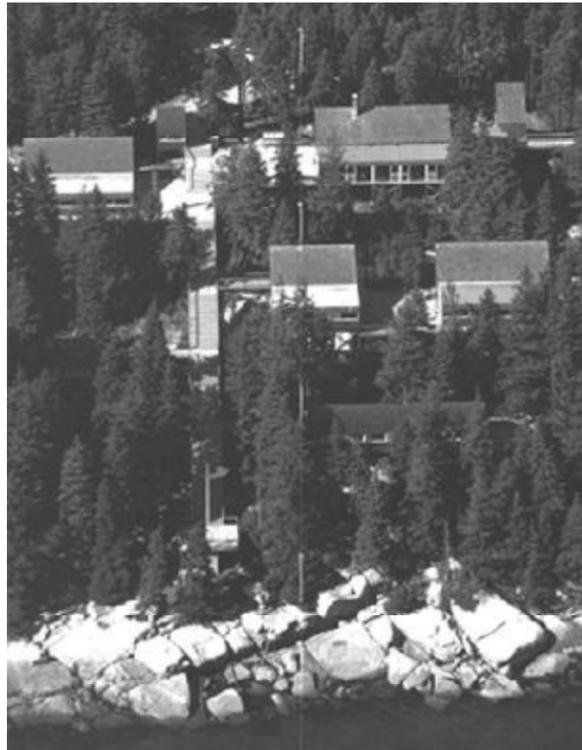


**SITE**



1. Hilltown, Majorca, Spain

An architect always has the option of designing in a way that does or does not take advantage of a site. When buildings and their sites are designed in a way that they take full advantage of the natural site, then they stand the greatest chance of longevity, and of nourishing and sustaining us physically, spiritually, emotionally, and mentally. We can make the connection between the building and its site. The building is not a stranger to the land, and in being so, permits us to be intimate with the land.



2. Haystack Mountain School,  
Deer Isle, Maine  
Edward Larabee Barnes, 1958 - 61

Ancient and indigenous peoples knew this quite well. Sometimes a site may have been inhabited for hundreds, if not thousands of years. As a result, these people were intimate with the local building materials, topography, weather, and sun conditions. Often building materials were taken directly from the site. The act of constructing took place and evolved continuously over many generations. With the recent disintegration of indigenous cultures, however, it is often up to the Architect to know these things well.



3. Haystack Mountain School  
Site Plan

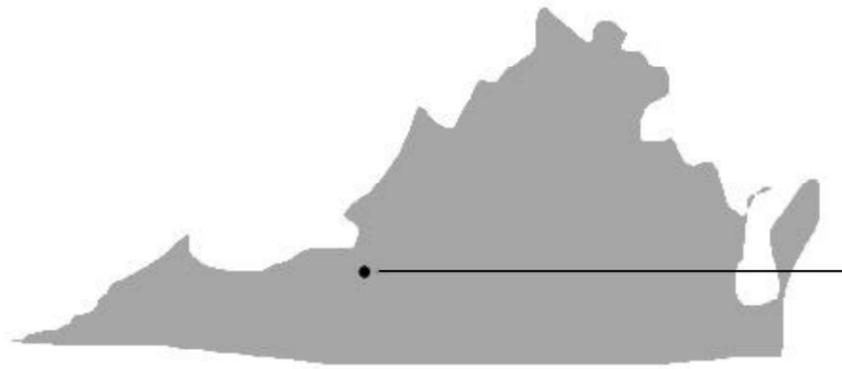
Like the Hilltown in Majorca, Spain, the Haystack Mountain School, designed by Edward Larabee Barnes, is built parallel to the contours of the site. Impact on the site topography and tiring foot travel up and down the hill are minimized. Views to the horizon and down the hill are optimized. Impact on the site is also reduced by elevating the buildings on piles, thus leaving the earth and drainage paths undisturbed.

