EDUCATIONAL SPECIFICATIONS

FOR THE

GREEN TECH ACADEMY HIGH SCHOOL

Lodi Unified School District

April 5, 2011
Revised April 15, 2011

Dr. Cathy Washer, Superintendent
ACKNOWLEDGEMENTS

We would like to acknowledge the following members of the Educational Specifications Committee for their valuable assistance with this project:

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- Tim DeWitt, Rainforth Grau Architects
- John Dale, Greenworks
- Carolie Sly, Center for Ecoliteracy
- Mike White, Diede Construction

Special thanks go to the educators on the committee. Facilities should always be designed in response to the educational program. They should reflect what is being taught and how it is being taught. The educators provided first hand knowledge of how the programs could work and their input was essential to the completion of this project.

Dennis L. Dunston, AIA, LEED AP
Total School Solutions
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“In the heyday of the psychometric and behaviorist eras, it was generally believed that intelligence was a single entity that was inherited; and that human beings – initially a blank slate – could be trained to learn anything, provided that it was presented in an appropriate way. Nowadays an increasing number of researchers believe precisely the opposite; that there exists a multitude of intelligences, quite independent of each other; that each intelligence has its own strengths and constraints; that the mind is far from unencumbered at birth; and that it is unexpectedly difficult to teach things that go against early ‘naive’ theories that challenge the natural lines of force within an intelligence and its matching domains.”

Frames of Mind: The Theory of Multiple Intelligences
Howard Gardner

In his 1983 book Frames of Mind, Howard Gardner hypothesized that people learn in different ways; each person has several types of intelligences instead of only one. We all have different levels of each of these intelligences. He proposed that students could achieve different levels of success based on the focus of the educational process in those intelligences. Some students learn well in a lecture environment, however, many students learn more effectively in a hands-on environment where learning can be based on a specific theme of interest. Students can learn more effectively when they can apply these interests through the use of relevant, real life projects. His theories have been widely accepted within the academic communities and have been used as the basis for new methodologies of teaching.

Since the release of this book, there has been a great deal of research conducted on the delivery and organization of the educational program. In 1992 the California Department of Education published the task force report Second to None: A Vision of the New California High School in which goals were established for reducing the high school drop out rate to 10%, increasing the attainment rate for Bachelor’s Degrees to 25% of high school graduates and increasing the attainment of Associate Degrees to 25%. The State still falls well short of these goals.

Second to None proposed organizational changes to high school education into small learning communities or academies. Integrated curriculum and project based learning were also a part of the recommendations. The small learning community concept has been shown to have a significant impact on educational outcomes however, this structure has not been widely adopted throughout the state.

In the 2010 publication Multiple Pathways to Student Success: Envisioning the New California High School, the CDE once again indicates the advantages of small learning communities; rigorous, integrated curriculum that is presented in a thematic, project based format in relevant, real life projects.
Introduction

The Green Tech Academy High School will embody many of these principles to create a learning environment that will encourage students to achieve educational excellence.

News stories are frequently heard about new green businesses starting up in the California Central Valley. It is estimated that as much as 10% of the new businesses started as the US economy emerges from the current recession will be in some respect related to green technologies. It is timely that the Lodi Unified School District is developing a new Green Tech Academy High School. This facility will provide graduating students with the opportunity to secure jobs directly in this new market, pursue further knowledge in higher education or to develop their own business related to green technology.

Whether students choose to pursue careers in areas related to green technologies or not, their experiences in the Academy will provide them with an increased knowledge and sensitivity to the impact we have on our environment and how sustainability impacts our professional and personal lives.
EDUCATIONAL PHILOSOPHY

The Green Tech Academy High School will prepare 21st century leaders to protect, honor, and support the biosphere upon which all life depends. As we enter this century, environmental degradation is of paramount concern, threatening to be irreversible if we don’t act now. Today’s high school students are only a few years away from making complex decisions that hold the potential to reverse our downward trajectory and uphold Earth’s life systems.

The Academy students will have the knowledge, skills, and attitudes to transform human behavior in ways that preserve human life and the planet. They will graduate with a deep understanding of how we must redefine our relationship with the natural world and redesign human communities. Their sophisticated and life-affirming high school education will prepare them for college and as productive wage earners and citizens in their communities.

From the buildings and grounds to the curriculum, the Academy will serve as an “apprentice community” of sustainable living. The facilities will serve as “teacher” through design for provisioning the school community with food, energy, materials, and water. The outside spaces will be as important as the inside spaces, serving as laboratories for learning.

The Academy is founded on the following premises:

A sustainable society is “one that is designed in such a manner that its ways of life, technologies, and social institutions honor, support, and cooperate with nature’s inherent ability to sustain life.” (Fritjof Capra)

To sustain life on Earth, we must turn to nature for guidance, since it has sustained life for 3.8 billion years. Therefore, students will develop an understanding of key ecological principles and learn to apply them to human communities.

Systems thinking is essential for comprehending the complexity of the world, recognizing that we cannot understand any whole system by merely studying its parts. Traditional education divides content into artificial disciplines, giving students a simplistic and partial grasp of how the world works. Systems thinking requires a new approach to organizing course content and a wider repertoire of teaching strategies. Students learn best in an interdisciplinary manner within the context of the natural world, the surrounding community, and the classroom setting.

Citizens of the 21st century will exhibit emotional intelligence, which extends empathy for others to include all living things; social intelligence, which allows them to form collaborative communities that address complex societal issues; and ecological intelligence, which recognizes the web of connections between human behavior and nature’s systems.

To be effective, high schools must be designed with the adolescent stage of development in mind and also take into account the diverse learning styles of students. While these foundations of learning are widely in-
Educational Philosophy

Corporated in the primary years, many secondary schools tend to view students as passive receptacles of irrelevant information. Successful high schools build their programs around the hallmarks of adolescent development and ensure that all learning styles are addressed. This is best accomplished through interdisciplinary, project-based learning, opportunities for student choice, and multiple forms of assessment. Teachers capitalize on teenagers’ interest in participating in the wider community and working to improve the world.

Students learn not only course content, but habits of mind that are necessary for success in college and careers. These habits of mind are:

- Persistence
- Decreasing impulsivity
- Listening to others with understanding & empathy
- Cooperative thinking & collective wisdom
- Flexibility in thinking
- Metacognition: Awareness of one’s own thinking
- A sense of humor
- Questioning & problem-posing
- Drawing on past knowledge and applying it to new situations
- Risk-taking
- Using all the senses
- Ingenuity, originality, insightfulness, creativity
- Wonderment, inquisitiveness, curiosity and the enjoyment of problem solving: a sense of efficacy as a thinker.
The organizational structure of California high schools has changed little since the days when agriculture dominated the business world. High schools have been organized in departments with core facilities centrally located and used by all students. In many communities, high schools housed large numbers of students, as many as 2,000 in most districts and up to 5,000 in larger districts. This organizational structure has allowed many students to pass from 9th grade through exiting with little attention being paid to the student’s specific needs. All too often, exiting was in the form of dropping out of high school prior to graduation. Teachers became just as invisible in such organizations; attending monthly departmental meetings, but independently planning and teaching classes with little interaction with other teachers or staff.

In the late 1980’s, the California Department of Education began development of several curriculum restructuring documents. Second to None outlined the restructuring of high school curriculum. One of the elements of that restructuring was the development of Small Learning Communities (SLC). Themed SLC’s encourage interdisciplinary instruction, with teachers collaborating across subject areas to present the material in a way that brings greater relevance to real world situations. The concept of SLC’s breaks the student and teacher population into smaller groups that work together over a longer period of time and which allows the teachers to understand the needs of individual students and address those needs in day to day instruction.

In their most recent publication on this topic, Multiple Pathways to Student Success: Envisioning the New California High School, the CDE outlined principles that will connect students with teachers and community role models and make the high school experience relevant, rigorous and based on real world projects. The Green Tech Academy High School will be based on these principles.

Linked Learning, Multiple Pathways and Small Learning Communities are relatively new concepts which, as a whole, lack significant documentation on overall effectiveness. However, numerous studies have shown that the components of these approaches have had significant success in improving the achievement of students:

• Rigorous academic and career technical courses with student support and work experience has been shown to increase high school exit exam passage rates in minority students enrolled in California Partnership Academy programs;

• National studies have shown an increase in employment and earning rates for Hispanic and African American students enrolled in themed career academy programs;

• There is a large body of literature that supports the positive effects of small learning communities. Schools organized in a single small school or multiple small learning communities within a larger school have been shown to increase student participation, reduce absenteeism and increase graduation rates.
The Green Tech Academy High School will prepare students for opportunities in post secondary education and for opportunities in the job market. Students will be required to successfully complete the a – g entry requirements of the University of California and the LUSD graduation requirements. They will learn through career technical, hands-on projects that will connect subject material to relevant, real world projects.

Multiple Pathways addresses the thematic approach to curriculum delivery and discusses themes based on the 15 industry sectors identified for model curriculum standards for career technical education in California Education Code Section 51226. The theme of this school will be based on Green Technologies, however, the organization of the school into SLC’s will allow any of the 15 industry sectors to be explored within the Green Technology theme. In the future, green technology and sustainability will have a significant impact on most of these sectors.

Research has shown the importance of tactile senses to the learning process. Integrating all the senses into the learning process is important, however, the use of hands-on learning techniques has been shown to be essential to understanding and cognitive development. Applying knowledge gained in classroom study to real-world relevant projects will allow students to utilize these senses and enhance the learning process. Spaces will be provided in close proximity to the classrooms for students to use these skills in the development and construction of interdisciplinary projects that will draw connections between different subject material and with real world applications. It has been shown that students retain more of the material learned through this process than through rote learning.

Project based learning will also allow students to engage in projects as a group, with each student contributing to the project. This aspect brings further real life context to the learning process and teaches interpersonal skills important to the work environment. The project spaces should allow for small groups working together on projects. Teaching techniques and the physical environment should be patterned after business models. Business partners will be a good resource for this process and should take an active role in the curriculum planning process.

The interdisciplinary instructional models are key to the success of this process. Teachers should work together to develop projects and instruction that are integrated across subject areas. Teachers must collaborate, be given time for collaboration and time for preparation of integrated projects. Spaces should be provided for teacher collaboration and planning.

Work-based learning in the form of internships with local businesses will be a part of every student’s curriculum. Learning in a real world environment and applying the knowledge that is learned in the classroom will enhance the understanding and retention of the subject material. The workplace environment engages the students and allows them to experience career opportunities.

