

Fay School

Southborough

MASTER PLAN

January 27, 2017

Drumme y Rosane Anderson, Inc.

235 Bear Hill Road

4th Floor

Waltham, MA 02451



Fay School

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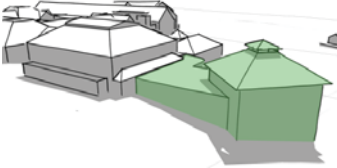
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ACKNOWLEDGEMENTS

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Stuart Rosenwald, Associated Head of School & Director of Secondary School Counseling

Lainie Schuster, Head of Lower School

Erin Sullivan, Director of Marketing and Communications

Ann Wardwell, Director of Advancement

Beth Whitney, Director of Admission

DESIGN TEAM

Drummary Rosane Anderson (DRA) also thanks and acknowledges the contributions of its design team.

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Project Manager
Educational Programming
Historical Architect

Consulting Engineering Services (CES)
The Berkshire Design Group, Inc.(BDG)
Consigli Construction Co., Inc.

Mechanical, Electrical, Plumbing and Fire Protection
Landscape Architecture, Site
Cost Estimating



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EXECUTIVE SUMMARY

INTRODUCTION

In Spring 2016 Fay School engaged Drummey Rosane Anderson (DRA) to develop a campus master plan. Founded in 1866, Fay School is an independent school with a boarding and day school serving 488 students in grades Pre-K through nine on its 66 Acre campus located in Southborough, Massachusetts. In 2016, the Fay School Board of Trustees completed work to refine their mission, vision and strategic direction. The Board's decision to engage an architectural firm for master plan services was born out of a recognition that existing facilities needed upgrades to align with the strategic plan.

The specific scope included the review and incorporation of existing data and previous studies, the verification of known needs, the identification of previously unknown needs, a prioritization of needs, and the development of alternatives that best align campus facilities with Fay School strategic directions of leadership, globalization, and technology.

PROCESS

It was evident to the design team from early campus visits that relationship-building was central to the culture, mission and success of Fay School as an educational institution. DRA's process reflected this culture and honored the input of a diverse set of stakeholders. The plan that follows resulted from a process organized into four major overlapping phases: Collecting, Listening, Visioning, and Documentation.

COLLECTING

The collecting phase established a baseline understanding for the design team. The Fay School has maintained good record of repair and maintenance of its facilities. These records were made available to the study team and served as the basis of understanding for our work. DRA and its consultants analyzed existing data, reviewed previous studies, and conducted several documentary site visits.

LISTENING

The listening phase engaged members of the Fay faculty and staff. DRA and its team interviewed each academic and administrative department in an effort to verify and identify needs. DRA facilitated faculty meetings to engage members of the Fay community in the prioritization of needs and the development of alternatives.

VISIONING

The visioning phase translated the information collected and the identified needs into options and alternatives. Each alternative resulted from a unique set of constraints and is intended to provide Fay School with choices for the configuration of the future campus.

DOCUMENTATION

The documentation phase began from the very first moment DRA arrived on campus and ultimately resulted in the production of this master plan report. The document that follows is a complete record of the process and its outcomes.



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IDENTIFIED and CRITICAL NEEDS

The listening process produced a wide range of identified needs. Many of these needs can be grouped within four key categories. They are *Student Life*, *Academics*, *Athletics* and *Campus Future*.

Within each category the needs are listed beginning with those determined as highest priority - those that represent the greatest impact to the successful fulfillment of the Fay School mission.

Some of the identified needs are addressed as a set of common planning items. These items are listed below.

Student Life

- Dormitory Parity & Improve Room Availability for Boarding Students
- Improve location and/or facilities for the Student Center: Best use of Upjohn School Room
- Increase seating in Camp Dining Hall

Academics

- Improve location and facilities for the Innovation Lab (iLab).
- Upgrade and Add Classrooms for the Upper School.
- Library shift towards Learning Commons.
- Add studio to the Picardi Art Center.
- Best use for Reinke Building: Consolidate and Enlarge the Music Department

Athletics

- Improve Athletic Field Complex. Explore addition of a shelter, toilet facilities and trainer. Locate future indoor athletic facility on athletic complex.
- Improve Locker Rooms in Harlow Gym.
- Identify a possible location for squash courts on campus.
- Identify a possible location for a hockey rink on campus.
- Find a main campus location for the tennis courts.

Campus Future

- Relocate School Store to a more prominent Location
- Improve Camp Dining Hall Kitchen
- Improve Faculty Housing on campus.
- Improve Admissions entrance from visitor parking and provide better access to the Conference Room.

Common Planning Items

DRA translated several of the identified, but not critical, needs into a list of common planning items present in the master plan study. The items proposed tend to be highly specific, have minimal impact on other buildings or programs, and represent items that can be accomplished with limited financial resources. The common planning items include:

- Phase II Sidewalk Improvements (designed and prepared by Beals & Thomas)
- Improve site drainage to route around Harris/Harlow



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OPTIONS SEQUENCING

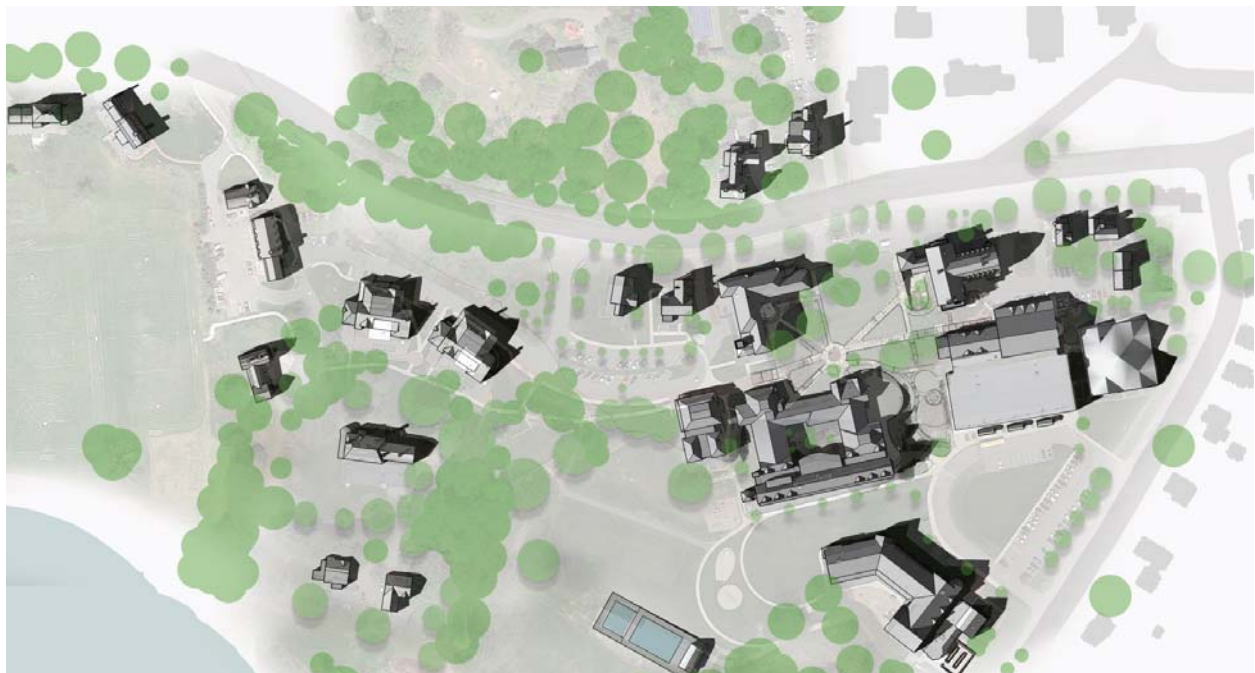
DRA prepared a set of planning items that address the identified needs. The issues are designed to work together in order to allow Fay School to plan each project as they see fit, regardless of the number of projects selected to work on simultaneously. Some of the options found in this report can be further developed and executed without dependency on relocated program space. In order for some of the preferred options to be executed, DRA has advised Fay School that the sequence in which the projects are completed is key to the success of the final Master Plan proposed in this document.

