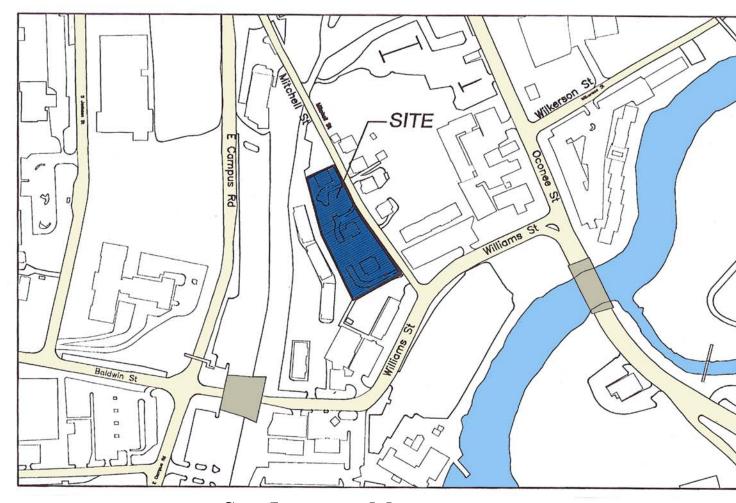


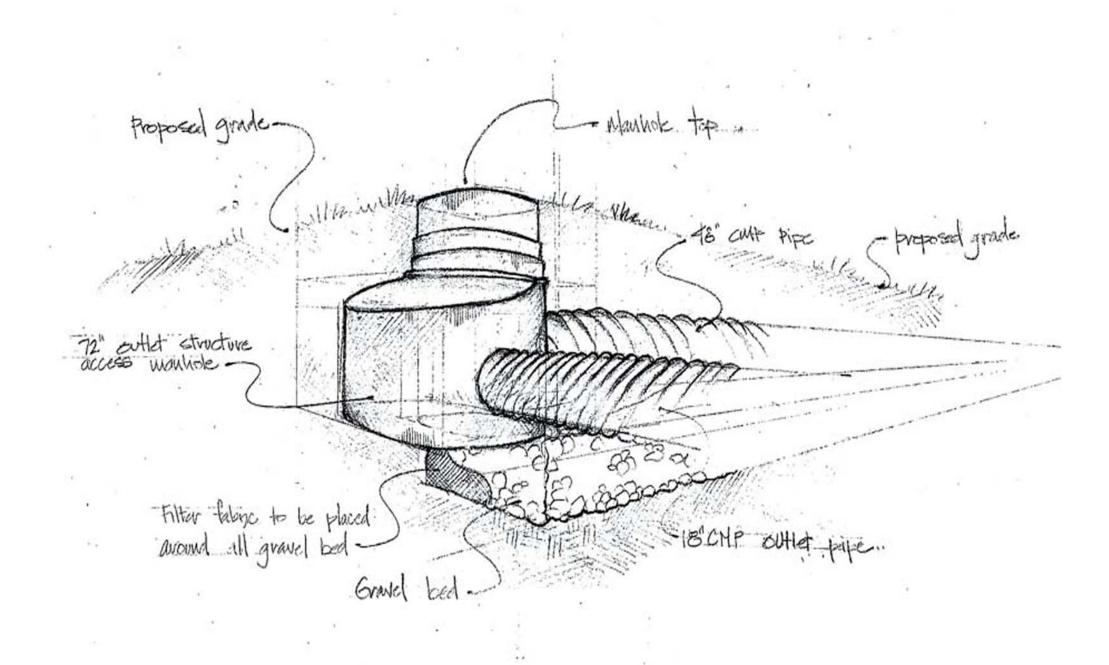
Williams Associates

LAND PLANNERS, P.C.

The Arches at Mitchell Street



SITE LOCATION MAP SCALE: 1" = 300"



SIGNIFICANT FACTS:

Due to constraints such as limited surface area, underground stormwater detention was selected for this development. Typically, underground detention does not allow for infiltration of stormwater into the ground because the water is contained within a pipe that does not allow any contact between the water and the ground. However, for this project, slits were cut along the bottom of the pipe at regular intervals to allow the water to flow from the bottom of the pipe into a gravel bed and then infiltrate into the ground. This infiltration recharges groundwater base flow, and the soil removes pollutants from the runoff. The gravel bed is wrapped in filter fabric in order to keep sediment from the stormwater and the surrounding soil to fill the voids within the bed.

Current stormwater standards require sites to treat the "first flush" that their property generates. This is the amount of rainfall that is generated from the first 1.2 inches of rainfall. Current standards also require that properties detain a certain volume of stormwater and release it at the same rate as if the land was not developed. The pipe and gravel bed met all the current standards, and in addition, it detains the 100-year rain event onsite. The current standards only require the 100-year storm be safely conveyed, not detained, through the property without causing flooding problems.



Athens-Clarke Transportation & Public Works
Stormwater Steward Award

