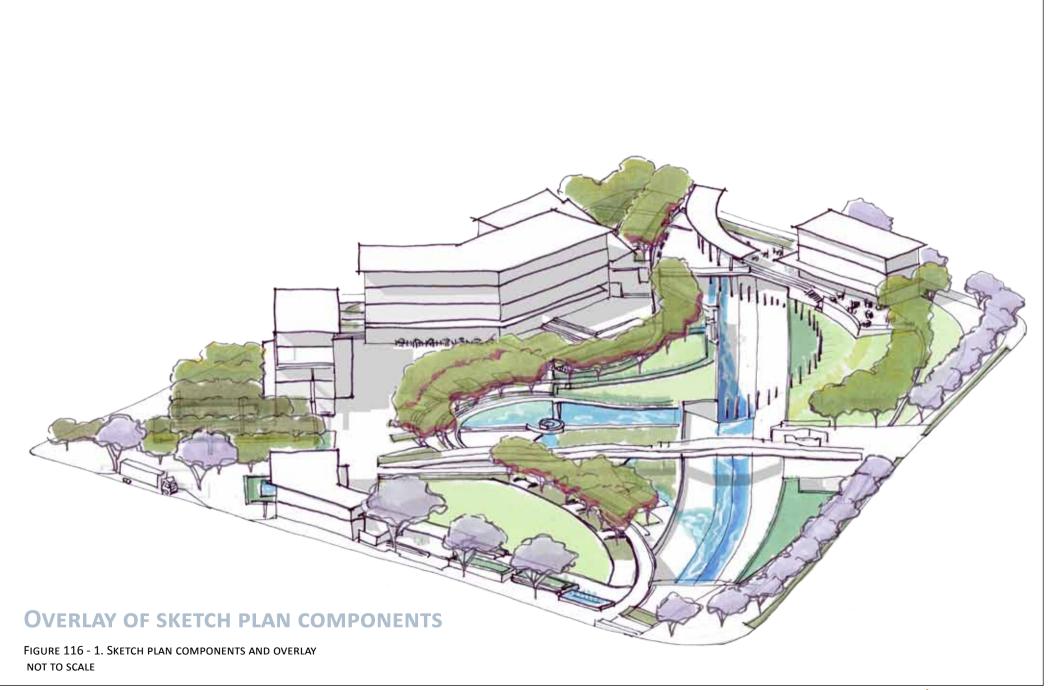
Figure 116 shows the sketch plan.











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## **SCHOOL CHILDREN**

The class of school kids from next door will come running down the path, everyone want to be the first one to see how much it had rained last night! They will be amazed at how much water you can get from one roof. A clever boy will nudge his friend and show him the patterns on the ground, he will explain that water refracts light and that is where the patterns come from (figure 118). The kids' teacher would not be far behind, she will bring them here every lunch break (interview with headmaster), they

can play and use the tuck shop while she has a cup of tea at the pavilion while watching them (figure 119).

After school the kids will rush to the water spouts and play ponds that fills up and swirls away through the vortex! The children will feel the cool, clear water of the river on their hands and feet and discover crabs, insects and water plants in the constructed stream (figure 120).