The cost estimates for each issue were explored in the master plan study. Costs reflect total project costs including all hard and soft costs related to renovation, new construction, and site-related work such as utilities, landscape design, and parking necessary to bring the project to fruition. Costs are in 2017 dollars and do not reflect the cost of property acquisition or costs associated with inflation resulting from phased construction. They are presented as order of magnitude ranges and further study is required to refine estimates. (Please refer to Appendix C for a summary of Total Project Costs and Appendix D for project costs provided by our estimating team at Consigli Construction Co. Inc.)

RECOMMENDATIONS and NEXT STEPS

Although the issues are presented independently, DRA crafted them to be combined, acted on in part or in whole, or expanded depending on resources available. DRA recommends that the Board of Trustees evaluate the alternatives and establish a preferred alternative for further study. The next logical step toward implementation of a preferred plan is to conduct a feasibility study of one or more of the impacted facilities. A study of this kind will result in a more clearly defined program, a more detailed testing of feasibility, and a more refined cost estimate. Successful completion of a feasibility study best positions Fay School to engage an architect for design and construction services.

DRA would like to thank the Fay School Board of Trustees and the school leadership for the opportunity to prepare this master plan. We look forward to an opportunity to continue building our professional relationship with your campus.



COLLECTING

COLLECTING

OVERVIEW

At the beginning of the master plan process, Fay School's leadership shared existing and relevant documentation with DRA. The documentation was useful as it provided DRA with an understanding of existing conditions and potential issues unique to Fay School. What follows is a brief summary of the existing documents and previous studies provided by Fay School and an associated narrative describing the relevance of each.

EXISTING DOCUMENTS AND PREVIOUS STUDIES

1. Fay School Campus Master Plan, 2007.
Provided an understanding of issues that resulted in the following built projects: Steward Dorm Wellness Center, the Village Dormitories (two buildings)
2. Fay School Strategic Plan Proposal 2016.
This plan helped identify strategic goals for the Fay School to better align issues identified in the Master Plan, including enrollment projections/goals.
3. Facility Conditions Reports by Fay School Facilities
Campus-wide assessment of capital needs and existing equipment in all campus buildings. This was coordinated and facilitated by members of the design team from CES and populated by facilities staff at Fay School.
4. Geotechnical Assessments
Beals & Thomas Geologic and Hydrogeologic Conditions Assessment, 2007
This document provided reference to geologic and hydrogeologic conditions from a previous capital improvement project.
5. Environmental Assessments and Reports
 - AHERA Reports, 2014
6. Fay Kitchen Equipment Inventory, 2016.
The inventory allowed DRA to review the requirements of the existing space in conjunction with the new desired equipment for the food service program. This helped to inform the program for the Camp Dining Hall kitchen.
7. Existing Building Capital Needs Survey Information , 2016.
CES prepared capital needs surveys for each building on campus that were provided to Fay School for review. The facilities team at Fay was helpful in generating information regarding the existing MEPFP systems. This survey provided key information to assess the infrastructure in each building. (Please see the Appendix A at the end of this report to review the Capital Needs Surveys in detail.)
8. Existing Building Plans
 - Root Building (1984/2002)
 - Harris Auditorium/Harlow Gym (1956)
 - Reinke (1969)
 - Fay House (1860)
 - Steward Dorm (1978)
 - Camp Dining Hall (1926)
 - East House (1924)
 - Webster House (1925)
 - 70 Main Street (1970)
 - Village Dorms (2008)

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SUMMARY OF FINDINGS

Documents provided by Fay School were utilized in the master plan effort. This summary highlights the Capital Needs Surveys as an invaluable resource. The report reflected maintenance, repair and replacement requirements. As part of our work included the effectiveness of a building or environment to support the learning model at Fay School, we referenced the capital needs information when developing solutions that required the modification of a room or building as the ramifications of altering a space that already required work is different from those where space is in pristine condition.

The surveys for each facility referenced above can be found in Appendix A of this report.

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	70 Village Path			Building Address:	70 Village Path			
Building Area:	4780			Year Built:	1988			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	4			7	\$ 3.00	\$21	
Water Closets	2	4			3	\$ 3.00	\$9	
Water heater	2	3				\$ 7,500	\$0	
Domestic Water distribution	2	4				\$ 5.00	\$0	copper
Plumbing Drainage	2	4				\$ 4.00	\$0	pvc
Fire Protection	1	na				\$ 6.50	\$0	Fire protection not required this is a single family residence.
Building Controls	2	na				\$ 5.00	\$0	N/A
Hot Water Boilers & Pumps	2	4				\$ -	\$0	We do install high efficiency boilers when unit(s) are replaced
Perimeter Heating System	2	3				\$ 4.00	\$0	baseboard
Ductwork System	3	na				\$ 10.00	\$0	none
Indoor Air Handling Units	3	na				\$ 20	\$0	none
Split Cooling Units	1	na				\$ 12,000	\$0	none
Hot Water Piping	2	4				\$ 3.00	\$0	copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	none

Sample Form: Capital Needs Survey for 70 Main Street (on Village Path)

These reports also helped CES, our MEP/FP consultant, to assess the value of what was required for AC upgrades in existing buildings to improve dormitory and faculty housing parity in terms of air conditioning needs. The facilities studied include: Steward Dorm (2nd and 3rd floors), Camp Building (2nd and 3rd floors), Webster House and East House.

(The Air Conditioning Study referred above can be found in Appendix B of this report.)



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STRATEGIC PLAN AND PROJECTIONS

The enrollment model provided by Fay School, as part of the Strategic Plan, was key for multiple issues addressed as part of this report. The enrollment projections and goals allowed the DRA team to more accurately assess the needs of Fay School for spaces associated with classrooms, art program needs, music program needs and locker rooms.

Although all the spaces in the master plan report are not associated with learning spaces, the projected enrollment affects each issue in a different way. The boarding student goal allowed FAY school to determine the number of dorm rooms required in 2021 to achieve their goal. This, in turn, allowed DRA to assess different options to gain additional beds within the built environment.

The target enrollment year of 2021 was identified, and a total Fay School enrollment of 498 is used for planning purposes.

	Prior Years				Current 2015/16	Next Year 2016/17	2021 model No Pre-K	Change To FY 16/17
	2011/12	2012/13	2013/14	2014/15				
Pre-K Half Day	1	1		1	0	2		-2
Pre-K Full Day	18	18	26	14	14	12		-12
K Day	32	27	27	30	18	20	20	0
1 Day	30	34	31	29	36	24	30	6
2 Day	26	29	36	29	28	36	30	-6
3 Day	27	30	27	34	33	30	30	0
4 Day	29	26	30	30	32	32	30	-2
5 Day	37	37	35	33	32	36	30	-6
6 Day	41	42	40	47	43	45	45	0
7 Day	47	40	51	45	58	48	53	5
8 Day	42	52	40	58	47	52	56	4
9 Day	15	14	18	19	23	21	24	3
	345	350	361	369	364	358	348	-10
7 Board	10	10	7	7	8	5	6	1
8 Board	15	15	14	13	8	12	13	1
9 Board	11	16	15	12	8	8	9	1
	36	41	36	32	24	25	28	3
7 Board Intl	4	5	1	5	3	6	6	0
8 Board Intl	24	14	19	18	27	28	41	13
9 Board Intl	18	24	16	26	23	27	32	5
	46	43	36	49	53	61	79	18
7 Bd Intl ESL	9	17	11	15	18	20	25	5
8 Bd Intl ESL	9	16	21	24	24	18	10	-8
9 Bd Intl ESL	5	2	5	1	3	2	4	2
	23	35	37	40	45	40	39	-1
7 5 Day Boarding			1	1		1	1	0
8 5 Day Boarding			2	2	1	2	2	0
9 5 Day Boarding			2	0	1	1	1	0
	0	0	5	3	2	4	4	0
DAY	345	350	361	369	364	358	348	-10
BOARDING - DOM	36	41	41	35	26	29	32	3
BOARDING -INTL	69	78	73	89	98	101	118	17
TOTAL BOARDING	105	119	114	124	124	130	150	20
TOTAL	450	469	475	493	488	488	498	10