Although the theme of this school will be Green Technology, there should be exposure to many different careers and occupations to help the students determine the path that is right for them. The Green Technology theme is ideally suited this approach. Green technologies and sustainability are impacting almost every aspect of our lives and most professions and occupations. Projects should be designed to expose the students to numerous career opportunities and show how sustainability will affect those careers.
Another key element of the effective high school education is student support services. Each student should develop strong connections with adult role models on the school site and in the business community. These connections will add relevance to the students learning process and will provide the students with resources for academic and social issues. Students and teachers should have access to career, academic and social counseling. Tools such as The California Career Resource Network (CalCRN), the California FreeZone, California Reality Check and other online and printed materials should be readily available to students and teachers in a central counseling office and at each SLC through the network and in the Study Areas. Space should be provided for a career center with areas for printed and electronic information on careers, colleges and job opportunities.
The campus will be equipped with a wireless network. Each student and teacher will be supplied with a laptop computer for use at the school. Sufficient electrical outlets should be provided in the classrooms and project spaces to power the computers. Wired connections will be used for sensitive material such as grades and financial information.

It is anticipated that most, if not all text books, and most reference material will be digital and available on the campus network or the internet. The need for a central library is limited. Small reading/study rooms will be provided in each Small Learning Community. These reading rooms will have a limited collection of printed material and career material and will provide students and teachers with a place for quiet study.

The primary phone system on the campus will be Voice Over Internet Protocol (VOIP) system. At the time of this writing, VOIP devices do not work effectively with wireless network systems. Data drops should be included in each space for use with the VOIP system. Security with wireless systems can be an issue. The data drop for the VOIP phone system can also be used for secure connections to the network. Network innovations will be monitored during the development of the project to determine if wired connections are still required at the time of construction.

It is anticipated that interactive whiteboard technology will be used in this facility. The interactive whiteboard could take the place of network projection systems, TV monitors for cable TV, and overhead projection systems. The District may wish to include projection screens, however, they would not be necessary with the interactive whiteboard technology.

Some interactive whiteboard systems require ceiling mounted projectors which could have structural implications. Other systems include cantilevered boom projectors attached directly to the screen. The District should investigate the type of system to be used in this facility prior to the finalization of the structural design.

Many of the green systems included in the design will have data that can be monitored for educational purposes. The availability of solar energy can be monitored with solar sensors; photovoltaic and wind generation systems can be monitored for the level of power produced. This can be compared to the total power usage on the site. Systems could be set up to monitor energy usage for equipment such as HVAC units. A display of these elements could be a valuable learning tool for students and would help them to relate to what they are learning.
The design of the facilities should reflect the curricular theme of the school. It should exemplify sustainability and environmental sensitivity and provide opportunities for the facilities to be used as tools for learning these principles.

One of the sustainability goals for this project is to attain a grid neutral status. Grid neutrality is the process of producing the same amount of electrical power on the site as is used when averaged over a period of time. Grid neutrality for school sites has been a goal for the State for several years. Grid neutrality can be achieved with the reduction of on site power usage through energy conservation and through the production of electricity with photovoltaics or wind power. The Lodi Unified School District has recently taken a great step toward grid neutrality with the dedication of the photovoltaic system installations throughout the District.

Another goal for this Academy is to achieve a LEED Silver certification. The Leadership in Energy and Environmental Design (LEED) program is recognized internationally as the standard for design of green buildings. The LEED system assigns points for elements of sustainability that are incorporated into a design. There are six major categories in which a project can attain points:

- Sustainable Sites;
- Water Efficiency
- Energy & Atmosphere;
- Materials & Resources;
- Indoor Environmental Quality;
- Innovation & Design Process

If a sufficient number of points is attained, a project can receive one of four categories of certification:

- Certified;
- Silver;
- Gold;
- Platinum.

Attaining a certification at any level is an indication that the project has achieved a high level of conformance to green standards.

To qualify for the maximum benefit of funding in the State School Facilities Program (SFP), this project must also attain the highest level of points possible in the High Performance Incentive (HPI) grant program. The HPI program is based on the Collaborative for High Performance Schools (CHPS) program. The CHPS point system is similar to the LEED for Schools program.

Some concepts of sustainability that were discussed in the process of developing these Educational Specifications include:

- Earth sheltered construction. The building and the central court could be partially or entirely below grade or earth bermed for energy efficiency.
- Rooftop gardens could be used for demonstration areas and for energy efficiency. Solar experiment demonstrations could be conducted in this area.
- Accessibility to roof gardens could be an issue. If some portions of the project were developed in two stories and others in single story, access could be made less expensive by providing the rooftop activities above the single story elements and providing access from the second floor of the
two story elements.
- Photovoltaics should be considered both for power generation and as a learning tool.
- As much daylight as possible should be provided to all spaces.
- The design should exemplify sustainability wherever possible. The project should be designed in and of itself as a tool for the students to learn about sustainability and the concepts of green building.
- Gardens should be included where students can learn about the propagation of plants for food production at the school.
- Wind generators should be installed to aid in the goal of reaching grid neutrality and as a learning tool.
Research has shown that implementing small learning communities or academies can have a significant impact on educational outcomes. Research has also shown that project based learning, utilizing relevant, real life projects can enhance the learning process and provide greater comprehension of material. Small learning communities allow students and teachers to develop extended relationships which allow the teachers to better understand the needs of each student and modify the learning process to adapt to each student’s needs.

Teaching stations in the Green Tech Academy will be arranged around a group project space creating a Small Learning Community (SLC). Each upper level SLC will contain 3 classrooms and a science lab around a project space. The project space will be used as a teaching station in addition to providing a space for the development of projects. The 9th grade SLC will contain 4 classrooms and a science lab, but not a project space. Two additional classrooms will be provided in the project for elective and AP classes. Each SLC will contain a conference room where teachers can collaborate and develop the integrated curriculum and integrated projects that are key to the success of the small learning community process. Where possible, teaching stations should have the capability of opening directly onto the project space to provide large spaces for demonstrations and large group lectures. The project space should have the capability of opening onto an exterior court with large, rollup doors, allowing large scale projects to be moved with relative ease. The exterior courts should have vehicular access for delivery of materials and moving of completed projects.

Each SLC will have a theme related to green technology. These themes will vary over time but may include areas such as photovoltaics, sustainable building design, sustainable waste management, sustainable energy production or sustainable manufacturing. The curriculum and the projects for the SLC will be based on this theme. The themes established for the initial design of this project are Design—Build—Grow. A part of the curriculum will include instruction in career paths and job opportunities related to the theme of the SLC.

Although some classes such as physical education and Advanced Placement classes will be taken outside the SLC and may be combined with students of other SLC’s, students and teachers will be assigned an SLC as a home base and take most of their classes in that location.

The SLC’s will be arranged around a central court. This court will serve on a daily basis as a dining facility and as a demonstration and display area for student projects. The demonstration area will allow students to be aware of projects being conducted in other SLC’s. The court will also be used for presentations to students, staff and visitors. The court should have the capability of seating at least 600 people in movable seating and/or bleachers. Where possible, one or more of the project rooms in the SLC’s could open directly onto the central court to allow for the expansion of that space for large events. Large rollup doors could be used to maximize the open space. These doors would need to have good acoustical characteristics to provide acoustical separation when closed.
Building Program

This facility will not be designed with a standard gymnasium or multipurpose area. Physical education requirements will be fulfilled through programs in the Exercise Room and in outdoor spaces. Similarly, the outdoor PE spaces will be limited. It is not anticipated that this facility will offer extracurricular sports activities and will not be designed with athletic fields. Limited sports fields and hard-court play areas will be provided.

Library Services
Due to the organization of this facility, no central library will be included in the design. The functions normally associated with the library will be accommodated by other spaces throughout the Academy:

- Access to printed collection– Much of the information associated with a centralized library will be digitally accessible through the computer network. Each student will have access to a laptop computer and the site will be equipped with a wireless network, giving students and staff access to material at all locations on the campus. Textbooks will be provided in digital format and accessible on the computer. Small selections of printed material will be available in the Study Room of each Small Learning Community.
- Study area- A centralized library typically provides a location for students to study in a quiet environment when they are not in class. Each SLC will include a Study Room for students to use as a quiet study area. In addition, two teaching stations, indicated in the 9th Grade SLC, will be provided for use as study environments and for use with elective classes not associated with a specific SLC. These classrooms may also be used for Advanced Placement (AP) classes.
- Access to reference material– Reference material will be available through the computer network. Small collections of printed reference material may be included in the Study Room of each SLC.

Classrooms
All classrooms will have the following requirements:

- As much daylight as possible within the design;
- 12 lft of cabinets including bookshelves and storage cabinets;
- Teachers’ wardrobe cabinet;
- The primary teaching wall will be at the front of the classroom and have an interactive whiteboard.
- A secondary teaching wall will be adjacent to the primary teaching wall and include 8 lft of white board.
- Although the site will be equipped with a wireless network, the connections for the teacher’s computer and telephone will be wired. These will be on the main teaching wall to the side of the interactive whiteboard;
- There will be a wall mounted clock/speaker on the wall at the rear of the classroom;
- There will be a data connection for the VOIP system at the teacher’s desk;
- Teaching stations in the Design, Build and Grow SLC’s may open directly onto the Project Space. These openings should be large and provide an opportunity for the classrooms to act as an expansion space for the Project Room. The door separating these two spaces should provide good sound isolation when closed.
- As indicated in the relationship diagrams, two classrooms in each SLC will be designed with an operable wall as a separation. When opened, the two classrooms will provide a space for large group lectures with seating for up to 60 students.
- Separations between the teaching stations and the Project Room should provide visual access for supervision of stu-
students if no teacher is in the Project Room.

- The classrooms may be opened to the Project Space frequently. The environmental controls should take this into account.
- Tackable wall surface should be included on all exposed walls.
- Sufficient power connections should be supplied in all spaces to accommodate the laptop computers.
- Student seating should be flexible, allowing frequent reconfigurations for varying teaching modalities. Tables should be considered over desks.

**Project Rooms**
The Project Room in the Design, Build and Grow SLC’s is intended to house one teacher and one class of students. There should be an adequate area for seating a class of students in addition to the other activities that take place in the Project Room. Teachers in each SLC will coordinate the use of the Project Room, the Science Lab and the classrooms.

**DESIGN Project Room**
Mobile CAD work stations come equipped with additional software for standard graphic design and word processing. These stations enable students to do CAD architectural design of buildings, vehicles, and landscape architecture. A large interactive white board and large classroom overhead screen allows students to display their CAD projects for large scale perspective and maximum impact.

To supplement the CAD software, standard graphic design and word processing software allows students to design green educational board games and computer games as well as green educational curriculum for elementary, middle and high schools. It has been shown that students learn better when they have the opportunity to teach a subject; This will give them the opportunity to pass their newly acquired green knowledge to others outside the Academy.