The Chicago Botanical Garden Visitors Center, also



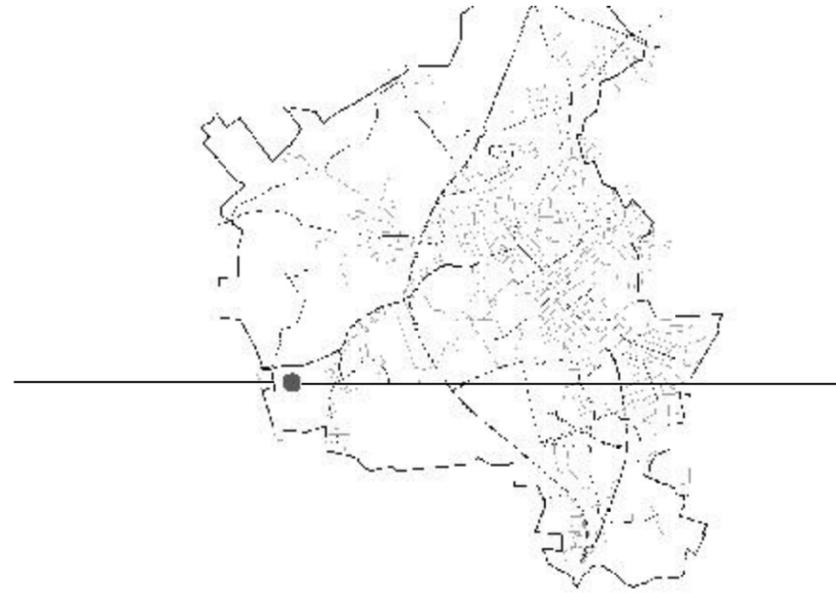
4. Chicago Botanical Garden  
Visitors Center  
Edward Larabee Barnes, 1993

designed by Barnes, engages the body of water by projecting over it. When looking over the edge of the deck, a visitor must know that they are standing over this body of water.



State of Virginia

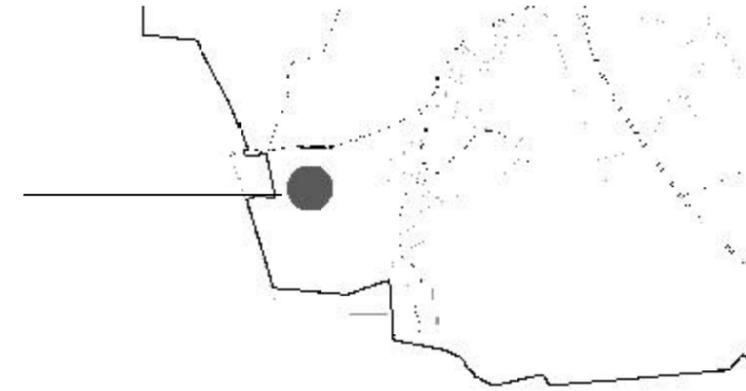
A site is comprised of its climatic and topographical conditions, and its social, cultural, economic, political, and architectural milieu. The proposed magnet high school for environmental studies is located in the rural town of Blacksburg in the Blue Ridge Mountains of Southwestern Virginia. The school is intended to serve approximately 300 students. Blacksburg is home to Virginia Polytechnic Institute and State University, and



Town of Blacksburg

thus has a cosmopolitan atmosphere and a relatively sophisticated population. The population, which includes students, faculty, and permanent residents, fluctuates seasonally, depending on the university calendar.

Culturally there is much going on for a town of ten thousand permanent residents and twenty seven thousand students. In summer, there is a farmers



Sun School site

market, food and craft fairs, many parks, outdoor concerts, etc. Many of these events and venues are sponsored by the university or the town. Downtown Blacksburg is comprised of quite a few historic buildings, and a mix of more contemporary buildings, both residential and commercial.

There is a small traditional industrial base with a growing high tech industrial base. The communities



View of site looking south from Prices Fork Road

surrounding Blacksburg are primarily agricultural. The topography is hilly with many streams and rivers nearby, the New River being dominant.

The climate is temperate. Blacksburg is at an elevation of approximately 2,000 feet. Summers are warm/hot and breezy, whereas winters are quite windy and cold. Annual precipitation is approximately 42”.

