Section 1: Introduction

Setting and Context
Corcoran High School, one of four high schools in the Syracuse City School district, occupies an interesting and diverse 60 acre campus on the southwest side of the city. In addition to the typical school related site improvements of parking lots and athletic fields, the school site is rich in natural features, including a retention pond, woodlands and fields, and Furnace Brook. The school campus also lies between two other publicly owned sites that contribute to its unique natural setting within the city. Located to the northeast of the school is Elmwood Park, a city park that is designed primarily for passive recreation and enjoyment of its beautiful natural setting. To the west, across McDonald Road, is a 10 acre site formerly used as a pasture, that contains varied topography, wetlands, two streams and a small pond, as well as interesting cultural features. Through the dedication and effort of environmental science teacher, Jim Smith, this site, known as Springdale, was deeded to the City of Syracuse to be used for educational purposes.

Although teachers from the high school and adjacent H.W. Smith Elementary School were already using the sites for a number of curriculum related activities and recognized the many learning opportunities, Jim Smith and Principal Brian Nolan had the vision that the school campus was perfectly situated to become the setting for environmental education programs for city school students and the local community. In the spring of 2003, Jim Smith composed a
memo outlining some preliminary ideas for the Springdale site to gather support and resources, and sent it to a number of potential partners, including several staff at SUNY College of Environmental Science and Forestry and the college’s Center for Community Design Research (CCDR). Several faculty and staff at SUNY ESF recognized the value for the high school and the college to partner on developing strategies to create a setting for environmental education, and to date three service learning projects have occurred through SUNY ESF courses.

Five students enrolled in Planning and Design of Forest Recreation Areas (a SUNY ESF course) undertook the first project in Spring 2004. Under the supervision of Dr. Diane Kuehn these students prepared recommendations for trails on the Springdale site. The report prepared by that class is included in a later section of this notebook. It has been instrumental in the high school obtaining funding to implement trail construction.

In summer 2004, Jim Smith submitted a design assistance request through the CCDR and the Faculty of Landscape Architecture for the development of design studies for an environmental education center to be located on the Corcoran property. The assistance request included preliminary ideas for programming, size and possible locations for the building. The goal of the project from the high school’s perspective was to develop several alternative strategies from which to seek funding for further design and program development. The CCDR staff, in consultation with landscape architecture faculty determined that this was an appropriate service learning project for students in the fall 2004 junior design studio, which focuses on site inventory, analysis, programming and schematic design. In order to meet the educational goals of the studio and to provide a number of different ideas for the high school to consider, the studio faculty and high school staff agreed to allow the landscape architecture students to explore alternative approaches to environmental education beyond the boundaries of a single building or site. Thus the project study area included the Corcoran campus, Springdale and Elmwood Park.

The Corcoran staff also agreed with the CCDR’s recommendation to involve members of the community in the design process, including faculty, students, parents and neighbors, appreciating the knowledge and support that these groups could contribute both during design as well as during implementation. Community involvement would allow the landscape architecture students to learn valuable communication and research skills through application of participatory methods.

Forty six junior landscape architecture students worked with the Corcoran community throughout the fall 2004 semester. The intent of the process was not necessarily to come up with one final design solution but rather to develop project goals and a series of alternative approaches for the Corcoran community to review, consider and discuss.

Following the fall semester work by the junior studio, graduate student Samuel Gordon worked with Jim Smith and several other teachers to look in more depth at locating a building devoted to environmental education on the main Corcoran campus. Sam’s work built on and expanded the findings of the earlier student work, focusing on a specific element of an urban environmental education center, as well as exploring how a public high school campus can become more environmentally sensitive and responsible.
Based on the findings and results from both of these project processes, the Corcoran project leaders should be better prepared to make informed decisions based on a series of goals and a thoughtful community specific vision on the approach to environmental education. In addition, they should be better prepared to work with professional design consultants to develop detailed design proposals.

**Notebook Organization**
The first portion of the project notebook contains a summary report of the junior studio process, the findings that resulted from the community meetings and the student investigations, examples of several student design proposals and the primary preferences and issues that were expressed during review of the design proposals. Following the project report is detailed documentation of activities and findings from community workshops, and project inventory, and a copy of the trail recommendation report by the Planning and Design of Forest Recreation Areas class. The last portion of the notebook contains a copy of Sam Gordon’s project report and illustrative posters.

The project notebook is meant to be a tool for project leaders to use and reference as they move forward with development of an environmental education center at Corcoran. Students, teachers, parents and neighbors shared a wealth of information and ideas that are recorded in the notebook. These should be used to guide decision-making and evaluation of ideas.

**Section 2: The Design Process**

**The LSA 326 Studio Sequence**
The project took place over the 15 weeks of the fall 2004 semester. The ESF faculty and staff, in close coordination with Jim Smith, designed the process to integrate community members into the project at times when their input, ideas and feedback would be most effective. Jim Smith was responsible for outreach and communication of workshop and meetings. For the ESF students a portion of the project process would be done working in groups but each student would be individually responsible for developing a portion of the project on their own, including program, site analysis, and schematic design. The first two stages of the project were primarily group process and the final stage was primarily individual. (A detailed Process Flow Diagram can be found in the Notebook section.)