In addition to the standard CAD stations for 30 students, standard size printers will be available in the studio. Two full size (42” wide) printers should be provided for large architectural drawings, school banners, posters, and large graphic designs for fund raising projects and event promotion.

Layout space should be provided for large architectural drawings. Provide work tables for students to discuss projects and make scale models of their electronically created projects.

**BUILD Project Room**
This is by far the largest project room. The space will accommodate the learning of building and manufacturing processes. Projects are all about scale, starting small and then increasing in complexity. Large mobile work tables allow students to discuss their own projects as well as CAD designs produced by the Design SLC students. Models will be created from these designs. These small scale models could be as basic as three dimensional paper models or as advanced as intricate miniatures made of wood, metal or plastics. The room is a fully equipped metal and wood shop to allow students to create the more advanced projects described below.

Students progress from the model stage to full scale production of projects such as the ultimate green machine: the bicycle. When students have mastered the basic mechanics of bicycles and have a foundation to build from, they progress to more complex projects; small battery packs and electric motors can be added to create the electric bicycle.

Increasing in complexity, students design and build scale model solar powered cars. Continuing to progress in complexity, students
design and build human powered cars. A battery and electric motor is added to create the electric car.

Beyond bicycles and cars we have flight. Students design and build small scale models, radio controlled models and full scale human powered, solar powered and battery electric airplanes.

In addition to transportation related projects, Build SLC students could design and build solar powered fountains, irrigation water pumps for the production garden, wind turbines, living wall systems incorporating aquaponics and renewable energy metal sculptures.

Interactive white board displays similar to those in the Design SLC should be included to allow students to present projects.

**GROW Project Room**
This space includes the basic components of a demonstration kitchen and is connected to the production kitchen off the Court. Fruits and vegetables grown by the students in the organic garden and on the living roof provide fresh food for daily consumption by the students at lunch. Produce can also be sold at the local farmers market to give students first hand experience in the business of agriculture. This process will also create connections to the surrounding community and provide income for fundraising activities.

Kitchen scraps are recycled by composting for the organic garden. A small vineyard could be planted to introduce students to one of the fastest growing branches of agriculture in the Central Valley: viticulture.

In addition, students can grow plants, flowers and trees for planting in the nature preserve and elsewhere on campus. Students can design and maintain the living wall aquaponics system designed by the Design SLC students and built by the Build SLC students.

Provide potters’ wheels to allow students to create ceramic or clay pots and other earthenware. Work tables should be provided for applying glaze to the clay and shelving provided for drying space.

These activities will give the students a good understanding of agriculture and business while they are learning writing skills, math, history and science.

The Grow Project Room should be equipped with mobile work tables for working with plants; deep sinks with mud traps for cleanup; microscopes for studying the plants on a cellular level.

**EXERCISE Room**
Human powered electric generators with power production displays in real time should be provided. Students could have competitions to determine who can produce the greatest amount of electricity. Other screens could display the power being consumed by equipment on the site. Students will obtain a greater understanding of the power necessary to run the equipment that we sometimes take for granted.
**PROJECT BUDGET**

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<td>Building Area Budget</td>
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DIAGRAM CONVENTIONS

CONVENTIONS USED IN RELATIONSHIP DIAGRAMS

- Bubbles are not representative of the size or shape of the space. They are used to show relationships only.
- The groupings of spaces are to indicate relationships only. They should not be perceived as being an indication of buildings. The functional spaces may take place in a single building or in more than one building.

**DIRECTLY ADJACENT**
Next to each other; no direct access

**DIRECT ACCESS**
Next to each other with direct access

**CONTROLLED ACCESS**
Next to each other with controlled access. Access may be limited to staff or may be through service windows.

**CLOSE PROXIMITY**
Spaces are accessible through hallways or other spaces

**VISUAL ACCESS**
SITE RELATIONSHIPS

- PLAYFIELDS
  - HARDCOURT
- NATURE PRESERVE
  - NATURE TRAIL / PAR COURSE
- COURT
  - 9th GRADE
  - BUILD
  - DESIGN
  - GROW
  - EXTERIOR COURT
  - GREENHOUSE
  - PRODUCTION GARDEN
- STAFF & VISITOR PARKING
- ADMIN
- STUDENT PARKING
- OUTDOOR COVERED EATING
- KITCHEN

ORGANIZATION
SITE REQUIREMENTS

The anticipated site for the Green Tech Academy High School includes 15 acres. The following elements will be included in the site design:

This facility is intended to have limited athletic facilities provided. Provisions for sufficient outdoor activities will be included in the design to meet the high school graduation and the UC a-g requirements. These elements include:

Hardcourt:
- 2 basketball courts. The courts will have the additional striping for volleyball and be equipped with sleeve inserts in the paving to accept volleyball standards.
- The hardcourt should be in close proximity to the Exercise Room.

Fields:
- A multipurpose playfield to accommodate field games such as soccer and flag football. No provisions will be included for bleachers or track.
- Fields should be in close proximity to the Exercise Room.

Nature Trail / Par Course:
- A trail will be provided to take advantage of the natural environment. This course will be used for jogging and will have exercise stations located at intervals along the trail.

Greenhouse:
- Space for a greenhouse will be provided in close proximity to the Grow Project Space. This facility will be actively used in the educational program for the Grow Studio. Provisions should be included in the design for utility stubs to the location of the greenhouse.

Production Garden:
- Based on the available space on the site, a large production garden will be included in close proximity to the Grow Project Space. This area will be used in conjunction with the educational program in the Grow Studio. Utility provisions should be included in the design of the site.

Nature Preserve:
- Based on the available space on the site, a nature preserve could be established for use in the study of environmental sciences. This area could also be used for storm water retention on the site. Plants indigenes to the Central Valley could be planted and studied as a part of the educational program.

Parking:
- Student parking will be provided for 200 cars.
- Staff parking will be separate from the student parking and 40 spaces will be provided.
- Visitor parking will be located in close proximity to the Reception area in the Administration.
- Charging stations will be included to encourage the use of electric vehicles.
- Photovoltaic panels will be used to provide power to the site and to provide shade for the parked cars.
- Spaces in all parking areas will be reserved for use by car pools.
- A secure area will be provided for bicycle parking.

Sufficient queuing space should be provided for parents in cars to drop off and pick up students without impacting the off site traffic.

Provisions should be made for a city bus stop at the front of the academy.
### BUILDING AREA SUMMARY

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9th Grade</td>
<td>10,445</td>
</tr>
<tr>
<td>DESIGN</td>
<td>10,097</td>
</tr>
<tr>
<td>BUILD</td>
<td>11,297</td>
</tr>
<tr>
<td>GROW</td>
<td>10,097</td>
</tr>
<tr>
<td>ADMINISTRATION</td>
<td>2,678</td>
</tr>
<tr>
<td>COURT / DEMONSTR. AREA</td>
<td>9,603</td>
</tr>
<tr>
<td>EXERCISE</td>
<td>3,712</td>
</tr>
<tr>
<td>FOOD SERVICE</td>
<td>2,542</td>
</tr>
<tr>
<td>TOILETS</td>
<td>828</td>
</tr>
<tr>
<td>TOTAL</td>
<td>61,297</td>
</tr>
</tbody>
</table>
Sustainability and green technology will soon touch every aspect of our lives. From the food we eat to the clothes we wear; the buildings in which we live and work and the vehicles we drive will all be affected to some degree by green technologies.

The Green Tech Academy High School is intended to prepare students for life in this new world. The Academy is organized around three major themes of green technology: Design—Build—Grow

While the theme of this academy is green technology, it is important to stress that the curriculum will be designed to meet the UC a through g requirements and the LUSD high school graduation requirements. The goal is to provide the education that will prepare each student for the pursuit of greater learning in higher education or for directly entering the work force. While some students may choose to pursue careers in areas related to green technologies, the educational program will prepare the students for any career choice. No matter what path they choose, the students will have the knowledge they need to become productive members of our society.

9th grade students entering the Academy will be introduced to the concepts of sustainability and green technologies. While learning in this environment, they will be given the opportunity to visit the Design, Build and Grow SLC’s to experience the projects that are being developed in those studios. They will be given the opportunity to select from one of these SLC’s beginning in the 10th grade.

The curriculum in the Design SLC will concentrate on how the design of the elements around us can impact and be impacted by green technologies. The students will be given the opportunity to design projects that reflect sustainability. Computer Aided Design (CAD) stations will be available in the Project Space of the Design SLC and students will learn the concepts of design while using drafting and 3D modeling programs in the development of real world projects.

Learning in the Build SLC will concentrate on the manufacturing and building processes and how those processes are impacted by green technologies. Students will have the opportunity to build wood and metal projects of their designs and learn how these projects can be made more sustainable. Students in the Build SLC will have hands-on learning experiences with the tools for building and manufacturing.

The Grow SLC will present the curriculum with an agricultural theme. Students will experience the life cycle process of how plants are grown and processed into the food we eat or the products we use. A demonstration kitchen is included in the Project Space in the Grow SLC to show students how crops can be processed or prepared for direct consumption. Crops and herbs grown in the greenhouse and the production garden will be used in the kitchen for consumption by the staff and students.

It is anticipated that students will be given the opportunity to change learning communities at intervals and it is also anticipated that students in the different SLC’s may collaborate on projects: Concepts developed in the Design SLC may be built in the Build SLC and used in the production of crops in the Grow SLC.
RELATIONSHIPS

CLASSROOM → CLASSROOM

CLASSROOM → CLASSROOM

CLASSROOM → CLASSROOM

CLASSROOM → CLASSROOM

SCIENCE LAB → STUDY AREA

PREP → CONFERENCE ROOM

STUDY AREA

CONFERENCE ROOM

TOILETS

ROOFTOP GARDENS
Students entering the Green Tech Academy High School at the 9th grade level will be introduced to the concepts of sustainability and green technology in the first year. Sustainability touches all aspects of our lives and students will explore these relationships and obtain an overall understanding of sustainability.

Project Based Learning will be limited in the 9th Grade SLC. No Project Space will be included in this SLC. However, the curriculum will be presented with an emphasis related to the theme of the school. Basic concepts such as photovoltaics, fuel cells, sustainable building, sustainable manufacturing and sustainable agriculture will be introduced to the students.

There will be opportunities for students to visit and learn with upper level students in the Design, Build and Grow SLC’s to get a better understanding of the opportunities in those career paths and prepare them for entrance into the upper level studios.

A Conference Room will be provided for teachers and students to meet and discuss topics related to the curriculum. A Study Area will be included in the design to provide a space for students to study in a quiet environment and for small groups to meet to collaborate on small projects. This space will also house the SLC’s printed reading collection.

Classrooms in this SLC will be 960 sqft.

