

Design Goals

Retain



Intercept, collect and allow for stormwater to be treated on site, releasing slowly back into the ground and watershed.

Restore



Using new technologies in stormwater management: effectively reduce run off from impervious surfaces, restore failing slopes and reestablish a healthy stream bed

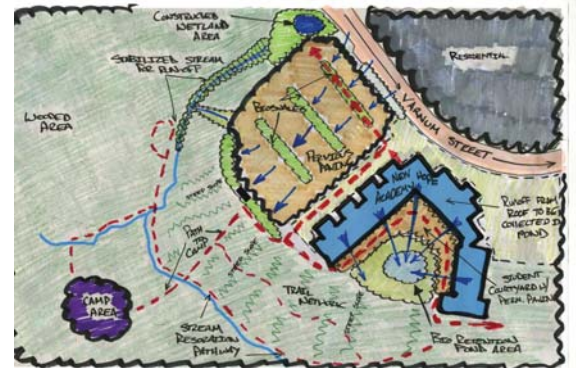
Educate



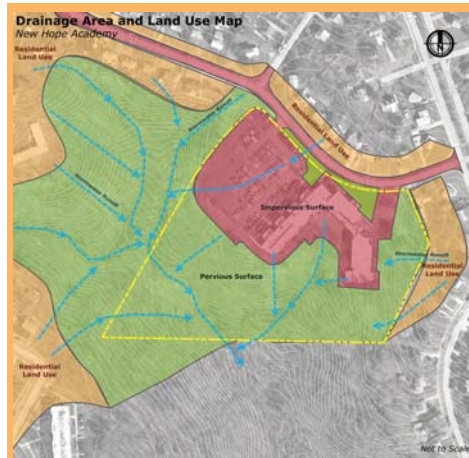
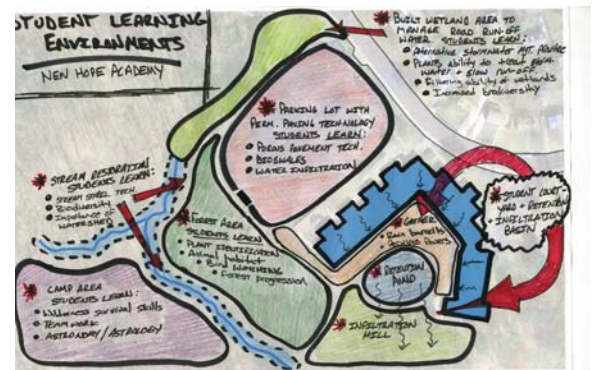
Create various environmentally educational experiences for all ages of students, the local community and the public