The first stage of the process involved introduction and initial exploration of the site and meeting with community members. The ESF students were introduced to the project during the first week on the semester. This included a visit to the Corcoran site that began with a PowerPoint presentation by Jim Smith that explained the initial vision underlying the project. He stressed the importance of the site in the education of all students in the city school district, but especially the elementary students in the second to fourth grade. As the students toured the Corcoran campus, Springdale and Elmwood Park, they observed existing conditions, took photographs and noted
site characteristics. Teams of students translated their initial impressions into narrative posters that were presented to the class and also displayed for community review during the first workshop series.

The community was engaged in the project process through two sets of workshop and one set of presentations that were spaced about one month apart. Three primary stakeholder groups of community members were identified: teachers, parents and neighbors, and Corcoran students. The ESF students divided into three groups to design and facilitate the separate stakeholder meetings but later shared the information and findings from the meetings. Due to their different schedules it was necessary to schedule the meetings with each stakeholder group at different times of the day. The high school student meetings took place immediately after school during the activity period, from 2:15 to 3:00 or 3:30; the teachers meeting took place after school at around 3:30; and the parents and neighbors meeting took place in the early evening.

The workshops were designed to provide a comfortable way for community members to share information and ideas, and each included several activities that were aimed at exploring and answering questions that ESF students and faculty had identified. During the first workshop, held on September 15, activities included mapping, site tours and brainstorming through which community members described their experience with the site now or in the past, opportunities for future use, ideas and desires for activities, and concerns. Approximately 25 students, 8 teachers, and 18 community members participated in the first set of workshops.

The ESF students documented and analyzed what community members had shared, prepared summaries and presented it to the entire studio. They discovered that many ideas, concerns, observations, and desires had come out of the first workshop. They used this information to begin to formulate a set of preliminary goals and objectives for the project, prepare user needs summaries and develop initial project programs.

During the second stage of the project the ESF students undertook more in-depth exploration and questioning based on initial findings and understanding. The ESF students, working in groups of three or four, began a systematic, in-depth inventory of site characteristics, environmental and cultural influences and other information relevant to the project. The groups gathered and prepared information and data in the following categories: Urban Ecology/Vegetation, Hydrology/Wetlands, Wildlife Habitat, Land Use Patterns, Historical-Cultural Patterns, Soils, Regional Context, Accessibility, Microclimate, Topography, Circulation Patterns, Ownership Patterns, Utilities, Precedents, and Census/Demographics. Small groups were also responsible
for developing draft project goals and objectives, and a preliminary program. The studio faculty provided suggestions and guidance during the inventory process. The students presented their preliminary inventory findings to each other, followed by discussion and suggestions to improve data collection or representation techniques. The refined inventories were made available to the entire studio for further analysis, and for each student to refine user needs matrices, program matrices, and goals and objectives based on the new information available.

The second set of stakeholders workshops took place on October 20, 2005. The activities were designed to confirm and further explore information shared at the first workshop and that the ESF students had uncovered during the initial site inventory. At the second set of workshops participants reviewed and added to inventory posters, and through mapping, brainstorming and survey responses expressed ideas and preferences about activities and programming on different area of the project site. Approximately 50 students, 6 teachers and 9 community members participated in the second set of workshops.

The ESF students summarized and analyzed the workshop data, preparing matrices which prioritized the needs and activities of each of the stakeholders groups, matrices showing actual number of responses to each proposed activities and group of activities, and a written summary of each meeting. At this point in the project, students had a wealth of information, represented in various forms including document summaries, matrices, diagrams, photographs, maps, charts and drawings collected from a wide range of sources, including community members, agencies and observation.

During the final stage of the project, the ESF students undertook an in-depth analysis of all of the data and concurrently formulated a concept for the design of the site. They prepared ideal functional diagrams and relationship diagrams in a synthesis process of data and site analysis. Based on these, each student developed a schematic site design which illustrated their proposal for the development of the environmental education center.

Most of the student projects were presented and reviewed at a third set of stakeholder meetings in early December. In small groups of two or three, students gave brief presentations and community members had the opportunity to ask questions, compare alternatives and discuss ideas. The questions and comments raised by community members were recorded and form the basis for further project development.
Workshop Summaries

The full outlines and results for each of the workshops and meetings are included in the project notebook. Following are key ideas and issues that emerged from the community members during the first two sets of workshops.

First workshop – Corcoran students - Activities:
The purpose of the first workshop series was for community members to share their experience with the site now or in the past, and discuss opportunities for future use, ideas and desires for activities, and concerns.

Three activities were conducted at this workshop.
- Mapping existing use – Teams completed a mapping activity to describe the way they use and know the site on a daily basis, and to discuss desired changes or improvements.
- The meaning of Nature – Teams brainstormed what was most interesting to them about nature as a child and now as a teenager, and the activities they enjoyed doing then and now.
- Guided tour – Corcoran students walked with ESF students through the site, defining the route and describing patterns of use, thoughts and feelings.

First workshop – Corcoran Students – Findings:
The high school students were very open to sharing their use of the site, their concerns and their ideas about what improvements they’d like to see made. In addition to functional use of the site and access information, the students value areas where they can gather and “hang out” such as the patio area by the bridge between the two academic buildings, the “party spot” in Springdale and an area of Elmwood Park. However, some students did voice the desire to remove the party sites. They are disappointed in the reconstructed main entrance to the Corcoran building, because of the removal of the wall used for seating. They would like to see more seating, some tables and better access to the existing courtyard, and a sidewalk and better access to the Springdale site.