Blacksburg is serviced by the Montgomery County school system. There are four elementary schools, one middle school, and one high school in town. In addition, there are several private schools. The population of these schools tends to be transient and international because of the university.

For the purposes of excellent sun exposure and views,

and access to a major road, I chose a 55 acre south sloping site along the south side of Prices Fork Road, a major artery. Directly east of the site is the Kipps Elementary School, built in 1995. Agricultural and rural residential areas border the south and west sides of the site.



Sketch of site from Pricas Fork Road



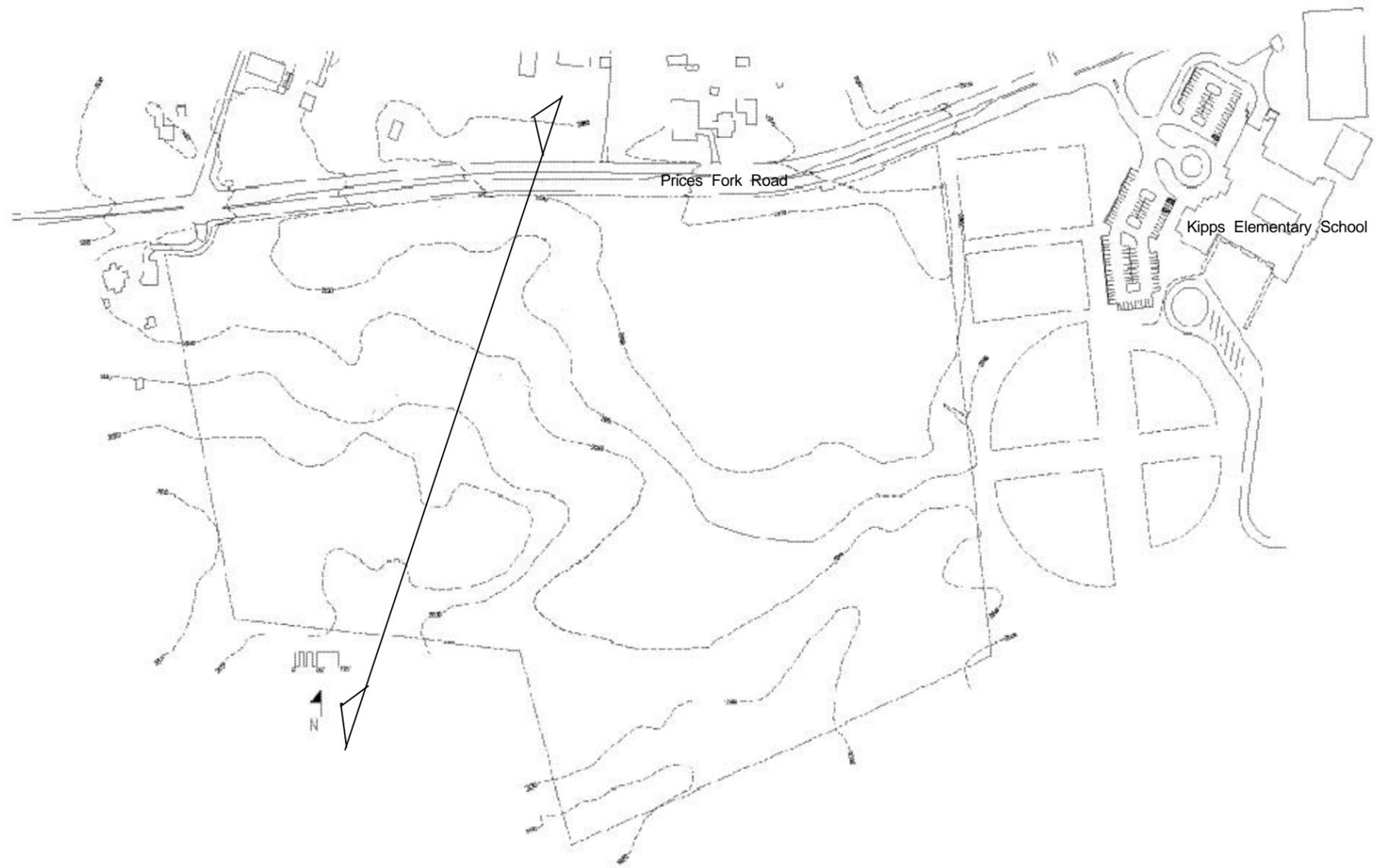
A pond is developed as a primary element of the site, and is an educational resource for the proposed school. The school and the pond can also be used by Kipps Elementary School. The pond is an outdoor extension of the laboratories and the classrooms. Students can learn about aquatic life, bird life and