Form Excerpt: 2021 Fay School Strategic Plan - Targeted Enrollment



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EMERGENCY PREPAREDNESS

Fay School has expressed an interest in providing alternative energy sources in the event a power outage. The school currently has 4 (four) emergency generators serving the following buildings/facilities:

- Camp Dining/Kitchen/Dormitory
- Village Dorms (2 buildings)
- Waste Water Treatment Facility
- Harris/Harlow Gym
- Root Building
- Upjohn/Picardi Art Building

DRA has collected the information below from Fay School that outlines the existing assessment for generator and emergency power on campus. Based on the information provided by Fay School, recommendations for emergency needs have been reviewed and provided by CES.

Equipment Status During Power Outage - Optional Standby Generator

	Address	Name	Card Access	Fire Alarm	Carbon Monoxide	Dry System	Boiler	Hot Water	Exit Signs / Flood Lights	24 hr. Egress Lights	Generator	Sewer Pumps	Exterior Lights
1	31 Main Street	Brackett House	N/A	No	N/A	N/A	No	No	No	No	No	N/A	No
2	33 Main Street	Todd House (Residence)	N/A	No	N/A	N/A	No	No	No	No	No	No	No
3	44 Main Street	East House (Dorm)	No	Yes	No	N/A	Yes	Yes	Yes/No	Yes	11 Kw	Gravity	?
4	44R Main Street	Old Facilities	N/A	No	N/A	N/A	No	No	No	No	No	Gravity	No
5	46 Main Street	Webster House (Dorm)	No	Yes	No	Yes	Yes	Yes	No	Yes\Partial (8)	11 Kw	Gravity	No
6	48 Main Street	Camp Bldg. (Dorm)	Yes	Yes	Yes	No (2)	Yes (4)	Yes	?	?	80 Kw	Gravity	?
7	50 Main Street	Steward (Dorm)	Yes	Yes	Yes	Yes	Yes	No (4)	Yes/?	Yes	80 Kw	Gravity	?
8		Wellness	Yes	Yes	Yes	Yes	Yes	No (3)	Yes/?	Yes	80 Kw	Gravity	?
9	52 Main Street	Fay House	N/A	No	N/A	N/A	No	No	No	No	No	Gravity	No
10	54 Main Street	Waters House (Residence)	N/A	No	No	N/A	No	No	No	No	No	Gravity	No
11	74 Main Street	Residence	N/A	Local (5)	No	N/A	No	No	No	No	250 Kw	Yes	No
12	76 Main Street	Residence	N/A	Local (5)	No	N/A	No	No	No	No	250 Kw	Yes	No
13	5 Middle Road	Reinke Bldg.	No	No	N/A	N/A	No	No	No	No	No	No	No
14	6 Middle Road	Residence	N/A	No	No	N/A	No	No	No	No	No	Gravity	No
15	9 Middle Road	Harris/Harlow	Yes	Yes	N/A	N/A	Yes	Yes	No	No	60 Kw	Gravity	?
16	10 Middle Road	Residence	N/A	Local (5)	No	N/A	No	No	No	No	No	Gravity	No
17	12 Middle Road	Residence	N/A	Local (5)	No	N/A	No	No	No	No	No	Gravity	No
18	15 Middle Road	Root Bldg.	Yes	Yes	N/A	No (2)	Yes (3)	No	Yes/ N/A	Yes	80 Kw	Gravity	?
19		Mars Wing	Yes	Yes	N/A	Yes	Yes (3)	No	Yes/ N/A	Yes	80 Kw	Gravity	?
20	25 Middle Road	Primary School	No	No	N/A	No	No	No	No	No	No (9)	No	No
21		Pool	N/A	No	N/A	N/A	N/A	No	N/A	N/A	N/A	Gravity	No
22	10 Village Path	Upjohn	Yes	Yes	N/A	N/A	No	No	No/No	No	80 Kw	Gravity	No
23		Picardi	Yes	Yes	N/A	N/A	No	No	No/No	No	80 Kw	Gravity	No
24	40 Village Path	Kidder House (Residence)	N/A	No	No	N/A	No	No	No	No	No	N/A	No
25	60 Village Path	South House (Residence)	N/A	No	No	N/A	No	No	No	No	No	N/A	No
26	62 Village Path	South Barn (Residence)	N/A	No	No	N/A	No	No	No	No	No	N/A	No
27	70 Village Path	Residence	N/A	No	No	N/A	No	No	No	No	No	Yes	No
28	80 Village Path	#80 Village (Dorm)	Yes	Yes	Yes	Yes	No	No	No	Yes	250 Kw	Gravity	?
29	90 Village Path	#90 Village (Dorm)	Yes	Yes	Yes	Yes	No	No	No	Yes	250 Kw	Gravity	?



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RECOMMENDATIONS

CES has identified that generators are an optional item for most buildings, assuming that they already have emergency battery lighting fixtures.

They've advised that if there is refrigerant in the building, that they should have a generator. Buildings with vital options (such as food service, clinics, etc.) should also have emergency power.

Another resource to consider within a building for emergency power is the loss of time or productivity, however we advise that this comes behind safety and welfare of students and staff on campus.

Maintenance is an issue with generators; to cut down on future maintenance a generator can be shared by a group of buildings. If there are buildings that will require generators within close proximity, and the electrical rooms are on the same side, they could be fed from one generator. This also helps reduce the overall cost of providing emergency power to critical buildings on campus.

Equipment Status During Power Outage - Optional Standby Generator

Generators

33	80 Kw - Located behind Camp Bldg.	Kohler		2014
34	11 Kw - Located behind Old Facilities Bldg.	Kohler	SER2104420	2002
35	250 Kw - Located behind Facilities Bldg.	Cummins	SERGTA855G2	2009
36	60 Kw - Located behind Reinke Bldg.	Kohler	SER063151	2006

Existing Assessment of Fay School Emergency Power on Campus - Provided by Fay School Facilities

LISTENING

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LISTENING OVERVIEW

DRA recognized the importance of a well formed and deep understanding of the cultural and educational practices at Fay School to a successful master plan. To gain this understanding, DRA incorporated several listening activities into its process. What follows in this overview is a short description of these activities.

PROGRAMMING INTERVIEWS

As part of our process, programming interviews were held with various key staff members:

May 11, 2016	Sheryl Traylor Kerry Masiero Philip Montgomery
May 12, 2016	Courtney Sargent Matt Heard Rob Feingold
May 17, 2016	David Dixon Rob Rojee Julie Porrazzo
May 19, 2016	Beth Whitney Ann Wardwell
May 26, 2016	Robert Gustavson, Head of School Alan Clarence, Director of Finance and Operations

Based on the programming meetings, key issues were developed and clarified. These key issues are addressed in the visioning section of this report.

15 June 2016 - Fay School Staff Presentation

As a component of the Master Plan process, DRA presented process information regarding the study to the staff prior to summer break in the Mars Conference Room located in the Root Building. The main issues were presented to the staff along with DRA's process of Collecting, Listening, Visioning and Documentation.

29 June 2016 - Innovation Lab Discussion

David Dixon has been leading the Innovation Lab initiative at Fay School and has aided the team in understanding the goals of the Innovation Lab program. This discussion provided DRA with a greater understanding of the creative thinking and maker mentality that the Fay School seeks to foster within the student and staff communities.