Most of the concerns expressed by the high school students had to do with personal safety and the safety of people on the site, both in the school buildings and outside. They are concerned about the level of care, commenting on the presence of garbage on the site and graffiti on many of the wall outside of the school.

Their discussion on the enjoyment and perception of nature as children and as teenagers was instructive for the different approaches that may be necessary to address the characteristics of different age groups of students. As children, they appreciated play activities, such as tree climbing, skipping rocks, hide and seek, and building forts. As teenagers they define activities more in terms of active recreation, such as biking, hiking, running, partying, canoeing, or more passive activities such as drawing.
First workshop – Teachers – Activities:
Three activities were conducted during this workshop
- Site orientation – Using an aerial photo of the site and photo boards of the different site areas the ESF students and teacher participants identified and discussed the character areas of the site.
- Educational use and opportunities – The group brainstormed educational opportunities, needs and desires when bringing students to the site, and considerations for taking students on field trips.
- Areas of interest and places of concern – Using a large-scale aerial photo, the teachers identified positive educational features and possible opportunities, and places of concern, or places that are unsightly or unsafe.

First workshop – Teachers – Findings:
The teachers had many ideas for desired activities, most of which focused on environmental opportunities for the children. They came up with a number of ideas such as stream projects, and wildlife and plant identification related to environmental education plus other cross curricular activities such as writing, art (photography, sketching, painting), and music videos. They also thought just being out in nature was important for many children. They wanted to be able to use the site even in the winter and mentioned the use of snowshoes.

The teachers had very clear ideas as to the features that would be important to themselves and the children such as accessibility for people of all ages, sizes and abilities; interpretive materials; and functional elements such as bathrooms, drinking fountains and boardwalks for wet areas.

There were many concerns, conflicts and issues mentioned by the teachers. The areas of major concerns were safety issues such as crossing McDonald Road to access Springdale and some areas with steep slopes.

The teachers already bring their students out into the school campus and Elmwood Part to study nature. They are very interested in continuing to take advantage of the features of the site. They are aware of some of the history attached to Furnace Brook and Elmwood Park, such as the fact that a spring on the Springdale site was once used as a source of drinking water for the city.

The complete documentation of the workshop results can be found in the project notebook.

First workshop – Parents and Neighbors - Activities:
There were two primary activities conducted during this workshop.
- Participant introduction – Participants introduced themselves and gave a brief description of their relationship to the site and how long they’ve lived in the area.
Past, present and future – Working in several groups, this activity used a combination of brainstorming and mapping to uncover information about the site history and past uses, the current uses and characteristics of the site, and ideas for what to change or improve.

First workshop – Parents and Neighbors - Findings:
From the introduction activity it was learned that the participants included several neighbors who had lived close to the site all or most of their lives, as well as parents of current high school students a couple of who had themselves been students at Corcoran.

The history of the site discussed by the participants included past activities, former land uses, significant landowners and past characteristics of the site. Prior to contemporary development, the land was primarily farmland and pasture. The original farmhouse was located on the Corcoran site, with an apple orchard located in the area that is now Reinmann Road. The spring from Springdale supplemented the city reservoir system and is still visible today. Participants relayed memories of damming the stream for swimming and weddings that occurred in Elmwood Park. Former Corcoran High School students recalled two party sites, one in Springdale and another in Elmwood Park. Participants commented that in its present condition, Springdale is wet and overgrown with a wide range of vegetation and trees. Wildlife include birds, deer, rabbits and even the largest moth that has been discovered in the nation (reported by a high school student). The topography varies from moderately flat to very steep, and teenagers use the flattest, driest part of the site as a place to hang out and party. There is a small waterfall that feeds the tributary that leads to Furnace Brook. The participants also noted the high density of vehicular traffic, and the lack of pedestrian pathways in the Springdale area.

The parents and neighbors group envisioned the potential user groups to be community members, teachers and students, clubs, religious groups, nature lovers, and people interested in outdoor activities. They foresee the land being used for education and outdoor activities. There are many activities in addition to those specifically geared towards education that the community members want to see happen within the site including bird watching, walking, jogging, picnics, a bio-blitz, and dog walking.

Community members emphasized the preservation of the natural characteristics including the waterfall, wetlands and the trees, as well as cultural features such as the stone work and the aquifer. Maintaining the diversity of all the ponds and streams is also a crucial issue. There were very few modifications that that they felt were necessary. Some possible changes would be to alter the slope of the land for better access to the waterfall, build boardwalks over wet areas, construct lookout towers over areas of interest, install natural, multi-use trails, provide interpretive signage, and create a pedestrian entrance.

Concerns focused on the safety of pedestrians along McDonald Road, navigating the wetland areas, visibility on the trail in areas of dense underbrush, increase in vehicular traffic and the
need for a parking lot, a possible increase in litter along with vandalism and inappropriate use such as motorized vehicles and skateboards.

**Second Workshop – Corcoran Students – Activities:**
The purpose of the second workshops series was to confirm and further explore information shared at the first workshop and that the ESF students had uncovered during the initial site inventory.

During the first few minutes of the workshop, ESF students stood by a display of the inventory posters they had prepared. The high school students were encouraged to review the posters, ask questions, and write comments on post-it notes. This informal review was followed by two activities.