Two of the six classrooms indicated with this grouping are multipurpose classrooms for use as student study areas, AP classes or elective classes not offered elsewhere on campus. These two classrooms are for the use of all students in the Academy and, although they are indicated in the 9th Grade group, they may be located anywhere on campus.

<table>
<thead>
<tr>
<th>SPACES REQUIRED</th>
<th>Building Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td>6 960 5,760</td>
</tr>
<tr>
<td>Science Lab</td>
<td>1 1,500 1,500</td>
</tr>
<tr>
<td>Study Area</td>
<td>1 480 480</td>
</tr>
<tr>
<td>Science Prep</td>
<td>1 300 300</td>
</tr>
<tr>
<td>Conference Room</td>
<td>1 200 200</td>
</tr>
<tr>
<td>Student Restrooms</td>
<td>2 200 400</td>
</tr>
<tr>
<td>Staff Restroom</td>
<td>1 64 64</td>
</tr>
<tr>
<td>Subtotal</td>
<td>8,704</td>
</tr>
<tr>
<td>Net/Gross 20%</td>
<td>1,741</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10,445</td>
</tr>
<tr>
<td>9th Grade SLC</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td><strong>Space</strong></td>
<td><strong>Quantity</strong></td>
</tr>
<tr>
<td>Classrooms</td>
<td>6</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
The classrooms will work in conjunction with each other to provide interdisciplinary, project based learning opportunities. Each Teaching Station will serve as a home base for a student and for a teacher. Activities will include lectures, small groups discussions, independent study, testing and working on projects.

**RELATIONSHIPS**
- Close proximity to the Science Lab.
- Close proximity to the Study Area.
- Close proximity to the Conference Room.

**SPECIFIC REQUIREMENTS**
See section on Organization.

<table>
<thead>
<tr>
<th>9th Grade SLC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Space</strong></td>
</tr>
<tr>
<td>Science Lab</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
This space will be used for the instruction of general science. Lab stations will be provided to accommodate 30 students. Laboratory experiments may include biology, chemistry, physics and general science. An increasing number of projects are available in electronic format and a good computer / video projection system should be included so that all students have visual access to presentation through a central screen and their laptop computers.

**RELATIONSHIPS**
- Directly accessible from the central circulation of the SLC.
- Close proximity to the classrooms in the 9th Grade SLC.
- Direct access to the Prep Room.

**SPECIFIC REQUIREMENTS**
- Gas, water and compressed air should be provided for use with project development and experimentation. Electrical connections should be provided to work stations.
- Tackable wall surface should be included wherever possible.
- Durable and low maintenance floor coverings conducive to active project development. Ceiling material should provide acoustic absorption.
- All areas of each SLC should have access to a wireless network.
### 9th Grade SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Area</td>
<td>1</td>
<td>480</td>
<td>480 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
This space will be available for quiet study for students not involved with classroom activities. The space will house each SLC’s collection of printed library material. Students will have access to the school network and the internet through the wireless network system.

#### RELATIONSHIPS
- Accessible from the main circulation of the SLC.
- Close proximity to the classrooms in the SLC.

#### SPECIFIC REQUIREMENTS
- Provide a comfortable environment for students to study.
- Comfortable seating and a small conference table.
- Provide power connections for laptop computers.
- The wireless data network should be accessible in this space.
- Tackable wall surface where available.
- 10 linear feet of bookshelves 6 feet tall for the library collection for the SLC.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Prep</td>
<td>1</td>
<td>300</td>
<td>300 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
Space used primarily by teachers to prepare for experiments in the Science Lab. Cabinets for the storage of chemicals and equipment should be provided. A fume hood should be provided to exhaust hazardous fumes. The space will be used by a limited number of people at one time.

#### RELATIONSHIPS
- Direct access to the Science Lab.
- Controlled access from the central circulation in the SLC.

#### SPECIFIC REQUIREMENTS
- Surface materials should be low maintenance and sustainable.
9th Grade SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference Room</td>
<td>1</td>
<td>200</td>
<td>200 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
Space for small groups to meet to discuss projects and curriculum. This space is intended for use by students and teachers. Teachers will use this space to collaborate on the integrated curriculum and the preparation of interdisciplinary projects.

**RELATIONSHIPS**
- Centrally located in the SLC.

**SPECIFIC REQUIREMENTS**
- Conference table and chairs for 10 people.
- 10 linear feet of bookshelves 6 feet tall for the library collection for the SLC.
- Comfortable seating for 4 people for quiet study.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Restrooms</td>
<td>2</td>
<td>200</td>
<td>400 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
These restrooms will primarily serve the students in the 9th Grade SLC and should house adequate fixtures to serve approximately 150 students.

**RELATIONSHIPS**
Centrally located within the SLC.

**SPECIFIC REQUIREMENTS**
- Floor, ceiling and wall surface materials should be low maintenance, easily cleaned and sustainable.
- Fixtures should be dual flow or low flow to reduce water consumption.
### 9th Grade SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Restroom</td>
<td>1</td>
<td>64</td>
<td>64 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**

This single accommodation restroom will serve as the primary facility for the staff in the 9th Grade SLC.

**RELATIONSHIPS**

Centrally located within the SLC.

**SPECIFIC REQUIREMENTS**

- Surface materials should be low maintenance and sustainable.
- Fixtures should be dual flush or low flow fixtures.
RELATIONSHIPS
### SPACES REQUIRED

<table>
<thead>
<tr>
<th></th>
<th>Required</th>
<th>Gross</th>
<th>Net/Gross 20%</th>
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</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td>3</td>
<td>900</td>
<td>2,700</td>
</tr>
<tr>
<td>Science Lab</td>
<td>1</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td>Science Prep</td>
<td>1</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Project Space</td>
<td>1</td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td>Conference</td>
<td>1</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Study Area</td>
<td>1</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Storage</td>
<td>1</td>
<td>450</td>
<td>450</td>
</tr>
<tr>
<td>Student Restrooms</td>
<td>2</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Staff Restroom</td>
<td>1</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td>8,414</td>
<td></td>
</tr>
<tr>
<td><strong>Net/Gross 20%</strong></td>
<td></td>
<td>1,683</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>10,097</td>
<td></td>
</tr>
</tbody>
</table>

The curriculum in the Design SLC will concentrate on how design can impact our environment and how principles of sustainability can be used to lessen that impact. This studio may use the design of the built environment and the use of sustainable building materials as a source for themes for projects.

The design of sustainable vehicles could also be a source for material in this SLC. Solar powered cars, fuel cell vehicles, human powered aircraft are all potential projects that could be designed in this environment.

The studio will be centered around Computer Aided Design (CAD) stations with which students and work with 2D and 3D modeling programs to design their projects.
### Design SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td>3</td>
<td>900</td>
<td>2,700 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
The classrooms will work in conjunction with each other and with the Project Space to provide interdisciplinary, project-based learning opportunities. Each Teaching Station will serve as a home base for students and for a teacher. Activities will include lectures, small groups discussions, independent study, testing, and working on projects. Two classrooms will be directly adjacent to the Project Space. These classrooms will have an operable wall dividing them.

#### RELATIONSHIPS
- Directly accessible to the Project Space.
- Two of the classrooms will be connected with an operable wall.
- Close proximity to the Conference Room and the Study area.
- Directly adjacent to the Project Space and accessible to that space.
- Close proximity to the classrooms in the 9th Grade SLC.

#### SPECIFIC REQUIREMENTS
See section on Organization.

### Science Lab

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Lab</td>
<td>1</td>
<td>1,500</td>
<td>1,500 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
This space will be used for the instruction of general science. Lab stations will be provided to accommodate 30 students. Laboratory experiments may include biology, chemistry, physics, and general science. An increasing number of projects are available in electronic format and a good computer/video projection system should be included so that all students have visual access to presentation through a central screen and their laptop computers.

#### RELATIONSHIPS
- Directly accessible from the central circulation of the SLC.
- Direct access to the Prep Room.
- Close proximity to the classrooms in the 9th Grade SLC.
- Directly accessible from the Project Space.
- Visual access to the Project Space for supervision.

#### SPECIFIC REQUIREMENTS
- Gas, water, and compressed air should be provided for use with project development and experimentation. Electrical connections should be provided to work stations.
- Tackable wall surface should be included wherever possible.
- Durable and low maintenance floor coverings conducive to active project development. Ceiling material should provide acoustic absorption.
- All areas of each SLC should have access to a wireless network.
### Educational Specifications

**GREEN TECH ACADEMY HIGH SCHOOL**

#### Design SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Prep</td>
<td>1</td>
<td>300</td>
<td>300 sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES

Space used primarily by teachers to prepare for experiments in the Science Lab. Cabinets for the storage of chemicals and equipment should be provided. A fume hood should be provided to exhaust hazardous fumes. The space will be used by a limited number of people at one time.

### RELATIONSHIPS

- Direct access from the Science Lab and the Project Space. This access should be controlled by the teachers.

### SPECIFIC REQUIREMENTS

- Storage cabinets in base cabinets with countertops and wall hung units.
- Fume hood.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Space</td>
<td>1</td>
<td>2,500</td>
<td>2,500 sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES

Multipurpose space for the development of instructional projects. The Design SLC Project Space will include an area for lecture and stations for Computer Aided Design (CAD). One teacher will be based in the space and may be teaching a class at the same time that students from other classes are working on projects.

### RELATIONSHIPS

- Centrally located within the SLC.
- Direct access to central circulation to other areas in the Academy.
- Direct access to classrooms, Science Lab, Science Prep.
- Close proximity to the SLC Storage.
- Direct visual access to the Conference and Study areas for supervision.

### SPECIFIC REQUIREMENTS

- 30 student desks or tables for lecture seating.
- 30 CAD stations.
### Design SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference Room</td>
<td>1</td>
<td>200</td>
<td>200 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES

Space for small groups to meet to discuss projects and curriculum. This space is intended for use by students and teachers. Teachers will use this space to collaborate on the integrated curriculum and the preparation of interdisciplinary projects.

#### RELATIONSHIPS

- Direct access from the Project Space.
- Centrally located within the SLC.
- Visually supervised by teachers in the Project Space.
- Close proximity to the Study Area.

#### SPECIFIC REQUIREMENTS

- Conference table with seating for up to 10 people.
- Interactive whiteboard.
- Access to computer network and the internet through wireless connection.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Area</td>
<td>1</td>
<td>300</td>
<td>300 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES

This space will be available for quiet study for students not involved with classroom activities or projects. The space will house each SLC’s collection of printed library material. Students will have access to the school network and the internet through the wireless network system.

#### RELATIONSHIPS

- Direct access from and visually supervised by the Project Space.
- Centrally located within the SLC.