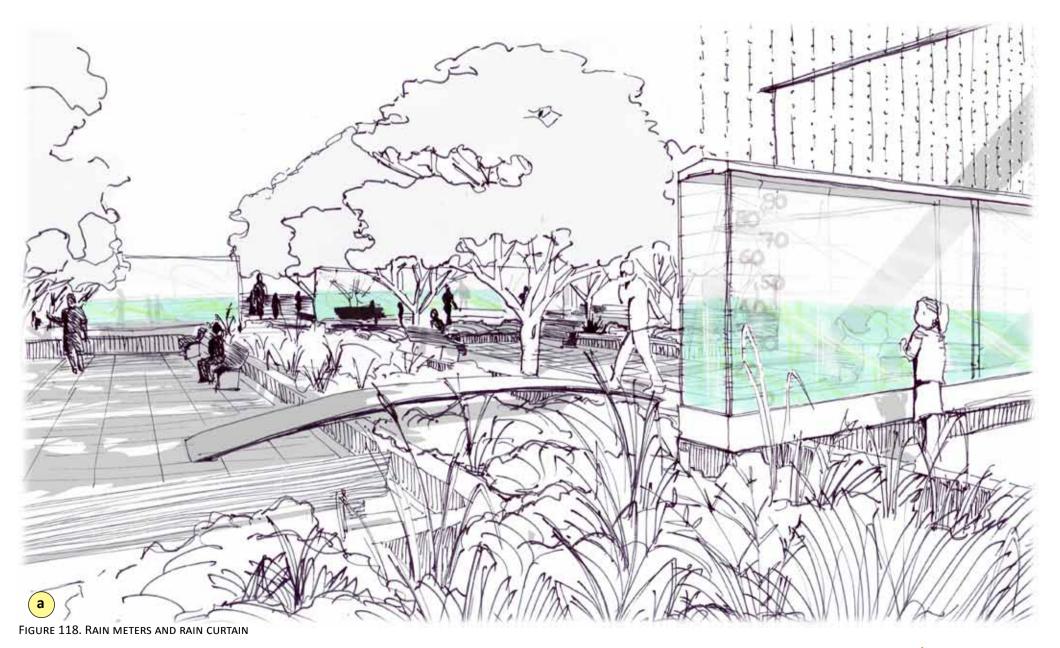




FIGURE 119. GREY WATER WETLAND WITH PLAY LAWN AND PAVILION



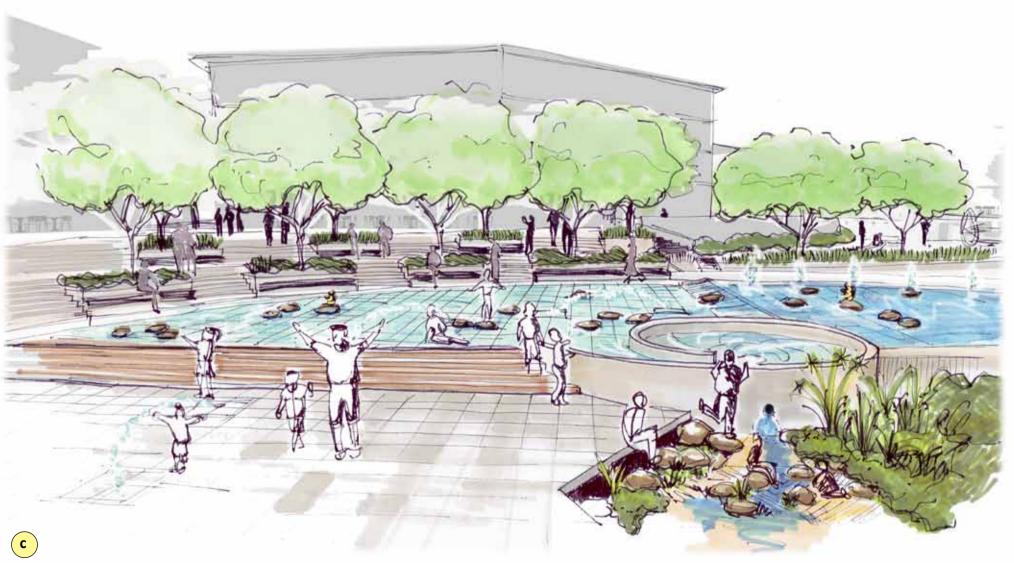
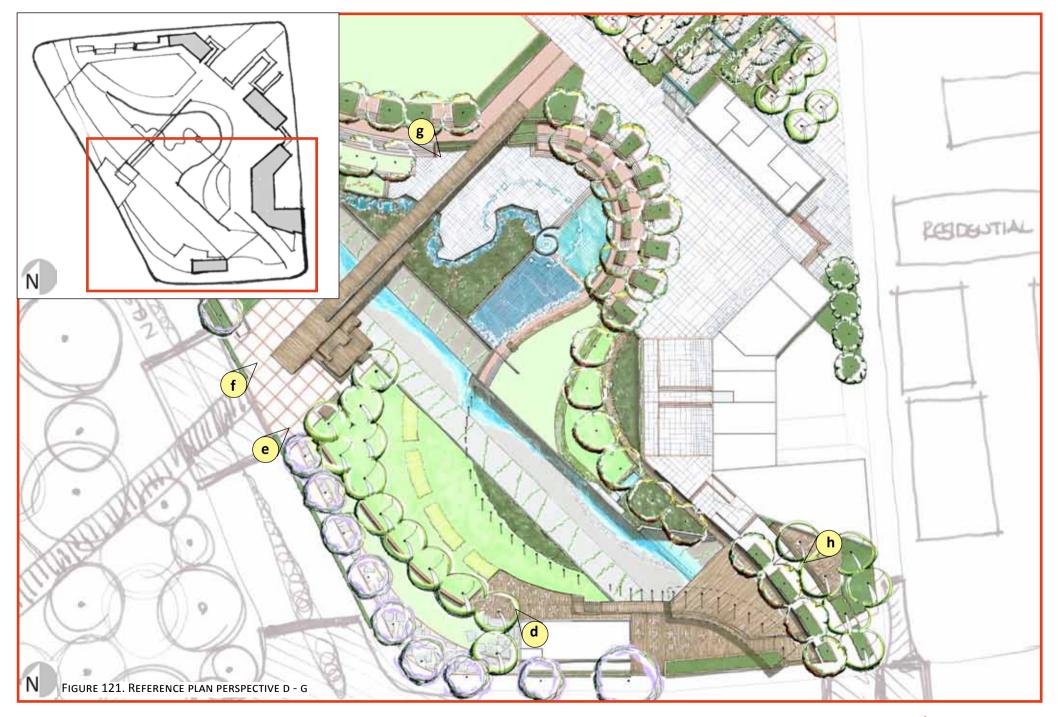