- Selecting appropriate activities – In groups of 8 to 10, Corcoran students prioritized a list of desired activities that had been developed based on the findings from workshop one. These activities were grouped into categories of related activities. The participants were supposed to check all of the activities that they thought were appropriate for an environmental education center at the site, and then highlight the top five that they thought were most important to discuss at the workshop.
- Locating activities – Using an aerial map participants located the priority activities into the three zones of the site (Springdale, Corcoran and Roberts campus and Elmwood Park), and described reasons why.

**Second Workshop – Teachers, and Parents and Neighbors – Activities:**
The teachers workshop and the parents and neighbors workshop occurred at two different times on the same day but had the same activities. The activities were similar to those done with the students, including review of the inventory posters, but there was one activity added to the adult workshops because there was more time available:

- Reviewing and refining goals – In small groups participants reviewed and discussed the preliminary goals that had been developed based on the findings from workshop one.

**Second Workshop – Findings**
The findings from this workshop are difficult to assess because there seemed to be a different understanding on the purpose of the activities by ESF students and thus the facilitation varied between the workshops. The high school students selected some different activities than the adults. For example, many of the high school students were interested in motorized wheeled activities, such as snowmobiling and 4-wheeling. When asked why, they responded that they had never done those things and would like to try it; they didn’t necessarily think those activities would be appropriate at this site. They selected a variety of activities but the top 10 were large-group guided nature walks, barbeque/cooking, nature photography, fishing, gardening (flower/fruit), apple picking, wetland restoration/planting, picnicking/eating, running/jogging, and snowshoeing/cross-country skiing.

The teachers responses indicate that they are open to a large variety of activities occurring at an environmental education center. There were only a few activities that they did not think were appropriate, including apple/fruit picking, hunting, general food preparation, skateboarding, field based sports, court based sports, snowmobiling and 4-wheeling.
The parents and neighbors were also open to a variety of activities occurring at the site. However, they selected most highly individual nature appreciation activities such as bird/wildlife watching, learning about features of the site, and quiet sitting/reflection/meditation on the site. Individual or small group linear activities, such as running/jogging, walking/hiking, and snowshoeing/crosscountry skiing were also highly ranked.

For the location of appropriate activities, the teachers expressed that just about all of the activities that they identified could occur in any of the three zones and they did distinguish between the zones. The parents and neighbors did distinguish between the zones, with Springdale being more appropriate for nature study and quiet activities, Corcoran and Roberts campus for more active recreation, and Elmwood Park containing a mixture. The high school students had a mix of activities across the three sites that do not fit a discernible pattern.

**Project Goals and Objectives**

After the first workshop and the initial discussions with stakeholders about how they use and value the site, and ideas about future use, the ESF students developed a set of preliminary common goals that they then presented and discussed at the second workshop. The purpose of goals is to establish what the community would like to achieve in the development of an environmental education center on the site.

The preliminary goals developed by the ESF students addressed issues of environmental preservation, recreational diversity, community ownership and inclusiveness, safety, accessibility and education. Each individual ESF student further refined those goals based on their understanding and interpretation of the desires, concerns and ideas expressed by the community. They then developed a series of objectives for each goal which expressed how that goal would be accomplished in their design proposal.

Following is a composite series of goals and objectives that the community can initially work with to help make decisions that will be supportive of the collective vision for an environmental education center that uses the combined site resources of Corcoran, Springdale and Elmwood Park.

1. **Safety**

Provide features and conditions that are conducive to creating a safe atmosphere and environment for visitors to the site.

- Provide the means for people of all ages and abilities to safely cross the streets to access site trails and features.
- Provide shelters and warming station to allow for all-season, all weather use of the site.
- Improve visibility throughout the site to enhance awareness of surrounding activities and the environment.
- Provide clear way-finding to allow for informed navigation throughout the site.

2. **Education**

Create an environment that is promotes learning through observation, discovery and exploration.
- Reveal the natural, historic and cultural elements and narratives of the site in creative and sensitive ways.
- Incorporate features that are fun and interesting for the diverse ages of children.
- Use the design of the site and environmental education building to model and teach sustainable development and maintenance practices, including selection of renewable building materials, responsible energy use, recycling and composting.

3. Environmental
Develop a plan that ensures the preservation and protection of existing resources and conditions conducive to ecological diversity.
- Design circulation and gathering spaces to have minimum impact on existing ecosystems.
- Select construction materials and methods that minimize impact on the existing natural and historical features.
- Retain vegetative buffers between Springdale and the surrounding streets and residential uses.
- Use species identification and inventory as a knowledge base to inform habitat protection strategies and interpretive materials use on site.
- Identify specific eco-zones (pasture, wetland, forest) and define and interpret them in a simple, unobtrusive manner.
- Emphasize the value of self-sustaining ecosystems as part of the site interpretation and design strategy while providing a sustainable human interface.

4. Accessibility
Develop a consistent plan throughout the site for ease of accessibility for users of all ages and abilities.
- Provide ADA approved trail surfaces and widths to, from and within the site.
- Provide ADA approved wayfinding and interpretive system.
- Provide ADA approved restrooms, benches, and shelters.

5. Congruence of Needs and Activities
Assure compatibility of activities and users from a diverse community while ensuring optimum conditions for educational activities.
- Buffer the general circulation through the site from educational and observation spaces.
- Delineate quiet zones in order to provide opportunities for wildlife observation.
- Consider and understand the characteristics and requirements of different activities, and group compatible activities and separate conflicting ones.