#### SPECIFIC REQUIREMENTS

- Tables for individual study.
- Comfortable seating for reading and study.
- Access to the wireless network.
- White board.
- Shelving for printed library material.
### Design SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>1</td>
<td>450</td>
<td>450</td>
</tr>
</tbody>
</table>

**ACTIVITIES**

Space for the storage of projects and project materials.

**RELATIONSHIPS**

- Close proximity to the Project Space.

**SPECIFIC REQUIREMENTS**

- Doors should be large enough to handle large projects.
- Shelving for material storage.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Restrooms</td>
<td>2</td>
<td>200</td>
<td>400 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**

These restrooms will primarily serve the students in the Design SLC and should house adequate fixtures to serve approximately 150 students.

**RELATIONSHIPS**

Centrally located within the SLC.

**SPECIFIC REQUIREMENTS**

- Floor, ceiling and wall surface materials should be low maintenance, easily cleaned and sustainable.
- Fixtures should be dual flow or low flow to reduce water consumption.
- The use of waterless urinals is strongly encouraged.
### Design SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Restroom</td>
<td>1</td>
<td>64</td>
<td>64 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**

This single accommodation restroom will serve as the primary facility for the staff in the Design SLC.

**RELATIONSHIPS**

Centrally located within the SLC.

**SPECIFIC REQUIREMENTS**

- Surface materials should be low maintenance and sustainable.
- Fixtures should be dual flush or low flow fixtures.
RELATIONSHIPS
## BUILD SLC

### SPACES REQUIRED

<table>
<thead>
<tr>
<th></th>
<th>Building Program</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Classrooms</strong></td>
<td>3 900</td>
</tr>
<tr>
<td><strong>Science Lab</strong></td>
<td>1 1,500</td>
</tr>
<tr>
<td><strong>Science Prep</strong></td>
<td>1 300</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>1 450</td>
</tr>
<tr>
<td><strong>Project Space</strong></td>
<td>1 3,500</td>
</tr>
<tr>
<td><strong>Conference</strong></td>
<td>1 200</td>
</tr>
<tr>
<td><strong>Study Area</strong></td>
<td>1 300</td>
</tr>
<tr>
<td><strong>Student Restrooms</strong></td>
<td>2 200</td>
</tr>
<tr>
<td><strong>Staff Restroom</strong></td>
<td>1 64</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>9,414</td>
</tr>
<tr>
<td><strong>Net/Gross 20%</strong></td>
<td>1,883</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>11,297</td>
</tr>
</tbody>
</table>

The curriculum in the Build SLC will be centered around the theme of building sustainably. Construction of elements for the built environment will be studied. Sustainable building materials and techniques can be used as a theme upon which the curriculum is based. Manufacturing processes and the construction of mechanical elements such as human powered aircraft, solar powered aircraft, photovoltaic cells, the application of photovoltaic cells in the production of powered objects can be used as the basis for learning. Students can learn the a-g requirements while engaged in the process of building projects.

The project room will be equipped with woodworking and metalworking tools. Computer controlled manufacturing machines such as the Computer Numerical Control (CNC) mill and the 3D printers will be studied and utilized in the building process.

Other equipment that will be used in the Project Room will include:

**Woodwork:**
- Table saw;
- Radial arm saw
- Drill press
- Power miter box
- Wood lathe
- Various hand power tools

**Metalwork:**
- Drill press
- Metal lathe

The Build Project Room should be equipped with classroom desks for 30 students in a lecture environment.
Building Program

- Stick welders
- Oxy-Acetylene welders
- Wire welders
- TIG arc welders
- Metal chop saw

The Project Space should include movable work tables with lockable storage cabinets below and work stools for seating. Work tables should accommodate approximately 30 students working on various projects.

Workbenches will be required for power tools such as the radial arm saw, miter saw and metal chop saw. The table saw should be equipped with extended in and out tables. All power equipment should be equipped with power ventilation equipment to exhaust sawdust to filtered containers.

The covered Exterior Court should be directly adjacent to the Project Space and accessible through large doors. This covered area could house welding equipment in secure storage. The Exterior Court could also be used for larger projects.

A secure storage space should be provided for flammable materials such as welding gases, paints, varnishes and cleaning materials.

A well ventilated paint booth should be included in the design to isolate the painting process from airborne particulates and to vent toxic fumes to the exterior.
### Build SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td>3</td>
<td>900</td>
<td>2,700 sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES
The classrooms will work in conjunction with each other and with the Project Space to provide interdisciplinary, project based learning opportunities. Each Teaching Station will serve as a home base for students and for a teacher. Activities will include lectures, small groups discussions, independent study, testing and working on projects. Two classrooms will be directly adjacent to the Project Space. These classrooms will have an operable wall dividing them.

### RELATIONSHIPS
- Directly accessible to the Project Space.
- Two of the classrooms will be connected with an operable wall.
- Close proximity to the Conference Room and the Study area.

### SPECIFIC REQUIREMENTS
See section on Organization.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Lab</td>
<td>1</td>
<td>1,500</td>
<td>1,500 sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES
This space will be used for the instruction of general science. Lab stations will be provided to accommodate 30 students. Laboratory experiments may include biology, chemistry, physics and general science. An increasing number of projects are available in electronic format and a good computer / video projection system should be included so that all students have visual access to presentation through a central screen and their laptop computers.

### RELATIONSHIPS
- Directly accessible from the central circulation of the SLC.
- Direct access to the Prep Room.
- Close proximity to the classrooms in the Build SLC.

### SPECIFIC REQUIREMENTS
- Gas, water and compressed air should be provided for use with project development and experimentation. Electrical connections should be provided to work stations.
- Tackable wall surface should be included wherever possible.
- Durable and low maintenance floor coverings conducive to active project development. Ceiling material should provide acoustic absorption.
- All areas of each SLC should have access to a wireless network.
**ACTIVITIES**
Space used primarily by teachers to prepare for experiments in the Science Lab. Cabinets for the storage of chemicals and equipment should be provided. A fume hood should be provided to exhaust hazardous fumes. The space will be used by a limited number of people at one time.

**RELATIONSHIPS**
- Direct access from the Science Lab and the Project Space. This access should be controlled by the teachers.

**SPECIFIC REQUIREMENTS**
- Storage cabinets in base cabinets with countertops and wall hung units.
- Fume hood.

**ACTIVITIES**
Space for the storage of projects and project materials.

**RELATIONSHIPS**
- Close proximity to the Project Space

**SPECIFIC REQUIREMENTS**
- Doors should be large enough to handle large projects.
- Shelving for material storage.
### Build SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Space</td>
<td>1</td>
<td>3,500</td>
<td>3,500 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
Multipurpose space for the development of instructional projects. The Build SLC Project Space will include a variety of woodworking and metalworking tools and machines for developing and building wood and metal projects. One teacher will be based in the space and may be teaching a class at the same time that students from other classes are working on projects. See Page 47 for a detailed description of the activities and requirements.

#### RELATIONSHIPS
- Centrally located within the SLC.
- Direct access to central circulation to other areas in the Academy.
- Direct access to classrooms, Science Lab, Science Prep.
- Close proximity to the SLC Storage.
- Direct visual access to the Conference and Study areas for supervision.
- Direct access through large doors to Exterior Court.
- Direct access from the Project Space.
- Centrally located within the SLC.
- Visually supervised by teachers in the Project Space.
- Close proximity to the Study Area.

#### SPECIFIC REQUIREMENTS
- 30 student desks or tables for lecture seating.
- See Page 47 for specific equipment to be housed in this space.
- Conference table with seating for up to 10 people.
- Interactive whiteboard.
- Access to computer network and the internet through wireless connection.

### Conference Room

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference Room</td>
<td>1</td>
<td>200</td>
<td>200 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
Space for small groups to meet to discuss projects and curriculum. This space is intended for use by students and teachers. Teachers will use this space to collaborate on the integrated curriculum and the preparation of interdisciplinary projects.

#### RELATIONSHIPS
- Direct access from the Project Space.
- Centrally located within the SLC.
- Visually supervised by teachers in the Project Space.
- Close proximity to the Study Area.

#### SPECIFIC REQUIREMENTS
- Conference table with seating for up to 10 people.
- Interactive whiteboard.
- Access to computer network and the internet through wireless connection.
**Build SLC**

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Area</td>
<td>1</td>
<td>300</td>
<td>300 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
This space will be available for quiet study for students not involved with classroom activities or projects. The space will house each SLC’s collection of printed library material. Students will have access to the school network and the internet through the wireless network system.

**RELATIONSHIPS**
- Direct access from and visually supervised by the Project Space.
- Centrally located within the SLC.

**SPECIFIC REQUIREMENTS**
- Tables for individual study.
- Comfortable seating for reading and study.
- Access to the wireless network.
- White board.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Restrooms</td>
<td>2</td>
<td>200</td>
<td>400 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
These restrooms will primarily serve the students in the Build SLC and should house adequate fixtures to serve approximately 150 students.

**RELATIONSHIPS**
- Centrally located within the SLC.

**SPECIFIC REQUIREMENTS**
- Floor, ceiling and wall surface materials should be low maintenance, easily cleaned and sustainable.
- Fixtures should be dual flow or low flow to reduce water consumption.
- The use of waterless urinals is strongly encouraged.
### Build SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Restroom</td>
<td>1</td>
<td>64</td>
<td>64 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
This single accommodation restroom will serve as the primary facility for the staff in the Build SLC.

#### RELATIONSHIPS
- Centrally located within the SLC.

#### SPECIFIC REQUIREMENTS
- Surface materials should be low maintenance and sustainable.
- Fixtures should be dual flush or low flow fixtures.
RELATIONSHIPS

- CLASSROOM
- STORAGE
- TOILETS
- CONF
- STUDY
- PREP
- SCIENCE LAB
- KITCHEN
- DEMONSTRATION KITCHEN
- EXTERIOR COURT
- COURT
- GREENHOUSE & GARDENS
The Grow SLC will provide education on how crops and plants can be grown, processed and used sustainably. Projects may include the science of plant growth and development, the impact of sustainable chemicals on crops, agribusiness, agricultural engineer or horticulture.

Projects developed in the Project Space may include the propagation of production crops, the study of sustainable fertilizers, and the use of crops in our diets. The Grow SLC is directly adjacent to the Kitchen with direct access. A small portion of the Project Space will be devoted to a demonstration kitchen to show how crops grown in the greenhouse or the production garden can be prepared for human consumption. Herbs grown in the gardens may be used to flavor the food served in the Kitchen. The Grow Project Space should have direct access to the outdoor greenhouse and the production garden.

The Grow Project Space will also be equipped with several pottery wheels for throwing clay pots that can be used in conjunction with the plants.

Academic classrooms in the Design, Build and Grow SLC’s are 900 sqft. Support spaces for these classrooms include the Project Space, the Conference and Study spaces and the exterior court. A class may be in the classroom in a lecture setting. Or a portion of the class may be in the classroom while others are in the Project Space working in small groups. Individuals may be in the Study room conducting research.