Functional Diagrams

Proposed stormwater management



Outdoor educational opportunities



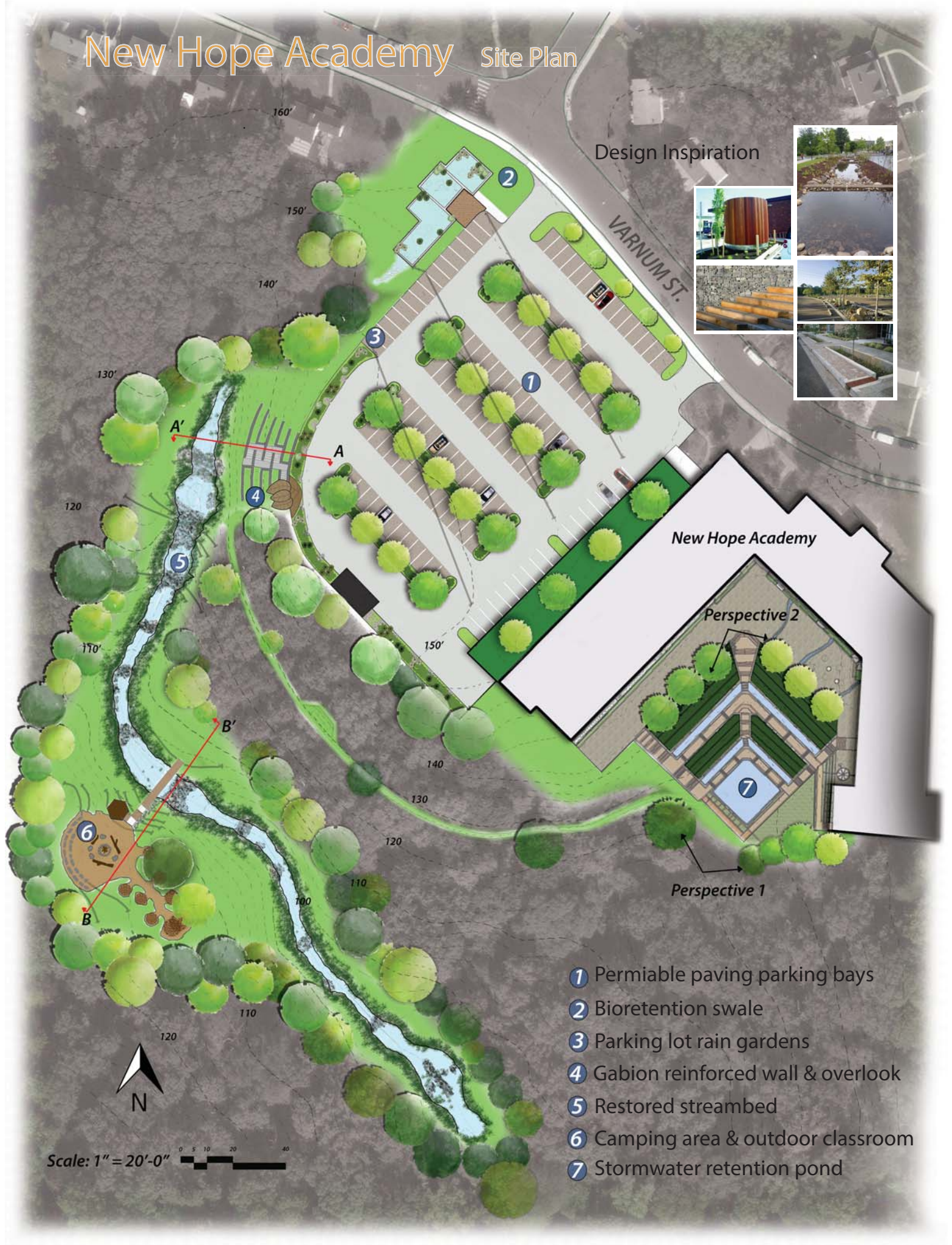
Site Analysis

Storm water run off

- Varnum St.
- New Hope parking lot
- New Hope roof



New Hope Academy Site Plan



Design Inspiration



New Hope Academy

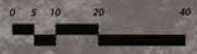
Perspective 2

Perspective 1

- 1 Permiabile paving parking bays
- 2 Bioretention swale
- 3 Parking lot rain gardens
- 4 Gabion reinforced wall & overlook
- 5 Restored streambed
- 6 Camping area & outdoor classroom
- 7 Stormwater retention pond



Scale: 1" = 20'-0"



New Hope Academy



Perspective 1 Before

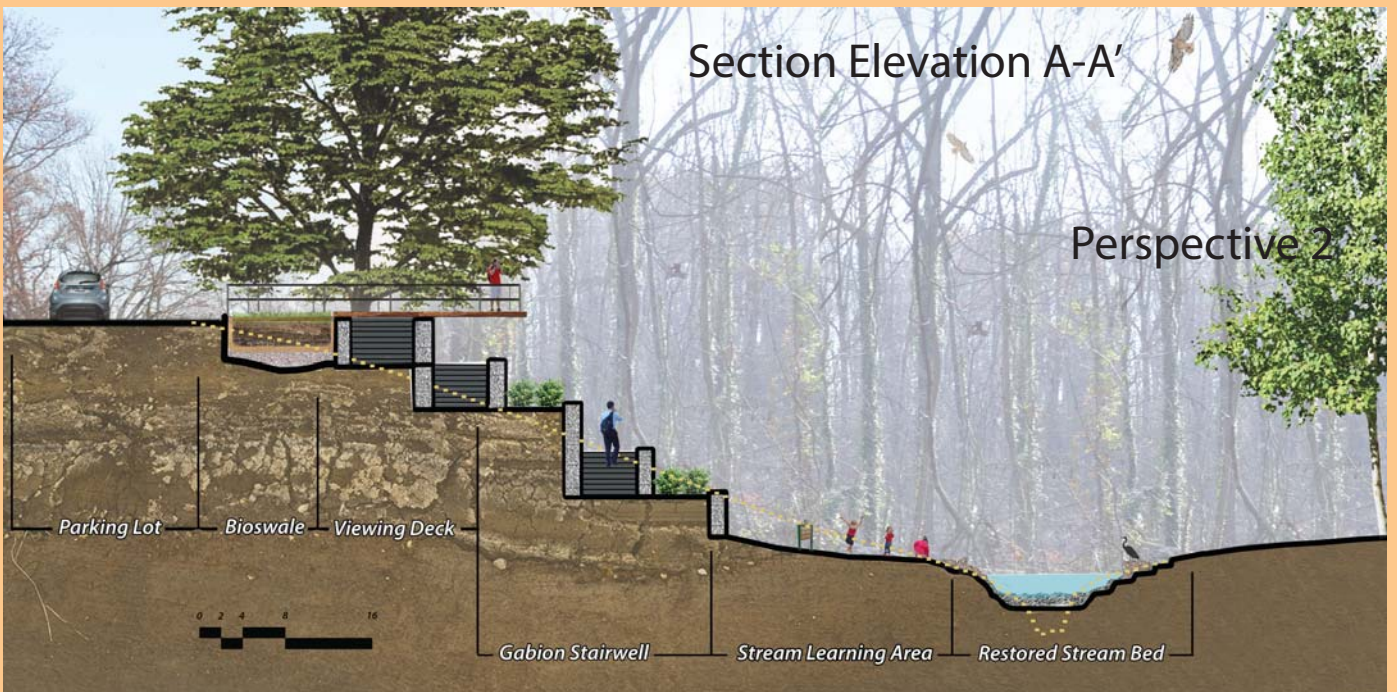


Perspective 1 After



Redesigned retention pond produces an artistic, yet functional stormwater treatment system

- Cistern collects and stores water for plants/ experiments
- Permeable paving courtyard
- Overflow planters initially receive downspout water
- Water moves through a series of planted terrace steps emptying into a retention pond.



Section Elevation A-A'

Perspective 2