6. Community ownership
Create a sense of community ownership and inclusiveness to encourage all users to make use of the site in appropriate and respectful ways.
- Promote community ownership by providing opportunities and encouraging community members to continue to take part in the design and construction process.
- Connect the Corcoran site to Elmwood Park and the surrounding neighborhoods.
- Develop programs that students and community members could participate in together, such as a community garden or compost center.
Site Program

Through the dialogue and activities with community members and Corcoran staff, the ESF students developed a list of possible program elements that were desired or necessary for the environmental education center site. Given this broad list, each ESF student refined the program for the site design that he or she would be developing. In addition, they explored the relationships between program elements as well as the area and environmental requirements for each of the program elements. The full list of possible program elements discussed by community members is included in the Inventory section of the project notebook. Figure 1 is an example of a Comprehensive Compatibility Matrix, and Figure 2 is an example of a Program Refinement Matrix, both prepared by Jeanie Gleisner, a student in the class.

Comprehensive Compatibility Matrix
(Prepared by Jeanie Gleisner)

Figure 1 – Example of Comprehensive Compatibility Matrix
Site Analysis Findings
The ESF students also prepared individual site analysis studies that were based on information shared by community members, the group inventory, and their individual goals, objectives, and preliminary program analysis. These analysis studies helped them determine the appropriate locations for program elements as well as issues that needed to be addressed and opportunities that could be taken advantage of through design or policy recommendations. Although each student prepared their own analyses studies, the two examples provided are fairly comprehensive and should provide useful information for decision-making.
The Corcoran site is located in the south-west quadrant of the City of Syracuse, in Onondaga County, N.Y. This is an area zoned largely R-1 and RA1 residential. Neighborhoods of single-family homes surround the site in varying densities, with higher densities to the north and east, lower densities to the south, a county club and open space to the west. (+) There are five city parks within one mile of the Corcoran site.

Children between 3 and 14 years of age make up approximately 17 percent of the total population in the surrounding neighborhoods. Demographics indicate that the poverty level rates of the area population range from 3.0-5.4 percent.

(-) The Corcoran and Roberts campuses are zones of high activity during school hours. An increase in traffic, the site size, and grounds maintenance activities can be a limiting factor in wildlife habitat immediately surrounding the schools.

(+ The ecology of the 9.9 acre site includes a significant portion of wetlands, supporting a diverse range of species. A drainage system traverses the site connecting the old Springdale site with the Corcoran campus and Elmwood Park. (+) Limestone gorge is located approximately from Corcoran along Pompeao Brook and would be an ideal location for geological studies. (+) The close proximity of the site to other city parks and transportation routes could afford a unique opportunity to link together an urban greenway system.

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Site Design Studies and Community Comment
Each of the ESF students prepared a Schematic Design, including a site plan and sketches or photo-simulations to graphically illustrate and describe their design proposal. Several of the site designs are included in this report for information and reference. However, it was not the intent to select one student design for further development but rather to understand alternative approaches and preferences upon which to base more in depth design study in the future. In addition, in the absence of further design documentation, Corcoran leaders can make informed decisions based on preferences expressed by community members in response to these student design studies.

Section 3: Selected Design Alternatives
Each student was required to develop a concept around which to create his or her site design proposal. The concept helps provide a structure or framework upon which to make decisions about any number of things, including relationships between program elements and the site context, detailing and materials, and the focus of the design proposal. Four student design projects were selected to be included in this report as representative of different approaches to the design and communication of ideas. Each of the design alternatives is preceded by the Concept Statement written by the student designer, which describes the big idea that the design is meant to express, and ways in which the concept is accomplished within the design proposal.

Student Design: Jay Goggin
Concept Statement: Water: Abundant Essential Element
Water is the most abundant element on the planet, covering 70% of the earth’s surface. Water also make up 66% of the human body. Water is the core of the planets existence and without we cannot live. Water is also the most prominent feature of the Corcoran Eco Educational Center. The bodies of water there are expressed as still, flowing and fluctuating. The site design celebrates the qualities of the water, instilling an appreciation for the site’s hydrologic qualities, and the significance and value of water in sustaining life.
Concept Statement: Labyrinth

The Corcoran site is an anomaly in the City of Syracuse, a self-regulating ecosystem embedded in an intensely managed urban area. A Labyrinth is an intricate arrangement of inextricable windings, as in an endless variety of ecologies and human interventions. The Labyrinth concept for the Corcoran Eco-Educational Center will become a means to look at human context from a variety of scales and perspectives. The Corcoran site affords a unique opportunity to explore complex contextual relationships between people and place. The interrelationships are not only physical, but temporal and cultural.

The work Labyrinth has its origins in myth; therefore, an interweaving of myth from different cultures will be expressed spatially and textually throughout the site. A diversity of species, experiences, and fable will emphasize our place in the intricate windings of the world in which we live. The concept of a Labyrinth will encourage and awareness of the interlacing relationships, processes and cycles of which we are a part. The landscape of the site will be experienced as a symbolic language of human/environment interrelationships inscribed through form and flow, scale and location.

The magic of the Labyrinth will be expressed through diverse experiences and perspectives. The perception of human scale relative to the environment will be illustrated through a range of lenses, from the close-up water’s edge observation of tiny living creatures to a tower view of the surrounding city. A streamside trail tracing the flow of water from Springdale’s hillside spring, under the road to Corcoran Pond and on into Elmwood Park will include interpretive panels telling the story of the complete water cycle. Historic preservation of the old mill at Elmwood Park will allow its development and use as an interpretive center.