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29 August 2016 - Faculty Update

As a component of the Master Plan process, DRA presented progress information regarding the study to the staff after their return to Fay School after the summer break. This presentation was held in the Mars Conference Room located in the Root Building and coordinated with Fay's update regarding the progress of the Fay School Strategic Plan initiative. Progress regarding selected main issues were presented to the staff.

31 August 2016 - Fay School Board Update

As a component of the Master Plan process, DRA presented progress information regarding the study to selected members of the Board of Trustees. This presentation aided DRA in identifying concerns and issues of the Board members prior to the full Board of Trustees meeting scheduled for early November 2016.

14 September 2016 - Facilities Subcommittee Progress Meeting

As a component of the Master Plan process, DRA presented progress information regarding the study to selected members of the Fay School Facilities Subcommittee. Concerns were expressed regarding capital issues that needed attention in conjunction with the presented issues.

19 September 2016 - Staff Review of the Innovation Lab and Learning Commons

DRA was able to meet with Directors and Key Staff for both the Innovation Lab and Learning Commons to review and obtain feedback regarding the options explored by the DRA team for both the Innovation Lab relocation and Learning Commons Improvement issues. These two issues were presented to staff and DRA was able to use the valuable feedback to refine the programs and test fits. The refinement allowed DRA to better understand and utilize existing built environment, which is a desire of the Fay School Administration as part of this Master Plan Study.

21 September 2016 - Staff Review of Locker Rooms, Dining and Kitchen Services

DRA was able to meet with Directors and Key Staff for both Athletics and Food Services to review and obtain feedback regarding the options explored by the DRA team for both the Locker Room Renovation, Camp Dining Hall Expansion and Kitchen Renovation/Addition issues. These three issues were presented to staff and DRA was able to use the valuable feedback to refine the programs and test fits. The refinement allowed DRA to better understand and utilize existing built environment, which is a desire of the Fay School Administration as part of this Master Plan Study.

11 October 2016 - Administrative Review

Key members of the Fay School Administration met with DRA to review the progress of the study and discuss the feedback provided during the previous meetings with Fay School staff members. This meeting allowed DRA to process and provide improved options to Fay School Administration based on the programming meetings held with the Fay School Staff. This meeting also allowed DRA to identify the priority issues to present to the Fay School Board of Trustees in early November.



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4 November 2016 - Presentation to Board of Trustees

A progress presentation to the Board of Trustees was held in the Mars Conference Room in the Root Building. This allowed DRA to gather important feedback regarding the options and reinforced DRA's direction for priority issues identified as part of the Master Plan.

9 January 2017 - Review of Cost Information

DRA Review of cost information provided to Fay School Administration regarding priority issues identified in the Master Plan.

12 January 2017 - Final Master Plan Presentation to Facilities Committee

DRA Review presentation of final Master Plan Documentation to Facilities Committee.

27 January 2017 - Final Master Plan Presentation to Board of Trustees.

DRA Review presentation of final Master Plan Documentation to Board of Trustees.



VISIONING

MASTER PLAN

KEY ISSUES

KEY ISSUES have been identified and listed in a compiled sequencing and priority order as determined by the working group members.

The Master Plan Visioning section identifies those issues and identifies potential options that were presented and evaluated during the Master Plan Process. The beginning of this section itemizes each issue on a campus map and follows with more detailed descriptions of the preferred solution and process. All plans and diagrams included in this section are for 'test fit' purposes only and are potential representations to identify scale and feasibility of options.

HISTORY at FAY SCHOOL

History and Tradition are important to Fay School and it is evident when you walk through the campus and meet the staff and alumni that have continued involvement and support of students at Fay School.

DRA recognizes the importance of tradition and the historic buildings on campus, like the Upjohn building, Fay House and Camp Dining Hall, which are a few of the many important structures on the main campus.

Our goal was to develop a master plan that respects these existing buildings that reflect the history of Fay School while looking for opportunities to help plan for the future of students at the Southborough campus. We enjoy the challenge of blending history with innovative solutions that allow schools like Fay to move seamlessly into the future.

SUSTAINABILITY & REUSE

Fay School has reinforced the importance of utilizing the existing built environment as much as possible in order to maximize reuse and minimize costs. By exploring opportunities within the existing buildings, Fay School has demonstrated that they recognize the importance and significance of each previous investment on their campus.

THE MASTER PLAN

In the Visioning section of this report, the DRA team has generated a sequencing plan that identifies how each of the issues can be separated into projects that can be appropriately sequenced to minimize, and eliminate, rework of past projects.



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STUDENT LIFE

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ISSUE

The Fay School Strategic Plan identifies an additional number of available rooms and beds required to accommodate an increase in the number of boarding students at Fay School. The boarder spots are tight now, so the school is considering how to expand their capacity.

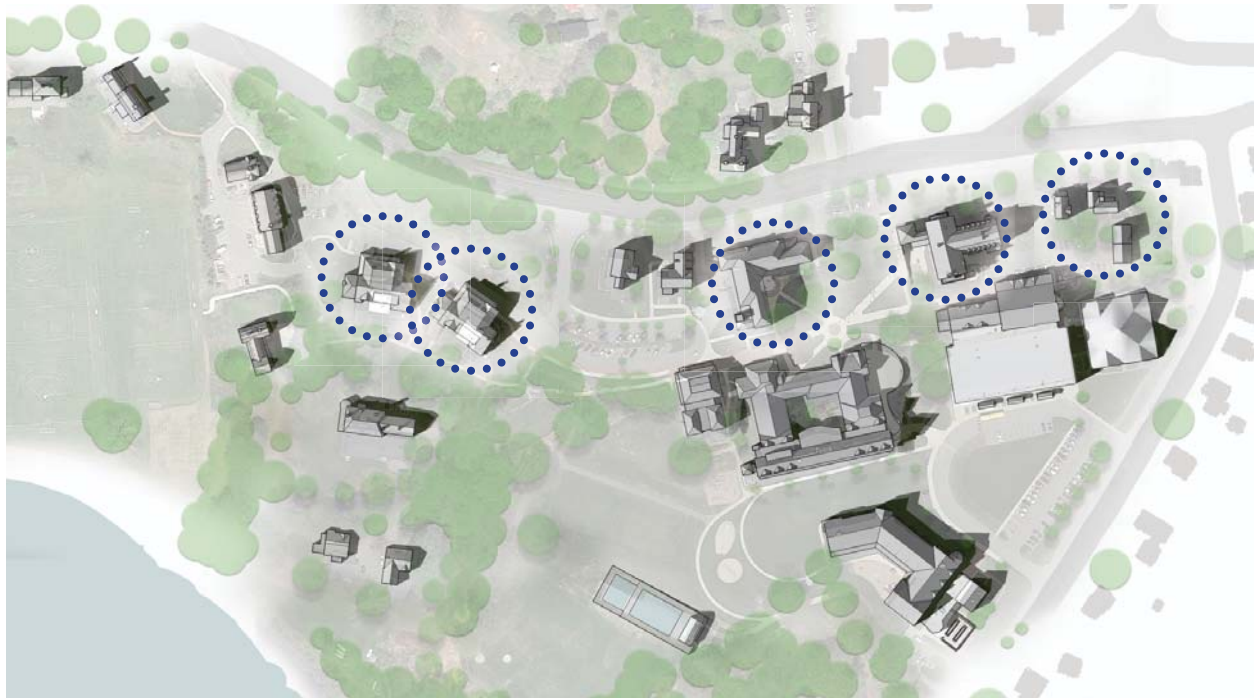
GOAL

Provide 158 beds to accommodate 150 boarders by 2021. 158 beds are required to provide the appropriate number of *FLEX rooms.