migration patterns, shoreline flora, water quality, and the effect of the sun, the weather, and the seasons on the life of the pond. Varying bottom and shoreline conditions can be developed which support their respective life systems. Water is supplied to the pond

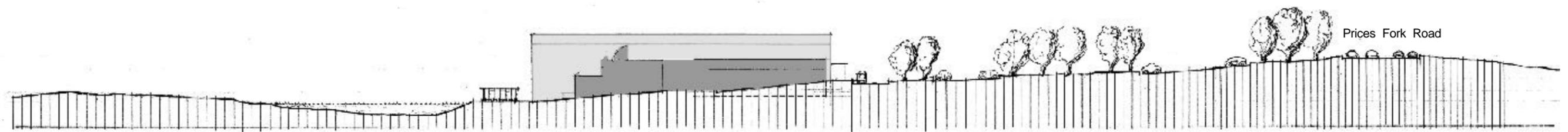
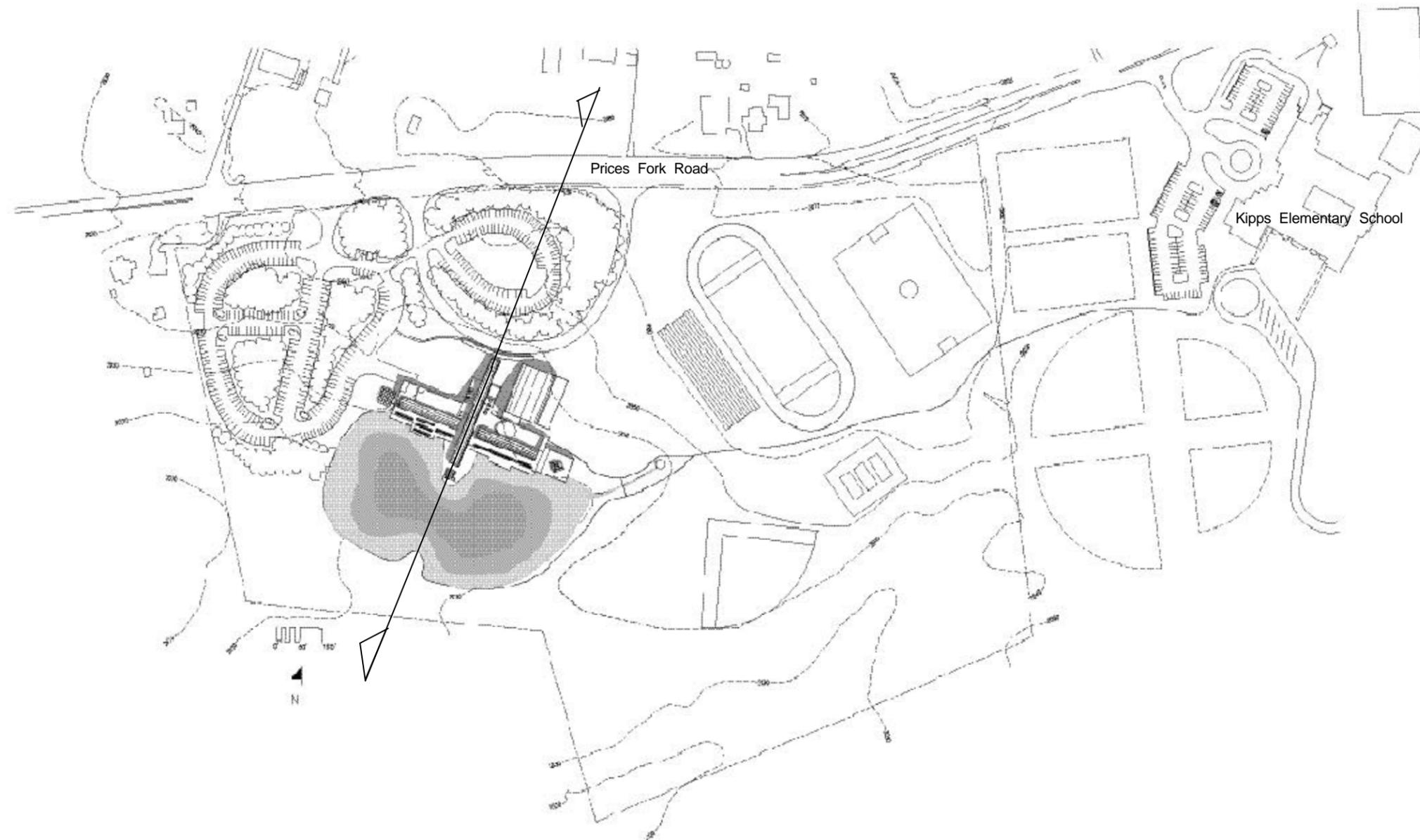