The Project Space in the Grow SLC should be directly adjacent to the Exterior Court and accessible with large, rollup doors for easy movement of equipment and materials. Potters wheels could be used on the covered Court.

<table>
<thead>
<tr>
<th>SPACES REQUIRED</th>
<th>Building Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td>3  900  2,700</td>
</tr>
<tr>
<td>Science Lab</td>
<td>1  1,500  1,500</td>
</tr>
<tr>
<td>Science Prep</td>
<td>1  300  300</td>
</tr>
<tr>
<td>Storage</td>
<td>1  450  450</td>
</tr>
<tr>
<td>Project Space</td>
<td>1  2,500  2,500</td>
</tr>
<tr>
<td>Conference</td>
<td>1  200  200</td>
</tr>
<tr>
<td>Study Area</td>
<td>1  300  300</td>
</tr>
<tr>
<td>Student Restrooms</td>
<td>2  200  400</td>
</tr>
<tr>
<td>Staff Restroom</td>
<td>1  64  64</td>
</tr>
<tr>
<td>Subtotal</td>
<td>8,414</td>
</tr>
<tr>
<td>Net/Gross 20%</td>
<td>1,683</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10,097</td>
</tr>
</tbody>
</table>
**Grow SLC**

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td>3</td>
<td>900</td>
<td>2,700 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
The classrooms will work in conjunction with each other and with the Project Space to provide interdisciplinary, project based learning opportunities. Each Teaching Station will serve as a home base for students and for a teacher. Activities will include lectures, small groups discussions, independent study, testing and working on projects. Two classrooms will be directly adjacent to the Project Space. These classrooms will have an operable wall dividing them.

**RELATIONSHIPS**
- Directly accessible to the Project Space.
- Two of the classrooms will be connected with an operable wall.
- Close proximity to the Conference Room and the Study area.

**SPECIFIC REQUIREMENTS**
See section on Organization.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Lab</td>
<td>1</td>
<td>1,500</td>
<td>1,500 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
This space will be used for the instruction of general science. Lab stations will be provided to accommodate 30 students. Laboratory experiments may include biology, chemistry, physics and general science. An increasing number of projects are available in electronic format and a good computer / video projection system should be included so that all students have visual access to presentation through a central screen and their laptop computers.

**RELATIONSHIPS**
- Directly accessible from the central circulation of the SLC.
- Close proximity to the classrooms in the Grow SLC.
- Direct access to the Prep Room.

**SPECIFIC REQUIREMENTS**
- Gas, water and compressed air should be provided for use with project development and experimentation. Electrical connections should be provided to work stations.
- Tackable wall surface should be included wherever possible.
- Durable and low maintenance floor coverings conducive to active project development. Ceiling material should provide acoustic absorption.
- All areas of each Pod should have access to a wireless network.
**Grow SLC**

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Prep</td>
<td>1</td>
<td>300</td>
<td>300 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
Space used primarily by teachers to prepare for experiments in the Science Lab. Cabinets for the storage of chemicals and equipment should be provided. A fume hood should be provided to exhaust hazardous fumes. The space will be used by a limited number of people at one time.

**RELATIONSHIPS**
- Direct access from the Science Lab and the Project Space. This access should be controlled by the teachers.

**SPECIFIC REQUIREMENTS**
- Storage cabinets in base cabinets with countertops and wall hung units.
- Fume hood.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>1</td>
<td>450</td>
<td>450</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
Space for the storage of projects and project materials.

**RELATIONSHIPS**
- Close proximity to the Project Space

**SPECIFIC REQUIREMENTS**
- Doors should be large enough to handle large projects.
- Shelving for material storage.
ACTIVITIES
Multipurpose space for the development of instructional projects. The Grow SLC Project Space will include an area for lecture and workbenches and tables for working with plant material. Stations with microscopes should be included for studying plant material on a cellular level. One teacher will be based in the space and may be teaching a class at the same time that students from other classes are working on projects. See Page 55 for a more detailed description of the activities.

RELATIONSHIPS
- Centrally located within the SLC.
- Direct access to central circulation to other areas in the SLC.
- Direct access to classrooms, Science Lab, Science Prep.
- Close proximity to the SLC Storage.
- Direct visual access to the Conference and Study areas for supervision.

SPECIFIC REQUIREMENTS
- 30 student desks or tables for lecture seating.
- Work tables for up to 30 students actively working on plant material projects.
- Deep sink with mud trap for cleanup.
- Potters wheel and work table for creating pottery associated with ornamental plants.

ACTIVITIES
Space for small groups to meet to discuss projects and curriculum. This space is intended for use by students and teachers. Teachers will use this space to collaborate on the integrated curriculum and the preparation of interdisciplinary projects.

RELATIONSHIPS
- Direct access from the Project Space.
- Centrally located within the SLC.
- Visually supervised by teachers in the Project Space.
- Close proximity to the Study Area.

SPECIFIC REQUIREMENTS
- Conference table with seating for up to 10 people.
- Interactive whiteboard.
- Access to computer network and the internet through wireless connection.
### Grow SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Area</td>
<td>1</td>
<td>300</td>
<td>300 sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES
This space will be available for quiet study for students not involved with classroom activities or projects. The space will house each SLC’s collection of printed library material. Students will have access to the school network and the internet through the wireless network system.

### RELATIONSHIPS
- Direct access from and visually supervised by the Project Space.
- Centrally located within the SLC.

### SPECIFIC REQUIREMENTS
- Tables for individual study.
- Comfortable seating for reading and study.
- Access to the wireless network.
- White board.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Restrooms</td>
<td>2</td>
<td>200</td>
<td>400 sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES
These restrooms will primarily serve the students in the Grow SLC and should house adequate fixtures to serve approximately 150 students.

### RELATIONSHIPS
Centrally located within the SLC.

### SPECIFIC REQUIREMENTS
- Floor, ceiling and wall surface materials should be low maintenance, easily cleaned and sustainable.
- Fixtures should be dual flow or low flow to reduce water consumption.
- The use of waterless urinals is strongly encouraged.
Grow SLC

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Restroom</td>
<td>1</td>
<td>64</td>
<td>64 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**

This single accommodation restroom will serve as the primary facility for the staff in the Grow SLC.

**RELATIONSHIPS**

Centrally located within the SLC.

**SPECIFIC REQUIREMENTS**

- Surface materials should be low maintenance and sustainable.
- Fixtures should be dual flush or low flow fixtures.
## SPACES REQUIRED

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception</td>
<td>1</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Clerical</td>
<td>4</td>
<td>75</td>
<td>300</td>
</tr>
<tr>
<td>Principal's Office</td>
<td>1</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Vice Principal's Office</td>
<td>1</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Conference Room</td>
<td>1</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Nurse's Station</td>
<td>1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Nurse's Restroom</td>
<td>1</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>Workroom</td>
<td>1</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Career Center</td>
<td>1</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Counselor</td>
<td>2</td>
<td>80</td>
<td>160</td>
</tr>
<tr>
<td>Academic Records Stor</td>
<td>1</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Registrar/Attendance</td>
<td>1</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Detention/Holding</td>
<td>1</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Technology / Electrical</td>
<td>1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Staff Restrooms</td>
<td>2</td>
<td>64</td>
<td>128</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td><strong>2,142</strong></td>
</tr>
</tbody>
</table>

**Net/Gross 25%**

People visiting the Academy will be required to check in at the Reception area of the Administration. The main entrance to the Reception area should be easily identifiable from the street. Visitor parking should be in close proximity to the entrance.
### Administration

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception</td>
<td>1</td>
<td>150</td>
<td>150 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES

All visitors to the site will check in at the reception area for the site. A seating area for 3—4 people should be provided. Parents will check in at the reception to pick up students during the school day. There should be a reception counter with accessible areas. The reception area and the school administrative staff will provide control over access to other areas in the administration area and in the school. The reception space should include and area for displaying examples of awards and projects developed at the school.

#### RELATIONSHIPS

- This space should be the main entrance to the school and be directly adjacent to the visitor parking area.
- The space should be directly adjacent to the Clerical area and allow visual control by the clerical stations.
- The main entrance should be clearly visible from the Clerical area.

#### SPECIFIC REQUIREMENTS

- Provide wall space for display of projects and awards.
- Include tackable wall surface where possible.
- Provide controlled telephone access from the seating area for contact with classrooms.

### Clerical

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clerical</td>
<td>4</td>
<td>75</td>
<td>300 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES

Open office space for 4 workstations. This space will house the main clerical staff for the school. Staff will act as receptionists, greeting visitors to the campus. There should be clear visible access to the main entrance, to the Reception area and visual access to the visitors’ parking area. The clerical staff will be the main telephone receptionists, directing calls to other stations in the school. There should be visual access to the Nurse’s station to monitor students with illnesses.

#### RELATIONSHIPS

- Directly adjacent to the Reception.
- Visual control of the student cot in the Nurse’s station.
- Close proximity to the Principal, Vice Principal and Conference spaces.
- The Clerical staff should have visual access to the central campus area (Court) and the visitor parking area.
- Direct access to Workroom.

#### SPECIFIC REQUIREMENTS

- Access to as much controlled daylighting as possible should be provided.
- Direct daylight should be controlled to limit the glare on work surfaces.
- 4 clerical workstations.
- Filing cabinets for clerical files.
- Built in counter for reception with accessible area.
### Principal’s Office

**Activities:**
Primary office for the school principal. The space should include an area for a small conference table with seating for 4 people. The space should include a primary entrance located in close proximity to the Clerical area and a secondary entrance outside at the rear of the administration area. The Principal may conduct meetings with parents, teachers or students containing sensitive information. The room should have good sound isolation characteristics.

**Relationships:**
- Close proximity to Clerical. The clerical staff will serve as receptionist and control the access to the Principal and Vice Principal.
- Close proximity and visual access to the Central Court.

**Specific Requirements:**
- Sound attenuation in walls and around doors.
- Visual access to the Central Court.
- Access to the wireless network.
- Data drop for VOIP phones system.
- Desk with computer station.

### Vice Principal’s Office

**Activities:**
One of the Vice Principal’s duties is addressing student discipline. The Vice Principal may engage in content sensitive conversations with students and/or parents. The room should have good sound isolation characteristics. An area should be included just outside the Vice Principal’s office where students can wait for meetings with the Vice Principal. This area should be visually supervised by the clerical staff.

**Relationships:**
- Close proximity to Clerical.
- Access to Central Court.
- Directly adjacent to a seating area for student disciplinary issues.

**Specific Requirements:**
- Sound attenuation in walls and around doors.
- Access to the wireless network.
- Data drop for VOIP phones system.
- Desk with computer station.