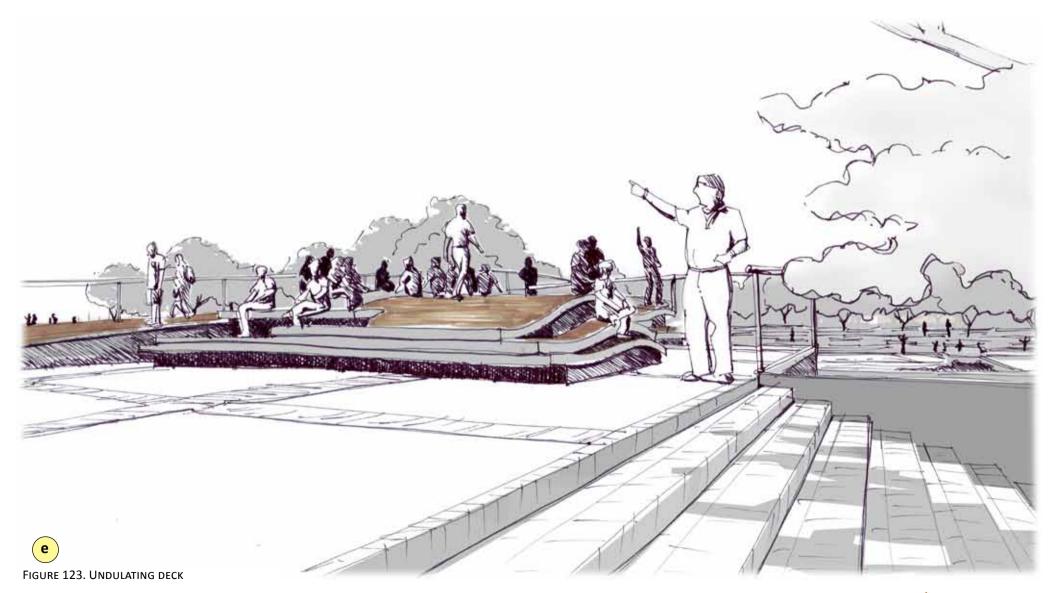
FIGURE 120. VORTEX PLAY





### **STUDENTS**

A group of friends, all students from the close by TUT favourite spot of theirs to watch people and the days go campuses will come and lounge on the lawn, later they by. During winter, when the river is reduced to a trickle, will have a have a drink and a meal at the cafe and dethe only reminder of the volume, power and motion of bate going back to class, a few will leave for class a cou-the Apies River will be the undulating deck they sit on. ple will stay to 'study' in the cool shade of a tree, all the while hearing the rhythmic slush of the water wheel in the background (figure 122). Later on that year the same group will be sitting on the wave-like bridge and deck, because it will definitely be a FIGURE 122. CAFE DECK, LAWN AND SEATING WALL



### **RESIDENTS AND PEDESTRIANS**

A tired by pedestrian from Arcadia will catch a breath in a shady spot beneath a tree while waiting for a bus or taxi, and meet a resident from close by who is on his way to the corner shop for his daily milk and bread. They will exchange greetings and go their separate way after lingering a while on the deck that overlooks the park with it's ever changing vortex pool, jubilant fountains and laughing kids.

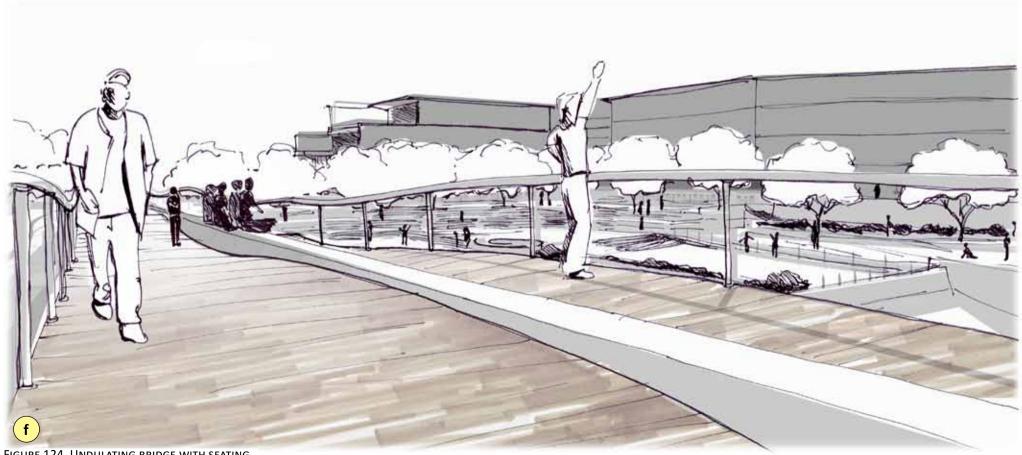


FIGURE 124. UNDULATING BRIDGE WITH SEATING



FIGURE 125. SOCIAL HEART OF THE CENTRE



# **LUNCH GOERS**

ting at a classy restaurant, having a glass of white wine. they will both make a mental note to bring their lunch They will gaze at the park, and remember how they loved packet here next week, maybe they'll even cool their

The sound of children playing will make them smile, and the steady turn of the water wheel will give them a sense On their lunch meeting, two business woman will be sit- of assurance that all is well in the world. Unknowingly, playing in a mountain stream, or on their favourite beach. tired feet in the play pond, and have some candy floss...