Cultural perspectives will be expressed through a mythological characterization of place using themes from stories such as The Mantis and the Moon, an African folktale, the Greek myth of the Labyrinth, Theseus and Ariadne, and The Origin of the Pleiades, an Onondaga Indian folktale. Sculptural and natural form will support the mythological characterization of place. The form of the Labyrinth will be used minimally in the execution of the design. More importantly, the Corcoran site will be a Labyrinth of experience. Environmental as well as many other forms of education will be supported through the careful design and placement of program elements throughout the site. Learning stations will be sensitively integrated into their sites, and high use and social gathering spaces will be located in perimeter areas allowing large, less disturbed areas for habitat preservation. Wildlife observation, quantitative analysis, geologic exploration, art studies, small scale community agriculture, native bee-keeping, music and theater space will all be provided for within the Labyrinth. These educational opportunities will be enhanced for the young child through the kindling of imagination in response to place and stories. Participatory design by the children will play an important role in the development of particular elements of the design encouraging the celebration of diversity and the rooting of identity in place.
Corcoran Eco-Environmental Center: The Labyrinth

A labyrinth is an intricate arrangement of pathways that lead through a variety of colorful and textured environments.

The Corcoran Eco-Environmental Center is designed to facilitate educational and recreational activities, promoting an understanding of the natural world. The center features a variety of interactive exhibits and educational programs, allowing visitors to explore the interconnectedness of the natural world.

The design serves to foster a sense of wonder and curiosity, encouraging visitors to explore and learn about the complex systems that make up our planet. The center is committed to promoting environmental awareness and sustainability through education and hands-on learning experiences.

Key points of interest include:
- Corcoran High School
- Roberts ES
- Orange Park
- SUNY ESF LSA 326

Distribution:
- Corcoran High School
- Roberts ES
- Orange Park
- SUNY ESF LSA 326

J. Stilson
December 1, 2004
There would be no life on earth without energy. Human beings pose the most serious threat to natural process and natural systems by exploiting energy supplies and unsustainable resource use. One way to quantify human energy use is to apply the idea of the Ecological Footprint to a site. The Ecological Footprint addresses the biophysical constraints of the earth by comparing our impact on the environment with the capacity of the biosphere to regenerate itself.

The concept Day Lighting, the Energy Footprint, was inspired by the idea of the Ecological Footprint. Incorporating this concept into the design of the site will encourage all users to reflect on their amount of energy use in several ways. First, this concept will motivate students, faculty and all other users to contemplate the amount of energy that they consume. Second, it will inspire them to reduce their impact on the site. Third, it will assist them in developing and appreciating sustainable practices. Finally, it will provide a perspective from which they can view their impact on the environment.

Implementing sustainable practices on site, such as an experimental green building with a Living Machine to treat and recycle wastes, “green” parking lots and sports fields, and no mow zones will allow users to observe sustainable alternatives to conventional development practices. Observation towers located at the zones of highest energy use and lowest energy use will provide the opportunity to view and reflect on these different levels of use.

Numerous institutions across the country have successfully set in motion programs that emphasize environmental education and sustainable practices, such as Oberlin University’s Living Machine and SUNY ESF’s Green Campus Initiative. Although there is a positive movement towards the use of renewable energy, it is important for educators to continue to promote this concept. The Corcoran site is the perfect candidate to spearhead a local movement towards sustainable practices not only because of its natural features but also because the school already emphasizes environmental education in their academic curriculum.
Student Design: John Boyd

Concept: Discovery

Discovery can be defined as the act of obtaining sight or knowledge of for the first time. Discovery is the reason that we are geographically where we are today. Discovery has lead to many important findings in the fields of science, education, aesthetics and self-awareness. As a child, discovery was both an important outcome as well as activity to which I owe much of the knowledge that I have today. I have always enjoyed going out beyond my parent’s house and exploring the fields and woods. Given the same environments, growing up, I feel that most others would have enjoyed the same experiences I have had.

Discovery is the concept that I will be using for the Springdale, and the connections to the Corcoran school area. The main ways through which the concept will be conveyed are through the trails. The trails will lead you to places of discovery. The trails will pass through and by interesting and different areas. Some areas will be discovered by finding trails that will wisp you off of the main trail and take you to other places. For example, they may be places for bird watching, places for scenic views, small group gatherings or even just secluded places to relax and enjoy nature. There will be interpretive signs throughout the site. There will be two main trails on the site. One will be accessible and the other more challenging. The latter of the two will be of great interest to those snow shoeing, cross-country skiing as well as hiking.

The Corcoran-Springdale sites offer great potential to be used as classroom for outdoor education. Both sites offer interesting natural features and history. This kind of atmosphere offers hands on experience invaluable to nature related classes as well as instilling greater appreciation for the natural world. The Springdale site is within short walking distance to and from Corcoran School as will as Elmwood Park and surrounding neighborhood.
Section 4: Choices to Consider

Introduction
For the final review of the 3rd year studio work, ESF students were selected to do brief, small group presentations of their projects during one of the meetings with the teachers, high school students, or parents and neighbors. Community participants wrote down comments which were then discussed within the group. Thus each student only received comments from a few people. While the comments can not be considered comprehensive because each community member was only able to review four projects, a composite review of the comments can provide enlightenment on general preferences and concerns, and some guidance on what elements require further consideration and discussion.