---

**Space** | **Quantity** | **Area** | **Total**
--- | --- | --- | ---
Principal’s Office | 1 | 250 | 250 sqft
Vice Principal’s Office | 1 | 200 | 200 sqft
### Administration

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference Room</td>
<td>1</td>
<td>200</td>
<td>200 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
Conference area with seating for 10-12 people around a conference table. This space will serve as a meeting area for the administrative staff and other small groups. It may be used for meetings with parents, students and teachers. Good sound isolation characteristics should be included in the design.

#### RELATIONSHIPS
- Close proximity to the Clerical area. Access to the conference room will be monitored by the clerical staff.
- Close proximity to the main entrance to the school.

#### SPECIFIC REQUIREMENTS
- Good sound isolation, attenuation characteristics.
- Power connections for computer and projector.
- Data connections for computer and projector.
- Data connection for VOIP telephone connection.
- Conference table with seating for up to 12 people.
- Projection screen or smart board.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse’s Station</td>
<td>1</td>
<td>100</td>
<td>100 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
The school nurse will be primarily responsible for treating ill students and monitoring the medications of students on prescription drugs. The nurse may not be on campus full time. This space provides a base of operations for the nurse when on campus. A cot should be provided in this space for students with illnesses. This cot should be visible to the clerical staff for cases when the nurse is not on site. A desk and a lockable cabinet for medications should be provided.

#### RELATIONSHIPS
- Directly adjacent to the Clerical space. The Clerical staff should have visual access to the interior of the space.
- Directly adjacent to the Nurse’s restroom.

#### SPECIFIC REQUIREMENTS
- Durable and easily washable wall surfaces.
- Durable and easily washable floor surfaces.
- Secure access to the site wireless network.
- Desk with computer station.
- 4 drawer filing cabinet.
- Lockable storage cabinet for medications.
- Cot for ill students.
### Nurse's Restroom

**Space**

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse's Restroom</td>
<td>64</td>
<td>1</td>
<td>64 sqf</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
Primary purpose for this restroom is for students with illnesses.

**RELATIONSHIPS**
- This space should be directly accessible from the Nurse’s Station and access should be controlled through that space.

**SPECIFIC REQUIREMENTS**
- Exhaust fan
- Durable and easily washable wall surfaces.
- Durable and easily washable floor surfaces.

### Workroom

**Space**

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workroom</td>
<td>1</td>
<td>200</td>
<td>200 sqf</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
- Area for business machines for teacher and staff use such as FAX machine.
- Area for storage of supplies.

**RELATIONSHIPS**
- Close proximity to administrative spaces for use by staff.
- Centrally located for use by teachers.
- Access from the central campus without going through the administrative spaces.
- Staff mailboxes should be located in this space.

**SPECIFIC REQUIREMENTS**
- Access to wireless network for FAX and VOIP phone system.
Green Tech Academy High School  

**Educational Specifications**

### Administration

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area (sqft)</th>
<th>Total (sqft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Center</td>
<td>1</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
This space will be used by students and staff to explore career and postsecondary options for students. Materials published by colleges and universities will be available as well as information on job opportunities. Several computers should be available for career research.

#### RELATIONSHIPS
- Directly adjacent and accessible to the Career Counselors’ offices.
- Close proximity to the Academic Records Storage area.

#### SPECIFIC REQUIREMENTS
- 4 computers with wireless network access

### Counselor

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area (sqft)</th>
<th>Total (sqft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counselor</td>
<td>2</td>
<td>80</td>
<td>160</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
Counselors will advise the students on career opportunities. The counselors should have access to the students academic records and access to general and specific career opportunities and on postsecondary schools. Information on opportunities related to green technologies should be readily available through the internet.

#### RELATIONSHIPS
- Directly accessible to the Career Center.
- Close proximity to the Academic Record Storage area.

#### SPECIFIC REQUIREMENTS
- Access to the wireless network. Due to the sensitivity of student academic records, a wired data connection may be advisable for use by the counselors.
- Desk with 3 side chairs for conferring with students and their parents.
### Academic Records Storage

**ACTIVITIES**
Secure area for the storage of student academic records.

**RELATIONSHIPS**
- Close proximity to the Career Center.
- Close proximity to the Clerical area.
- Directly accessible from the Registrar / Attendance Office

**SPECIFIC REQUIREMENTS**
- 10 lockable 4 drawer legal size filing cabinets.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Records Storage</td>
<td>1</td>
<td>50</td>
<td>50 sqft</td>
</tr>
</tbody>
</table>

### Registrar / Attendance Office

**ACTIVITIES**
The attendance clerk will be responsible for daily attendance records, registering students for school. This space may be an enclosed office or an open part of the clerical office area.

**RELATIONSHIPS**
- Close proximity to the Clerical area.
- Controls access to the Academic Records Storage area.
- Direct access through a service window to the path of travel for students entering the campus.

**SPECIFIC REQUIREMENTS**
- Service window for students to check in / out when arriving or leaving campus other than at standard times.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registrar / Attendance Office</td>
<td>1</td>
<td>80</td>
<td>80 sqft</td>
</tr>
</tbody>
</table>
## Administration

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detention / Holding</td>
<td>1</td>
<td>10</td>
<td>10 sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES
An area directly adjacent to the Vice Principal’s Office with a bench for students with discipline issues to wait for meetings with the Vice Principal.

### RELATIONSHIPS
- This space should be directly adjacent to the Vice Principal’s office and should be visually accessible by both the Vice Principal and the clerical staff.

### SPECIFIC REQUIREMENTS
- Bench of sufficient size to seat two students with space in between the students.

## Staff Restrooms

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Restrooms</td>
<td>2</td>
<td>64</td>
<td>128 sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES
Two single accommodation toilets for staff use.

### RELATIONSHIPS
- Easily accessible from all areas of the administration area.

### SPECIFIC REQUIREMENTS
- Dual flow or low flow toilet fixtures should be used.
COURT / DEMONSTRATION

RELATIONSHIPS
### SPACES REQUIRED

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Net Area</th>
<th>Gross Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dining/Assembly</td>
<td>1</td>
<td>7,000</td>
<td>7,000</td>
</tr>
<tr>
<td>Demonstration / Display</td>
<td>1</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Stage</td>
<td>1</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Storage</td>
<td>1</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Teachers' Lounge</td>
<td>1</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Outdoor Covered Eating*</td>
<td>1</td>
<td>900</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>8,350</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Net/Gross 15%</strong></td>
<td></td>
<td></td>
<td><strong>1,253</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>9,603</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Exterior area not included in the Building Area.

The Court is the central gathering area for the Academy. Students will be served lunches and eat here or at the outdoor covered eating area on a daily basis. Assemblies of the students and staff will take place here. Students may also use this space to meet in groups to discuss projects or assignments.

The Court should have the relaxed atmosphere of a college union. This area will be the primary location where students from different SLC's can meet and interact. The space should be conducive to social interaction.

The Demonstration / Display area should be readily accessible to all students. Projects from the different SLC's can be displayed for all the students and staff to see. Performance monitor displays for the different systems will be on display in this area. This area should be on a direct pathway from the front entrance to the Court so that parents and guests can view the work on the way to presentations in the Court.

The Court will be used for presentations to the entire student population or for evening presentation to parents and guests. Limited stage lighting should be included for presentations.
## Court / Demonstration

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dining/Assembly</td>
<td>1</td>
<td>7,000</td>
<td>7,000 sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES
- Table seating for up to 300 students per lunch session.
- Assembly seating for up to 600 people.
- The Dining/Assembly area should be a versatile space that can be setup with tables for eating during lunch periods or with chairs for assemblies. The Food Court, Demonstration area and the Dining/Assembly should flow together as one large space.
- Consideration should be given to using retractable theater style seating for assemblies.

### RELATIONSHIPS
- Directly adjacent to Serving area of the Food Service group.
- Directly adjacent to Demonstration Area.
- Directly adjacent to Stage.
- Direct access to an outdoor court with doors that open to the court.
- Direct access to the Build and Grow project spaces. Large doors should be considered to open the project rooms to the Court.

### SPECIFIC REQUIREMENTS
- A fixed projector and projection screen should be included in this space with the screen at the Stage. The projector should be supplied with data and video connections to allow video presentations to be made. Connections for a computer and/or DVD player should be provided in a convenient location.
- No athletics will be conducted in this space. Floors should be easily maintainable with food service.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstration Area</td>
<td>1</td>
<td>500</td>
<td>500 sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES
- Projects and concepts developed by students will be displayed in this area. The space could also be used for demonstration of projects.
- This space should be directly adjacent to and become a part of the Dining/Assembly area.
- Seating for demonstrations could be set up in the Dining/Assembly area.

### RELATIONSHIPS
- Directly adjacent to the Dining/ Assembly area.
- Directly adjacent to the main entry to the Dining/ Assembly area. People attending functions in the assembly area should be exposed to the project displays as they enter the assembly area.

### SPECIFIC REQUIREMENTS
- This space should have access to direct sunlight for photovoltaic displays.
- Power and data locations should be included at regular intervals for display purposes.
- An area should be dedicated to a display showing the performance of building systems.
### Court / Demonstration

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage</td>
<td>1</td>
<td>150</td>
<td>150 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
Primarily used for presentations and demonstrations in front of assemblies. May be used for community events. There is no performing arts component of the curriculum planned for this facility. Stage performances are not anticipated. This stage will not be enclosed and may be movable.

#### RELATIONSHIPS
- The stage area will be within the Court.
- If the Stage is fixed, it will be located at the front of the bleacher area.

#### SPECIFIC REQUIREMENTS
- Retractable projection screen. Screen and lighting control should be located in a convenient location to the stage.
- Data and/or video connection should be provided at the stage so that computer/VCR/DVD presentations can be controlled from the stage.
- Daylight control mechanisms such as curtains should be utilized on windows in the Court.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>1</td>
<td>400</td>
<td>400</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
Space for the storage of tables, chairs, portable stage (if used) and other equipment used in the Court.

#### RELATIONSHIPS
- Directly accessible from the Court.

#### SPECIFIC REQUIREMENTS
- Access doors should be of sufficient size to accommodate a portable stage.
### Court / Demonstration

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers’ Lounge</td>
<td>1</td>
<td>300</td>
<td>300 sqft</td>
</tr>
</tbody>
</table>

**Activities**

Space for the teaching staff to meet and eat lunch. Space for seating at lunch tables should be provided for up to 20 people.

**Relationships**

- Close proximity to the Food Service area.
- Visually and acoustically isolated from the Court.

