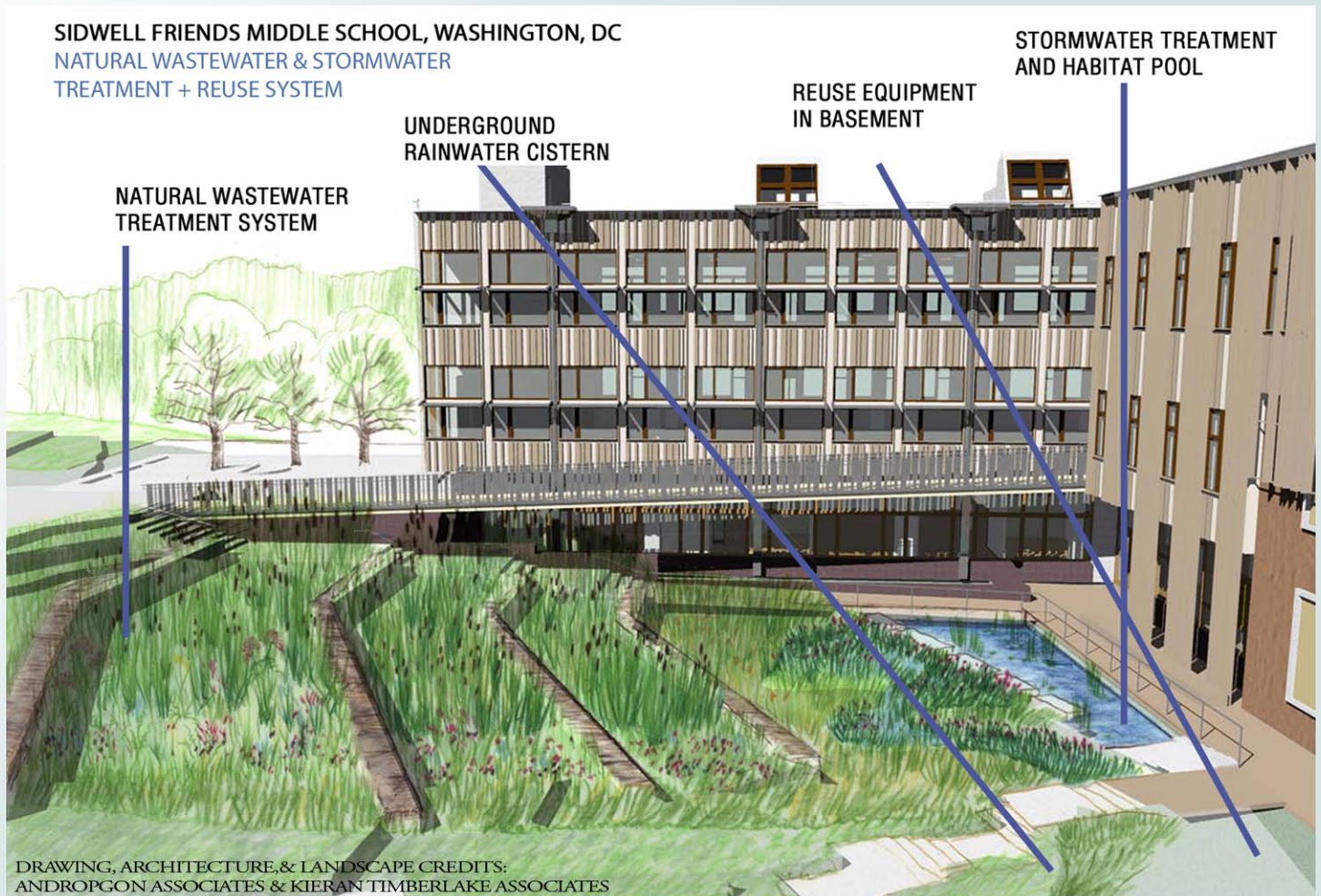




Sidwell Friends Middle School, Washington D.C.



The Sidwell Friends School is deeply committed as an educational institution to practicing responsible environmental stewardship. The curriculum is grounded in teaching students about the natural world and their relationship to it. When the school decided to construct a new middle school building sustainable design was a logical expression of institutional values. The new middle school design includes four major components that focus on environmental stewardship: Water Management, Energy Efficiency, Building Materials, and Indoor Air Quality.

Working with a talented integrated design team that included Kieran Timberlake Associates LLP, Andropogon Associates LTD, JFW Project Management, and CVM Engineers, NSI contributed heavily to the water management component. NSI designed the Wastewater and Stormwater treatment systems for the school, incorporating the design into the schoolyard entrance. The final designs helped contribute to a LEED Platinum certified building and winner of the “AIA top ten 2007”. The Middle School incorporates constructed wetlands, the first in Washington, DC, that treat building wastewater on site. It is part of a closed system that recycles the water back to the building lavatories. A constructed wetland uses biological processes to clean water, providing students with a vivid example of how such systems work in nature. The design flow of 3,000 gpd is treated with a series of terraced constructed wetland cells, a recirculating sand filter and trickling filter, which are all tightly integrated into the site. The Stormwater System is equally dynamic with components for rainwater collection, rain gardens with biofiltration and habitat pools for classroom study. The Sidwell Friends Middle School has become an important case example for sustainable building practice.