Comments related to Organization and Approach

Structuring access and visits to the site.
1. In one type of approach, specific areas for study of processes or features are identified. There would be different learning areas and stops along the trail.
   - Introduce site features to tell a specific story or provide information, such as interpretive signage; one student proposed a soil profile window (Julie)
   - Participate in program or activity related to a feature or natural process (for example – maple sugaring or native pollinator area). Improvements would be added to support the activity.

2. The other approach is one of minimal impact and disturbance taking advantage of existing clearing and meadows, with minimal impact on the existing environment and little or no creation of specific spaces for specific learning activities.
   - Simple observation of existing natural features, processes and traces evident on the site (for example, looking for traces of deer habitat)
   - Allowing the Springdale site to continue succession, with vegetation growth over time resulting in other learning opportunities

There did not seem to be a clear preference on the part of any group for one approach over the other. The teachers commented positively about both approaches, with two teachers responding positively to designs that had different learning area and others responding to the concept of conservation and low impact on existing features.

The high school students also responded positively to both approaches although the most extensive comments came in response to one design that had “a lot of games and things to do” and another that had the concept of the site as a series of puzzle pieces fitting together.

The approach to learning, and the extent and type improvements should be explored and discussed in greater depth.

Comments related to Functional Characteristics and Issues

This category of comments received the most number of responses.

Bathrooms and warming huts at the Springdale site
Several teachers responded positively to the provision of bathrooms specifically at the Springdale site. They saw the need for restroom facilities for children coming from other
schools, and wondered where they were on some designs where they were not provided. There was only one comment expressing concern about bathrooms in relation to the need for sewage.

Parking and vehicular access
Some students showed parking at the Springdale site (see for example, J. Gleisners and J. Googin’s plans), most often associated with the Niagara Mohawk transfer station accessible from Glenwood Avenue. Concern was expressed for providing parking at the Springdale site by a couple of people in the parent and neighbor group, while another person said, “some parking at Springdale might be nice”.

There were proposals by several students to change the size or configuration of existing parking lots at Corcoran. Some proposed to make the parking lots more ecologically sensitive, with biofiltration swales to filter runoff, and others proposed adding plant material to make them more attractive and integrate them into the overall site design (example).

Several ideas for drop off were illustrated but most did not adequately address the turning and visibility requirements of a school bus.

The issue of parking and vehicular needs to be discussed in more depth, both for community visitors to the site as well as bus drop off and parking for buses transporting school children.

Pedestrian Access to the Springdale site
Providing safe pedestrian access between and around the high school, elementary school and the Springdale site are of paramount concern to all groups. The students proposed a number of different options for addressing these issues.

1. Sidewalks and paths along roads
   a. Proposals for sidewalks and path along Reinmann Road, Glenwood Road and McDonald Road to provide a safe walking route were positively received (see for example H. Jannelle and J. Gleisner’s plan’s) In at least one design where they were not provided, concern was expressed about their absence.

2. Crossing McDonald Road
   a. Several students proposed structural solutions of building pedestrian bridges or an underpass under the road to provide for safe crossing of McDonald Road. (see plans by J. Boyd, J. Goggin and J. Gleisner) These were met with positive responses from community participants but also with expressions of concern for the cost of these solutions. Based on the cost and the space requirements for a pedestrian overpass or underpass, as well as the reticence of many people to use such a feature, this should not be considered a feasible solution; other proposals must be considered.
   b. Establishing crosswalks at defined points was one common approach to safe crossing of the streets (see plan by H. Jannelle).
   c. Another idea to consider would be speed tables or humps (extended version of speed bumps).

3. Sidewalks and paths within the school campuses
   a. Few of the design proposals addressed pedestrian routes between and through the existing school sites. Given the increased movement that will result from
environmental education center potentially on the school property, safe pedestrian corridors must be considered. (See plans by J. Goggin and J. Gleisner for pedestrian circulation proposals within the school campus)

**Potential for vandalism**
There were a number of comments expressing concerns over the potential for vandalism of facilities and features that were located on the Springdale property, particularly structures. (See also comments related to the location of an environmental education center building) The community members offered no potential solutions and this topic is one for additional consideration during the planning process.

One approach to reducing vandalism is to continue to the process so that community members, especially the youth, are engaged in the design, installation and programming, and through this hand-on involvement, takes ownership of the site and improvements.

The community does not want to create an attractive nuisance and questions providing shelters or improvements to the “party site” for fear that they will be used for drinking parties.

**Maintenance**
The question of responsibility for the care and maintenance of the sites and facilities was raised by several community members. In one specific example, the need to clean trash out of the existing pond at the high school was raised in response to a student proposal for improvements.

**Utilities**
Many of the proposals by students require extension or installation of utility service such as electric. At least one person commented on the need to consider these utility requirements.

**Comments related to Trail system and characteristics**
There were numerous comments related to the trail design on the sites. They tend to fall into two main categories. The first is the location, extent and layout of a trail system and the second are the physical characteristics of the trails.

**Location, extent and layout of trails**
Positive comments about the trail system included loop trails of different lengths, widely dispersed trails, a comprehensive trail and access system (including a trail connections from Corcoran to Springdale, trails throughout the Corcoran site, and a trail system along the top of the hill on the Corcoran site). Another concept that received positive comments was providing trails along the pond at the high school (all four sample site alternatives illustrate this idea).