**Specific Requirements**

- 4 tables and seating for eating lunches.
- Counter space with electrical outlets for microwave ovens.
- Space and connections for residential refrigerator / freezer.
- Space and connections for vending machines.
- Space and connections for residential refrigerator / freezer.
- Covered and protected from prevailing winds and rain.
- Daylighting. Consider skylights in this area.
- Electric lighting for night use.

### Outdoor Covered Eating Area

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor Covered Eating Area</td>
<td>1</td>
<td>900</td>
<td>900 sqft</td>
</tr>
</tbody>
</table>

**Activities**

Outdoor space with fixed tables for eating. This area should provide the same collegiate atmosphere as the Court.

**Relationships**

- Directly accessible from the Court.
- Close proximity to the Food Service area.

**Specific Requirements**

- Fixed tables with benches for eating lunch.
- Covered and protected from prevailing winds and rain.
- Daylighting. Consider skylights in this area.
- Electric lighting for night use.
RELATIONSHIPS

EXERCISE ROOM

MEN’S RESTROOM

MEN’S DRESSING

MEN’S OFFICE

DRESSING/SHOWER

TOILETS

HARDCOURT & PLAYFIELDS

WOMEN’S DRESSING

WOMEN’S RESTROOM

WOMEN’S OFFICE

DRESSING/SHOWER

TOILETS

General Building Circulation

General Building Circulation
In conjunction with the outdoor activity areas, the Exercise Room is intended to provide an opportunity for students to fulfill the PE requirements for graduation. The space will be set up on the basis of a exercise space at a private exercise organization with machines for running, stair climbing, lifting weights and other exercise apparatus.

The Exercise Room should be in close proximity to the outdoor exercise areas: the hard-court, the playfields and the par course.

No showers or lockers will be provided for this facility, however, a small dressing room will be provided for male and female students directly adjacent to the restrooms.

An office will be provided for the female PE instructors and one for the male instructors. The office will have visual access to the adjacent student dressing area for supervision. A small dressing area and an adjacent, single accommodation shower will be provided with a set of 5 lockers in each locations for staff use. The Shower / Dressing area will be accessible from the staff office and directly from the main circulation outside the Exercise Room. A single accommodation toilet accessible from the Shower / Dressing area and directly from the Exercise Room will be included.
GREEN TECH ACADEMY HIGH SCHOOL  Educational Specifications

**Exercise Center**

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise Room</td>
<td>1</td>
<td>2,000 sqft</td>
<td>2,000 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
Organized aerobics, weight lifting, free weights, bicycle machines, treadmill machines. This space will be the primary indoor exercise space for the campus. Physical Education requirements will be fulfilled in this space.

**RELATIONSHIPS**
- Directly adjacent to the dressing spaces.
- Directly adjacent and accessible to the Central Court.
- Directly adjacent to the PE instructors’ Offices.

**SPECIFIC REQUIREMENTS**
- The HVAC should be sized for high physical activity.
- Exercise floor in aerobics area.
- Resilient floor in free weight area.
- Storage area for small movable equipment used for exercise.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE Instructors’ Offices</td>
<td>2</td>
<td>80</td>
<td>160sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
Office for male and female PE instructors for the school.

**RELATIONSHIPS**
- Direct access to the Exercise Room.
- Direct access to the dressing / shower area.
- Close proximity to the restroom.
- Each office should have visual access to the adjacent student dressing area for supervision.

**SPECIFIC REQUIREMENTS**
- Desk with power for computer.
- Access to the wireless network.
- Side chair at desk.
- Window into student dressing area.
## Exercise Center

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Dressing / Shower</td>
<td>2</td>
<td>120</td>
<td>240sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES

Space for one staff person to shower and dress. A small number of lockers should be provided for use by the staff. This space is intended for the use of all the staff, not just the PE staff.

### RELATIONSHIPS

- Directly accessible from the PE Instructors’ offices.
- Directly accessible from the central building circulation.
- Direct access to the Restroom.

### SPECIFIC REQUIREMENTS

- Single accommodation shower.
- Bench for use during dressing.
- 5 full height, lockable dressing lockers.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Restrooms</td>
<td>2</td>
<td>64</td>
<td>128sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES

One single accommodation accessible restroom each for the male and female PE instructors.

### RELATIONSHIPS

- Directly accessible from the Shower / Dressing.
- Directly accessible from the Exercise Room.

### SPECIFIC REQUIREMENTS

- Low flow or dual flow toilets should be used in all restrooms.
Exercise Center

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Dressing</td>
<td>2</td>
<td>200</td>
<td>400 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**

Area for students to change after exercise session or after work session in the outdoor gardens. The dressing area is not intended to provide locker space for students to store clothing during exercise sessions. Benches should be provided to facilitate dressing.

**RELATIONSHIPS**

- Directly accessible from the Exercise room.
- Open to the Student Restroom.

**SPECIFIC REQUIREMENTS**

- Benches for use while dressing.
- It is anticipated that this space will be used by students after exercise or after work outdoors in gardens. It is also anticipated that the space will require frequent and extensive cleaning. Durable and easily cleaned wall and floor surfaces should be used.
- Provide floor drains for ease in cleaning.

**Student Restrooms**

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Restrooms</td>
<td>2</td>
<td>150</td>
<td>300 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**

Multi-fixture restroom facility for the use of the students during exercise sessions.

**RELATIONSHIPS**

- Direct access from the Student Dressing area.

**SPECIFIC REQUIREMENTS**

- Two toilet fixtures each.
- Two sinks each.
- Low or dual flow toilets should be used in all toilets.
- Consideration should be given to the use of waterless urinals for water conservation.
RELATIONSHIPS
### FOOD SERVICE

#### SPACES REQUIRED

<table>
<thead>
<tr>
<th>Space</th>
<th>District Approved</th>
<th>Building Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Prep</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td>Serving</td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td>Scullery</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Dry Storage</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Refrig/Freezer</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Office</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Lockers</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Restroom</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>2,210</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Net/Gross 15%</strong></td>
<td></td>
<td>332</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2,542</strong></td>
<td></td>
</tr>
</tbody>
</table>

The program for the Kitchen area is identical to the District approved program for the K-8 models in the District.

The Food Prep area will provide cooking and serving areas for the student and staff lunches. The facility will be organized around food courts, with themed meals served at the courts.

In addition to the food service, the food prep area will have a direct connection to the Demonstration Kitchen in the Grow Project Space. The Kitchen staff can assist with demonstrations in the Grow SLC and use that facility for extra capacity if needed. Students will assist in the Demonstration Kitchen as well as the main Food Prep area.

The Demonstration Kitchen is intended for use in demonstrating how plants grown at the Academy can be prepared or processed in a sustainable and healthy manner. The food prepared for daily consumption should also exemplify sustainability and healthy eating.

Herbs and spices will be grown in the gardens for use with the food preparation on a daily basis and to be used as educational examples for the students.
**Food Service**

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Prep</td>
<td>1</td>
<td>800</td>
<td>800 sqft</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
Preparation of food for service to students and staff. This area will be used by the staff cooks and assisted by the students in the Academy. There should be a close relationship between the Food Prep area and the Demonstration Kitchen in the Grow Studio. Cooks may take part in demonstrations and may use the Demonstration Kitchen as an extra prep area when needed.

**RELATIONSHIPS**
- Direct access to the Serving area.
- Direct access to the Scullery.
- Close proximity to the Dry Storage.
- Close proximity to the Refrigerator / Freezer.
- Close proximity to the Office.
- Close proximity to the Lockers.
- Close proximity to the Restroom.
- Direct access to the Demonstration Kitchen in the Grow Studio.

**SPECIFIC REQUIREMENTS**
The equipment and layout of the prep area is similar to the approved program for the District’s K-8 models.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serving</td>
<td>1</td>
<td>600</td>
<td>600</td>
</tr>
</tbody>
</table>

**ACTIVITIES**
The Serving area will be set up on the food court concept. Several serving stations will be available to students. These stations may serve themed foods. Movable serving stations will be used for food service. These stations may be moved from the serving area into the Court for expanded service. Each station should have access to power and a secure data connection.

**RELATIONSHIPS**
- Direct access to the Food Prep area.
- Direct access to the Court for serving food.
- Close proximity to all other spaces in the Food Service group.

**SPECIFIC REQUIREMENTS**
The equipment and layout of the prep area is similar to the approved program for the District’s K-8 models.
### Food Service

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scullery</td>
<td>1</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
Area to accept and clean food preparation and eating utensils.

#### RELATIONSHIPS
- Direct access to Food Prep area.
- Direct access to Serving.
- Direct access to Court.
- Close proximity to other Kitchen functions.
- Close proximity to the Demonstration Kitchen in the Grow Studio.

#### SPECIFIC REQUIREMENTS
The equipment and layout of the prep area is similar to the approved program for the District’s K-8 models.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Storage</td>
<td>1</td>
<td>200</td>
<td>200 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
Area for storage of nonperishable foods.

#### RELATIONSHIPS
- Close proximity to Food Prep.

#### SPECIFIC REQUIREMENTS
The equipment and layout of the prep area is similar to the approved program for the District’s K-8 models.
### Food Service

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigerator / Freezer</td>
<td>1</td>
<td>250</td>
<td>250 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
Walk in refrigerator and freezer for the storage of perishable foods.

#### RELATIONSHIPS
- Close proximity to the Food Prep area.
- The freezer section can be accessed by going through the refrigerator section for efficiency.

#### SPECIFIC REQUIREMENTS
The equipment and layout of the prep area is similar to the approved program for the District’s K-8 models.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>1</td>
<td>70</td>
<td>70 sqft</td>
</tr>
</tbody>
</table>

#### ACTIVITIES
Private office for the Head Cook. This space will be the headquarters for the Kitchen. Food ordering, staff scheduling, staff management activities will take place. There should be area for a desk, side chair and filing cabinet.

#### RELATIONSHIPS
- Close proximity to all Kitchen functions.

#### SPECIFIC REQUIREMENTS
- Desk with power and secure data connections.
- Side chair.
- Filing cabinet.
- Telephone connection.
- Visual access to the Food Prep area.
### ACTIVITIES
Area for lockers for the cooking staff. Kitchen employees will keep personal valuables locked in the lockers in this area.

### RELATIONSHIPS
- Close proximity to all Kitchen functions.

### SPECIFIC REQUIREMENTS
- 6 full height lockable lockers.

<table>
<thead>
<tr>
<th>Space</th>
<th>Quantity</th>
<th>Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lockers</td>
<td>1</td>
<td>70</td>
<td>70 sqft</td>
</tr>
</tbody>
</table>

### ACTIVITIES
Single accommodation restroom for Kitchen staff use.

### RELATIONSHIPS
- Close proximity to all Kitchen functions.

### SPECIFIC REQUIREMENTS
- Single water closet and sink.
- Dual flow or low flow fixtures should be used.