DEFINITIONS:

SWING ROOM - Faculty Bedroom for Weekend Coverage

FLEX ROOM - Spare Room Dedicated for Boarding Students



Fay School

SOUTH BOROUGH

existing conditions

EAST-WEBSTER-CAMP-VILLAGE

A total of 65 girls are housed in the four buildings:

- East House (5)
- Webster (8)
- Camp (28)
- Village (24)

A total of 72 boys are housed in two buildings:

- Village (24)
- Steward (48)



These dorms provide 137 beds as of Fall 2016, but the target of more than 150 beds is needed to fulfill the goals of the Strategic Plan to accommodate 150 boarding students. Boarders start in 7th grade, but there are many more 8th grade, especially international students. Ninth grade enrollments currently drop off, because students can leave for high school elsewhere.

Exceptions:

Although Webster is outfitted for (8) beds, it currently boards a greater amount of students. (See spreadsheet below that identifies the current Fall 2016 boarding capacity.)

Building Name	Gender	Beds - Number					Ratio (stu/ dorm parent)	AC	Faculty (family)	Faculty (single)	SWING*
		Total	Singles	Doubles	Triples	FLEX*					
East House	girls	7		4	3		7	N	1		1
Webster	girls	9	0	6	3		9	N	1		1
Camp Level 2	girls	10	10				10	N		1	0
Camp Level 3	girls	18	14	4			9	N	0	2	0
Village Girls	girls	22		16		6	7	Y	2	1	2
Village Boys	boys	22		16		6	7	Y	2	1	2
Steward Level 2	boys	27		22	3	2	9	N	1	2	2
Steward Level 3	boys	26		24		2	9	N	1	2	2
TOTAL:		141									
			Girls:	66		Boys:	75		Faculty Apts:	8	9
						Total Beds:	141				



DORM Modification Options

OPTION 1:

Maximize space in Steward by the addition of triple suites on floors 2 and 3 (boys); add 4 double rooms and 1 faculty single room to Steward's first level. Floors 2 and 3 each lose a swing space. Wellness and Guidance first-level spaces are reduced or relocated. This option increases beds for boys only, throwing off the balance (65 girls and 86 boys).

OPTION 2:

Convert the former Assistant Headmaster's House (70 Main St.) to a girls' dorm: adds a double room on floor 1, and three double rooms plus one single room on floor 2. Includes 1 faculty family apartment and a swing space. This configuration produces a high student-to-dorm-parent ratio in this building (15:1). To preserve a balance in beds for girls and boys, East House would become a boys' dorm, yielding totals of 75 beds for girls and 77 beds for boys, for a total of 152 beds.

PREFERRED OPTION 2a:

Conversion of SWING room to Faculty Single apartment would reduce the dorm-faculty ration to 7.5 to 1.

OPTION 2b:

(small addition to 70 Main Street)

Includes the conversion of 70 main street to accommodate 15 additional boarding students. Without an addition to the building, a two bedroom faculty apartment and a swing room can be accommodated.

Add (1) one faculty family apartment, therefore reducing dorm parent ration to 7.5 to 1.

OPTION 3:

Maximize space in Steward by the addition of triple rooms on floors 2 and 3 (boys). Build TWO NEW Village Dorms (girls/boys), each with 8 double rooms. Existing Village Dorm counts are eased (from 8 triple rooms to 8 double rooms), and student-to-dorm-parent ratios in ALL Village Dorms drop significantly.

OPTION 3 (continued)

Each new building includes 2 faculty family apartment and 2 swing spaces. Counts in Camp (girls) are also eased (10 single rooms to 9, floor 2; and 18 double rooms to 10, level 3); Camp also gains a swing space on floors 2 and 3.

OPTION 4:

Maximize space in Steward by the addition of double and triple rooms on floors 2 and 3 (boys). Build TWO NEW Village Dorms (girls/boys), each with 8 double rooms. Existing Village Dorm counts are eased (from 8 triple rooms to 8 double rooms), and student-to-dorm-parent ratios in ALL Village Dorms drop significantly. Each new building includes 2 faculty family apartment and 2 swing spaces. Convert East House and Webster House to faculty housing (2 family apartments in each building).

OPTION 5:

Maximize space in Steward by the addition of a triple room on each floor (boys). Build THREE NEW Village Dorms (girls, boys, and split girls/ boys floors in the third building), each with 8 double rooms. Existing Village Dorm counts are eased (from 8 triple rooms to 8 double rooms), and student-to-dorm-parent ratios in ALL Village Dorms drop significantly (ratio of floor 2 of the coed Village Dorm will be somewhat higher). Each new building includes 2 faculty family apartment and 2 swing spaces. Counts in Camp (girls) are also eased (to 8 single rooms, floor 2; and 8 double rooms, level 3); Camp also gains a swing space on floors 2 and 3. Convert East House and Webster House to faculty housing (2 family apartments in each building).

OPTION 6:

(merge OPTION 1 & OPTION 2)

First floor of Steward is already outfitted for faculty apartment.

70 Main provided an additional 15 beds as a girls dorm with (1) one faculty apartment.

An addition (Option 2) would allow a second faculty apartment.

Fay School

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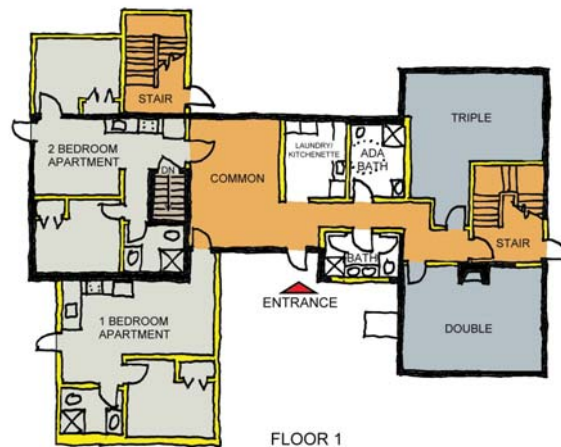
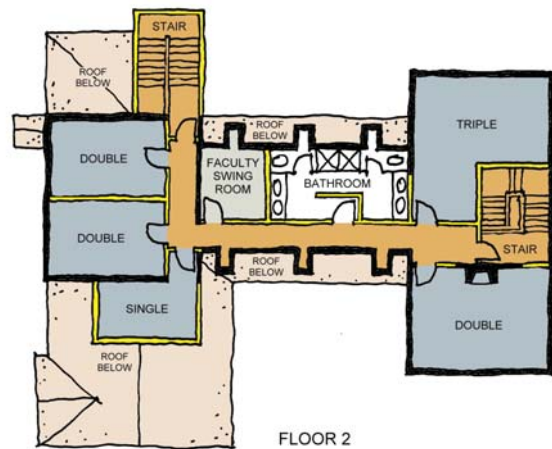
OPTION 2

Convert Asst Head House(70 Main) to Dorm; reduce student beds in Camp

Building Name	Gender	Beds - Number					Ratio (stu/ dorm parent)	AC	Faculty (family)	Faculty (single)	Swing
		Total	Singles	Doubles	Triples	Flex*					
East House	boys	5		2	3		5	N	1		1
Webster	girls	8	1	4	3		8	N	1		1
Camp Level 2	girls	10	10				10	Y		1	0
Camp Level 3	girls	18	14	4			9	Y	0	2	0
EXST Village Girls	girls	24			24		8	Y	2	1	0
EXST Village Boys	boys	24			24		8	Y	2	1	0
70 Main	girls	15	1	8	6		8	Y	1	1	1
Steward Level 2	boys	27		24	3		9	Y	2	1	0
Steward Level 3	boys	27		24	3		9	Y	2	1	0
TOTAL:		158									
			Girls: 75		Boys: 83			Faculty Apts: 11		8	

test fit for option at
70 main street
Root Building Addition/Renovation

THIS OPTION INCLUDES:
*Renovated Space:
Full Building Renovation
Addition to first floor to create
1-Bedroom Apartment to improve
the faculty to student ratio.
New stair construction included.
This includes 4,450SF of
renovation area and 600SF of
addition.*



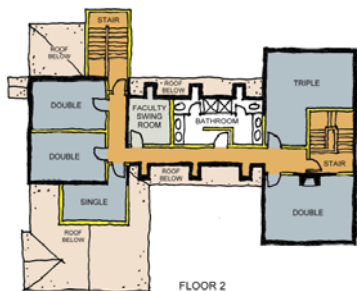
GRAPHIC NOTE:

Existing exterior walls and partitions are shown in black.
All new/proposed construction is shown in yellow.