Concerns were expressed about providing a trail between Corcoran and Springdale along the stream corridor included cutting through private property and being too close to the existing houses (this connection is shown on plans by J. Goggin, J. Boyd and H. Jannelle).
Physical characteristics of the trails

The teacher’s comments in particular mentioned the need for a hard packed material to ensure accessibility. Other positive comments were noted about boardwalks over surface water and around the Springdale site.

Although it did not come out strongly in the comments about the student designs, based on teachers comments during other workshops there will need to be continued discussion and eventual agreement on the extent of universal accessibility to areas of the site, as well as the appropriate developmental age for use of certain trails. The elementary school teachers expressed fairly strongly the need to have equal access to features of the sites for all of their students, including those using wheelchairs, crutches, and walkers. Given the steep topography of some areas of the site making equal access difficult and expensive to accomplish, and the costs associated with paving materials, we anticipate that choices will need to be made about how much of the site can be made universally accessible.

Comments related to Nature Center location and characteristics

Nature Center location

The comments concerning the nature center related primarily to its location. The student designs illustrate a variety of locations for the center, both at the Springdale site and at the Corcoran/Roberts schools site. Within those broad areas there were also a variety of locations shown.

Positive comments were expressed for most of the site locations shown by the students. For those located on the existing school property, close to the school buildings, the most common comment had to do with the proximity and ease of access. In addition, it would be less likely to be vandalized (see plans by J. Goggin and J. Boyd)

In response to the siting of the nature center on the Springdale site, several people commented that having the “nature center in nature” is best but there was also the concern that it would be too long a walk (see plans by J. Gleisner and H. Jannelle).

Other Concerns about the nature center included,

- Size – would like it to be spacious
- Proximity to existing schools/Distance from Roberts – would like it to be within walking distance for young children
- Solar orientation and access
- Year round facility – would like it to be winterized and heated
- Conflicts with existing uses – for example, location at site of existing loading dock, or within an existing athletic field
- Conflicts with adjacent uses – for example, proximity to adjacent houses at Corcoran

Most student designs did not give detail on even the most basic characteristics of the nature center, and community comment tended to be general as well.

Criteria for location

In order to select an appropriate location for the nature center, specific criteria need to be developed that can be used in the assessment of alternative site locations. These criteria can be
developed in part from comments expressed about the student designs and information shared by teachers, students and parents/neighbors during the Fall 2004 community meetings.

In addition, more definite program requirements must be determined. A program for the environmental education center can be developed review and discussion based on Jim Smith’s initial assistance request and information shared by teachers, students and parents/neighbors during the Fall 2004 community meetings.

Comments concerning Outdoor Seating and Gathering
Amphitheatres received several positive responses as a specific type of outdoor seating and gathering area. Comments were very general and so it is not known the reasons why the amphitheatres were liked, such as location, size, materials, orientation, etc. However it is clear that areas for outdoor teaching and gathering are important features. The form, character and location of these need to be further explored.

Several people also commented positively on the idea of having a picnic area outside of the high school for students.

Comments concerning Growing and Cultivating
Several student designs recommended restoration or creation of an apple orchard at Springdale or near the high school, and this idea received positive responses (see plans by H. Jannelle and J. Gleisner). Also appealing to community members was a community garden. (see plans by H. Jannelle and J. Gleisner) One reason given was that it is a great way to get people involved. A couple of people had concerns about vandalism and continued care of a community garden.

Comments concerning Cultural Narratives/memories
Community members responded positively to the student recommendations to incorporate history and past cultural practices into the contemporary site design. This included the integration of stories (see plan by J. Gleisner), highlighting historic features such as stone walls and the old well, and referencing past agricultural use, such as apple orchards.

Comments concerning active and passive recreation
A couple of students recommended the creation of camping sites on the Springdale property. These received several positive comments from high school students, because they enjoy camping and think the area is well sited it.

One person considered the idea of a playground in the Springdale area a good idea, but several others did not like the idea, considering it too noisy a use, that would scare away birds that use the area.

Section 5: Next Steps

The collaboration between the Corcoran community and SUNY ESF has produced a number of useful outcomes including an in depth inventory, project goals, preliminary program and alternatives design ideas upon which to base in depth proposals. The school district is fortunate
to have dedicated and visionary faculty and administrators willing to continue to forward this project for the educational benefit of the city’s children. During summer 2005, high school students under the guidance of high school teachers Jim Smith and Gene Evans constructed a portion of the Springdale trail system. Design and construction of the bridges and boardwalks was in discussion. Completing the trail system to allow safe access and use by school children and community residents should be a top priority. Visible action like the construction of the Springdale trail is critical to continue to build support and momentum to accomplish the larger vision of an environmental education center.

There are a number of directions that the project could take at this time; however, confirmation of vision and mission might be an appropriate next step. The collaborative design process has expanded the possibilities for environmental education that not only introduces children to the wonders of nature but also teaches them to be environmental stewards through example and practice. The entire Corcoran campus and adjacent public land can be used to explore our relationships, impacts and responsibilities to the natural environment.

The school community must confirm belief in and support of the project. Preparation of a comprehensive information brief and a display including images and graphics would help in expanding understanding of the possibilities and purpose of the project.

The formation of a steering committee or advisory group, composed of both district staff as well as other interested community members would be useful to help determine the direction for the project and provide expertise and resources that expand those available within school district. This group could fulfill a number of roles including investigation of funding sources and development of partners.