from a photovoltaic powered pump drawing water from a well. A photovoltaic powered fountain aerates and recycles the water. The pond and well, as part of the site, and the site as part of the Architecture, thus become teaching tools.



Undeveloped N - S Site Section

A site with a south facing slope is chosen to take advantage of sunlight for photovoltaics, daylighting, and passive solar heating.



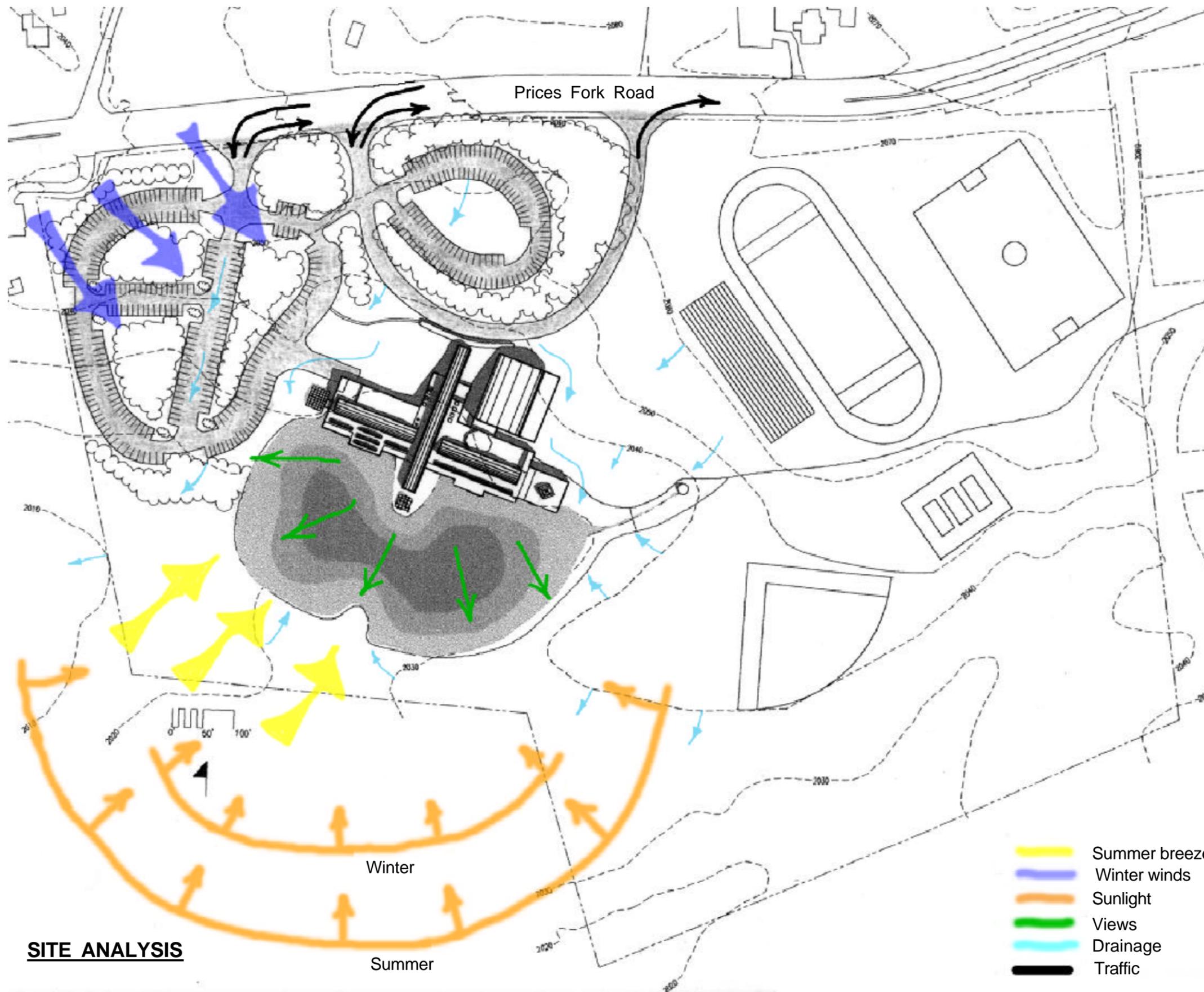
Developed N - S Site Section

The school and parking lot are developed on a south facing slope parallel to the contours to maximize harmony with the site. Trees and the curves of the parking lot make the walk to the school a pleasant one. The pond is located at the natural lowpoint of the

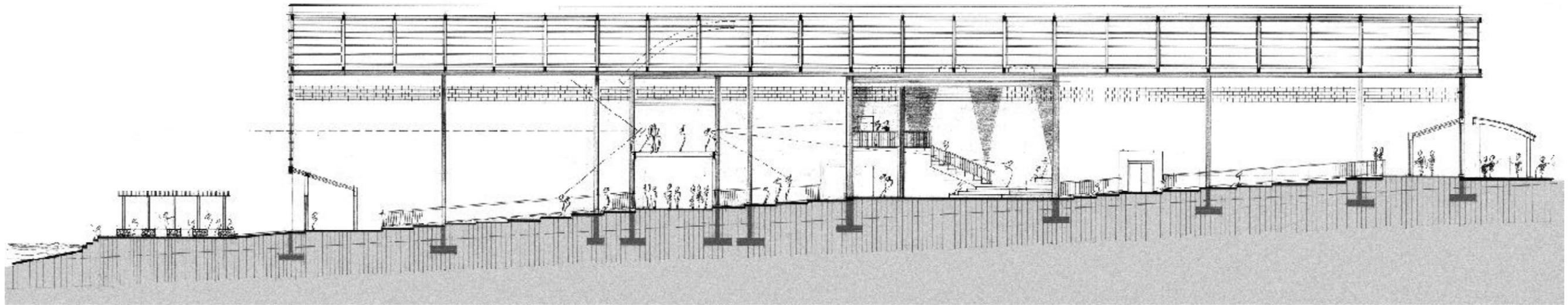
site, and the well and stream are developed at a higher elevation at the terminus of a natural swale.

Ball fields are located at the flattest section of the site, and are oriented toward the northwest to minimize sunlight in players' eyes.

The Town of Blacksburg Recreation Department manages and maintains the Kipps ballfields. I am proposing that the Sun School ballfields be managed and maintained as a complex with the Kipps fields.



- ▬ Summer breezes
- ▬ Winter winds
- ▬ Sunlight
- ▬ Views
- ▬ Drainage
- ▬ Traffic



## SECTION 5 - ENTRY SPINE

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If a building and its site are truly integrated, then the site should be expressed within the building as well as without. The slope of the site is expressed in the Entry Spine through steps and a ramp. All who

enter the school must experience the slope of the site from the interior. The Architecture teaches about the site topography through this expression. The pond is visible from the Entry, while natural light

enters the space from the vaulted skylight above. In this interior place students are aware of the ground beneath them, and the sky above.