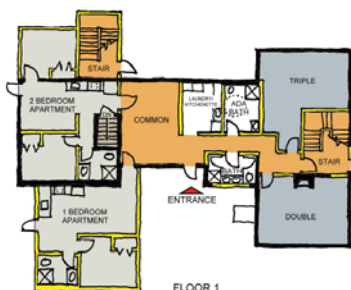
Fay School

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RECOMMENDATIONS



FLOOR 2



FLOOR 1

SELECTED OPTION REVIEW:

Program Fit: Allows an appropriate Faculty/Student Ratio for a dormitory.

Accessibility for Students & Staff: The proposed renovation location is in close proximity to the Village Dorms.

Construction Phasing: This project can be constructed in one phase, no restrictions on time of year with the exception of appropriate temperatures for foundation construction.

Disruption to Existing Programs: Isolated structure can be renovated without affecting other programs.

Reuse of Existing Space: Existing, underutilized space is maximized by use of 70 Main Street for dormitories.

Alignment with Strategic Plan: Option 2 brings the Fay School boarder capacity to align with the 158 beds needed to accommodate 150 boarders in 2021.



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STUDENT LIFE

ISSUE

Dormitory and the associated faculty housing has been constructed and renovated at different times. Some of the housing requires upgrades. The Village Dorms (most recent constructed) faculty and student housing are the only two dormitory buildings that currently have air conditioning. Finishes within the dormitories also vary between the buildings.

GOALS

Improve parity amongst faculty housing in East House, Webster House, Steward Dorm and Camp Dining Hall Dormitories.

existing conditions

Each of the four buildings have varied level of finish depending year constructed and most recent renovations. For the dormitories within residential structures, the apartments sometimes take up the entire level. Older dorms are substandard and the finishes are not the same as the new Village Dorms. The sequencing for refinishing houses is most critical to be in the summer due to the smaller building and student to faculty ratio. Faculty would have to temporarily take up student spaces or the house would not be occupied during the renovation. Larger buildings such as Steward and Camp would be easier to sequence and temporarily relocate single apartments during renovation.



East House Exterior



Webster House Exterior



Camp Dormitory Wing Exterior



Steward Dorm Exterior

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EXISTING CONDITIONS		Fall 2016									
Building Name	Gender	Beds - Number					Ratio (stu/ dorm parent)	AC	Faculty (family)	Faculty (single)	Swing
		Total	Singles	Doubles	Triples	Flex*					
East House	girls	7		4	3		7	N	1		1
Webster	girls	9	0	6	3		9	N	1		1
Camp Level 2	girls	10	10				10	N		1	0
Camp Level 3	girls	18	14	4			9	N	0	2	0
Village Girls	girls	22		16		6	7	Y	2	1	2
Village Boys	boys	22		16		6	7	Y	2	1	2
Steward Level 2	boys	27		22	3	2	9	N	1	2	2
Steward Level 3	boys	26		24		2	9	N	1	2	2
TOTAL:		141									
		Girls:	66								
		Boys:				75					
		Total Beds:				141		Faculty Apts:	8	9	

*Note: "Flex" refers to extra beds temporarily giving bedrooms more capacity.

Renovations to existing faculty housing may also be combined with the student dorm room parity upgrades. Total project budget pricing has provided for each building to be renovated independently, taking into consideration both dorm rooms and faculty housing.

Please refer to Appendix B, which includes costs associated with air conditioning upgrades for Dormitories and associated faculty housing.

THIS OPTION INCLUDES:

Renovated Space: 8,370SF

The renovations for the spaces in four buildings include a total of 6 Family Apartments and 5 Single Apartments. Proposed pricing includes common areas and hallways.



RECOMMENDATIONS

SELECTED OPTION REVIEW:

Program Fit:

The upgraded faculty apartments will improve parity amongst on site faculty housing.

Accessibility for Students and Staff:

No change in accessibility for Students and Staff.

Construction Phasing:

Phasing will vary between smaller residential and the larger dormitories due to scale and temporary relocation opportunities. Smaller buildings will require no occupants during the construction, therefore phasing during the summer months is preferred.

Disruption to Existing Programs:

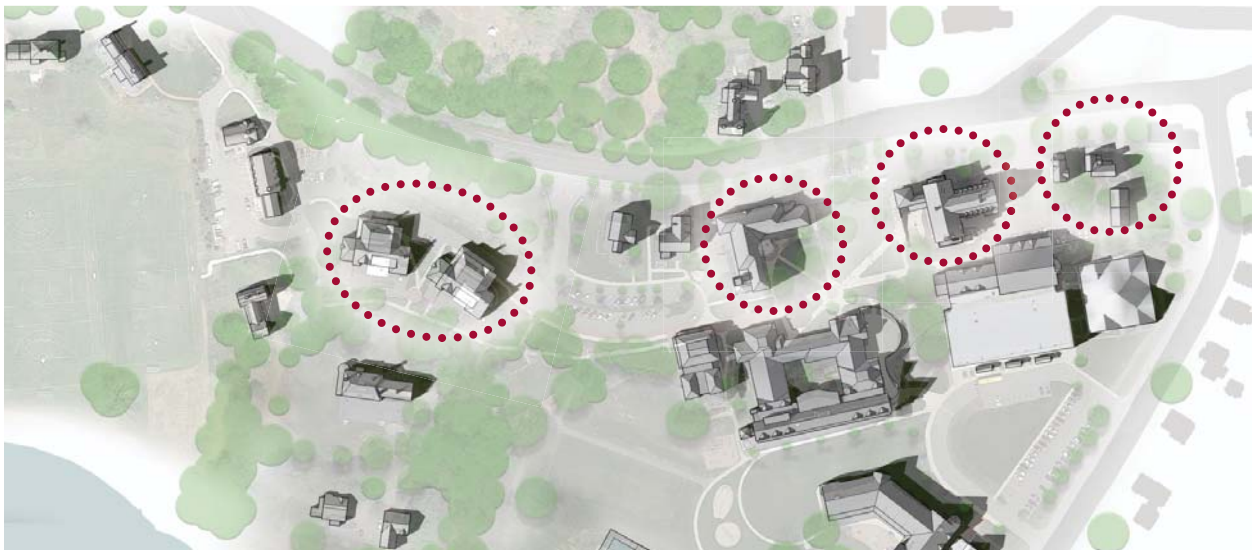
Construction will disturb existing occupants of the faculty housing, and families will have to be temporarily relocated.

Reuse of Existing Space:

The faculty renovations are utilizing 100% existing space.

Alignment with Strategic Plan:

The upgrades to faculty housing improve conditions for families and staff on campus, therefore in alignment with the Strategic Plan.



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LEARNING SPACES

C

ISSUE:

To accommodate the student count identified in the strategic plan, the study team reviewed the overall classroom count at the Upper and Lower School. Opportunities to explore parity amongst the classrooms was also a key consideration of this study.

GOAL:

Upgrade and add classrooms for the Upper School in the existing ROOT Building. The required classroom count to maintain a maximum student count of 15 students is as follows:

- 9 Lower School Classrooms
- 19 Upper School Classrooms



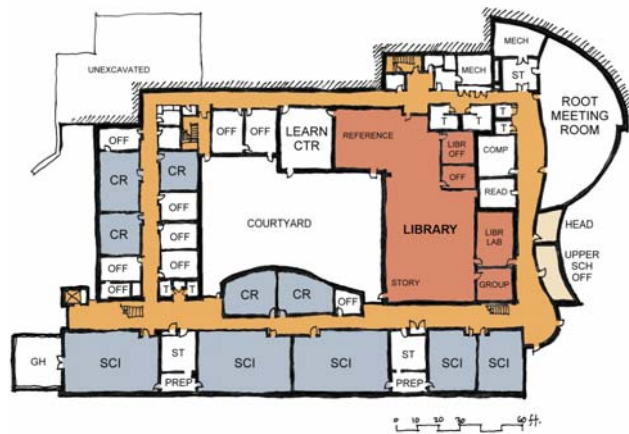
- Circulation
- Upper School classrooms
- Lower School Classrooms
- Administration
- Learning Commons

existing conditions

Root Building Classrooms



Level 2 Floor Plan (On Grade Access, South Side)



Level 1 Floor Plan (On Grade Access, South Side)

Fay School

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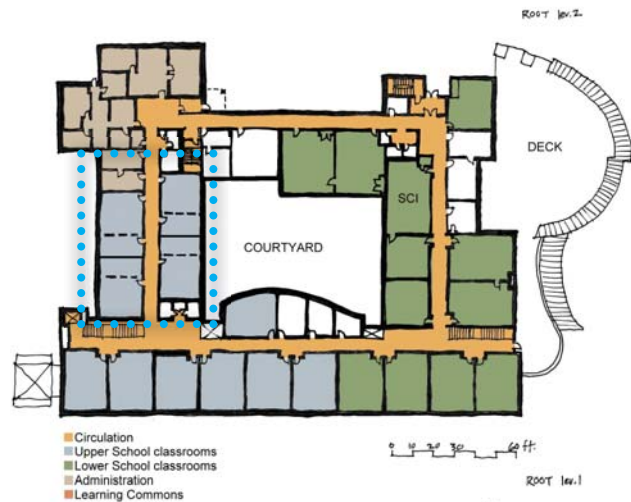
Upgrade and add classrooms for the **Upper School**

OPTION 1 PREFERRED OPTION

- Circulation
- Upper School classrooms
- Lower School Classrooms
- Administration
- Learning Commons

UPPER LEVEL (Lower/Upper School):

Upper School uses classroom spaces in southwest quadrant of this floor. On the terrace, a large shade is installed. One classroom and office to the northeast will be consolidated to form a larger space.



LOWER LEVEL (Upper School):

Library and adjoining spaces become a Learning Commons; the Meeting Room becomes a large Group Space. One classroom and office to the northwest will be consolidated to form a larger space.



THIS OPTION INCLUDES:

Demolition of existing partitions as identified on the upper and lower levels, new ceiling, lighting, carpet and paint for renovated areas.

Renovated Space: 3,200sf



Fay School

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Upgrade and add classrooms for the **Upper School**

OPTION 2

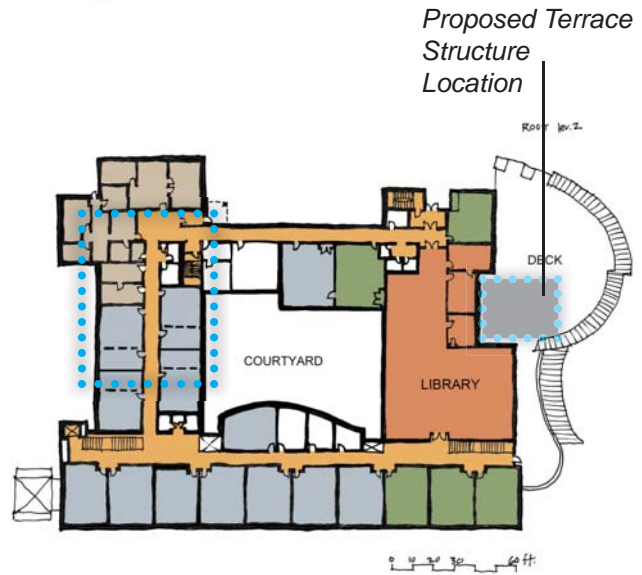
- Circulation
- Upper School classrooms
- Lower School Classrooms
- Administration
- Learning Commons

Floor 2 (Lower/Upper School):

The eastern half of this level is divided between Lower School Classrooms and a Learning Commons. The Learning Commons is relocated to the upper floor level and has access to the existing patio. On the patio, a large shade is installed. Classrooms and offices in the western wing will be renovated/consolidated to form larger spaces.

Floor 1 (Lower/Upper School):

Lower School uses classroom and office spaces in northeast quadrant of this floor, with some renovation including the addition of toilets.



Level 2 Floor Plan (On Grade Access, South Side)

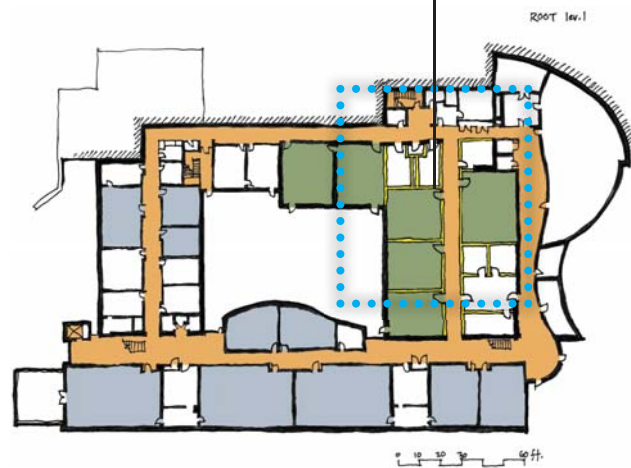


Proposed Terrace Structure on existing Root Patio



Terrace Structure Option

New Classrooms in former Media Center Location



Level 1 Floor Plan (On Grade Access, South Side)

RECOMMENDATIONS

SELECTED OPTION REVIEW:

Program Fit:

The proposed modifications for Option 1 of the classroom reconfiguration provide the appropriate number of classrooms required per the 2021 goal identified in the Strategic Plan.

Accessibility for Students & Staff:

The proposed modifications do not change the current traffic flow for students and staff to access classrooms, therefore these classrooms can be easily accessed by Students and Staff.

Construction Phasing:

Due to the minimal scope of work, including demolition, this classroom construction phasing can be scheduled to have these classrooms modified over the summer months.

Disruption to Existing Programs:

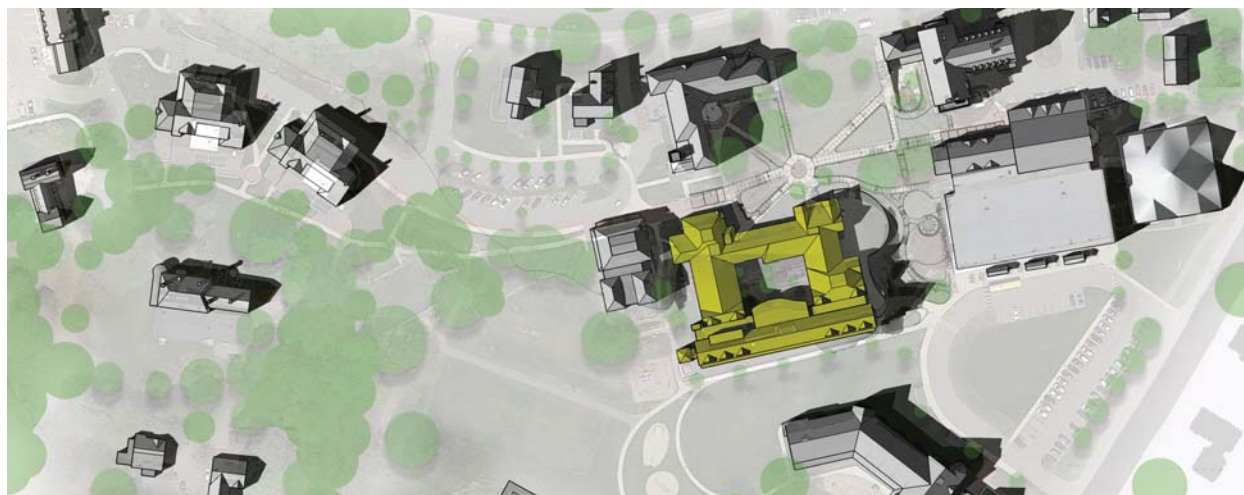
Existing programs are minimally disrupted due to the ability for the existing Root Building to accommodate the number of classrooms identified in the Strategic Plan. Phasing of the work during the summer will allow for minimal disruption to Fay Programs during construction.

Reuse of Existing Space:

The proposed Option 1 is complete renovation which utilizes 100% existing built environment, therefore minimizing construction costs.

Alignment with Strategic Plan:

The proposed classroom count in Option 1 meets and exceeds the number of classrooms required for the student body in 2021.



ACTIVE SPACES

ISSUE

The existing athletic fields are remotely located from the main campus and have no support structure or facilities.

GOAL

Improve Athletic Field Complex. Explore addition of a shelter, toilet facilities and trainer. Locate future indoor athletic facility on athletic complex.

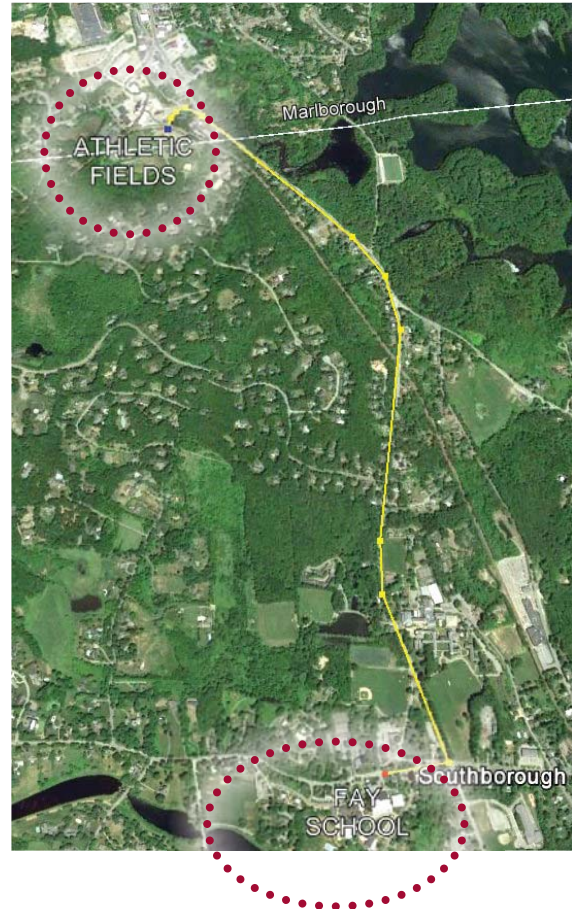
A shelter building is added to the south end of the easternmost athletic field. At approximately 3,000SF, it includes toilets (8 WC for girls, 2 WC and 2 urinals for boys), with the goal of servicing a maximum of approximately 500 people at a time.

To the west of the toilet rooms, two rooms are flexible spaces for trainers, vendors, etc.

As a rain shelter, this structure also has a large wrap-around porch with an overhanging roof area on all four sides; there is also a potential connection on the northern side to a future indoor turf field or hockey rink.

existing conditions

Fay School Athletic Complex - Auxiliary Campus



The Athletic Complex is located north of the Main Campus



Existing Athletic Complex Aerial Photo

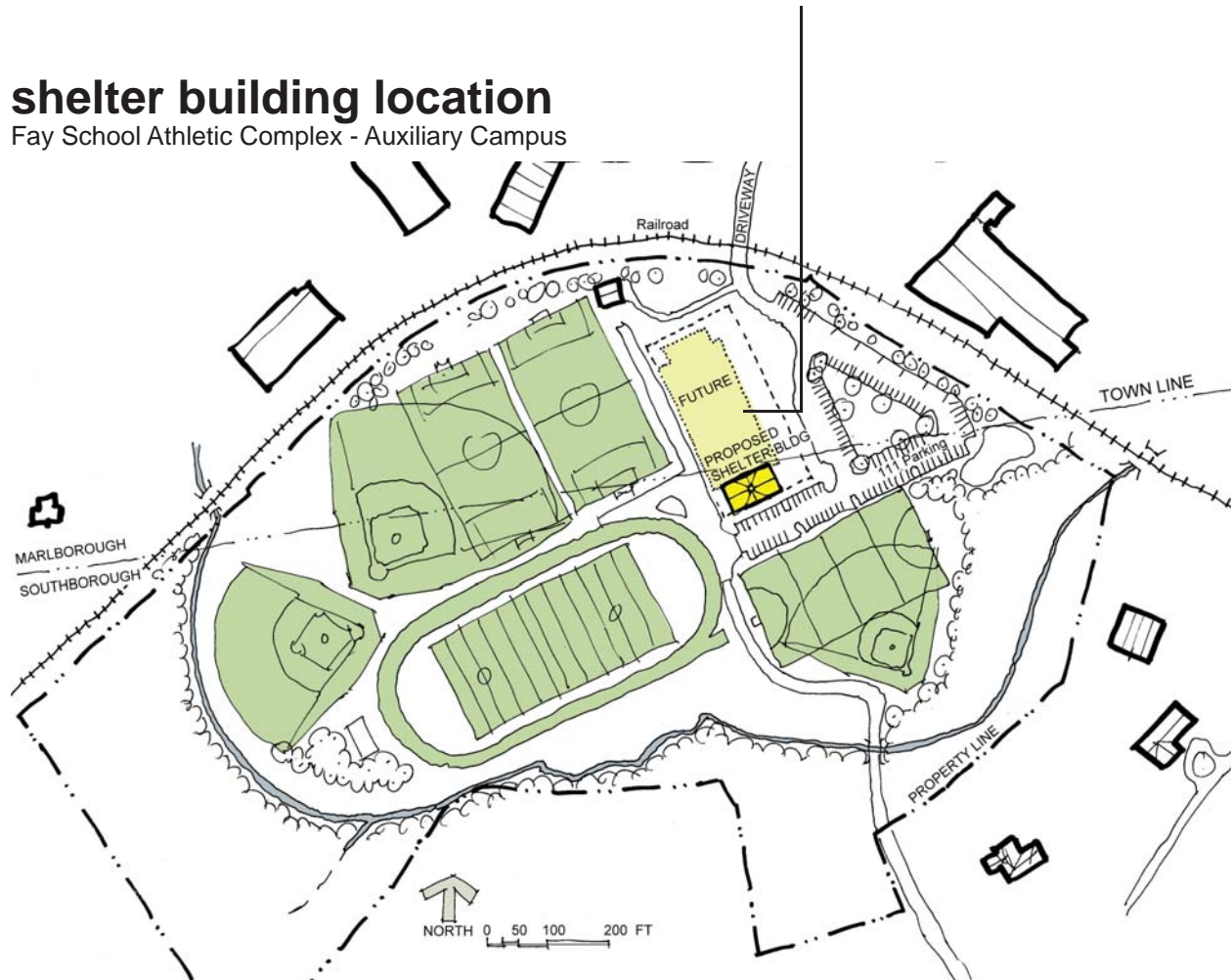
Fay School

S O U T H B O R O U G H

As a rain shelter, this structure also has a large wrap-around porch with an overhanging roof on all four sides; there is also a potential connection on the northern side to a future indoor turf field or hockey rink.

shelter building location

Fay School Athletic Complex - Auxiliary Campus



The proposed shelter building is located in an underutilized field location, adjacent to the existing parking lots. The location would allow for future indoor athletic field to be developed in a second phase of the project.

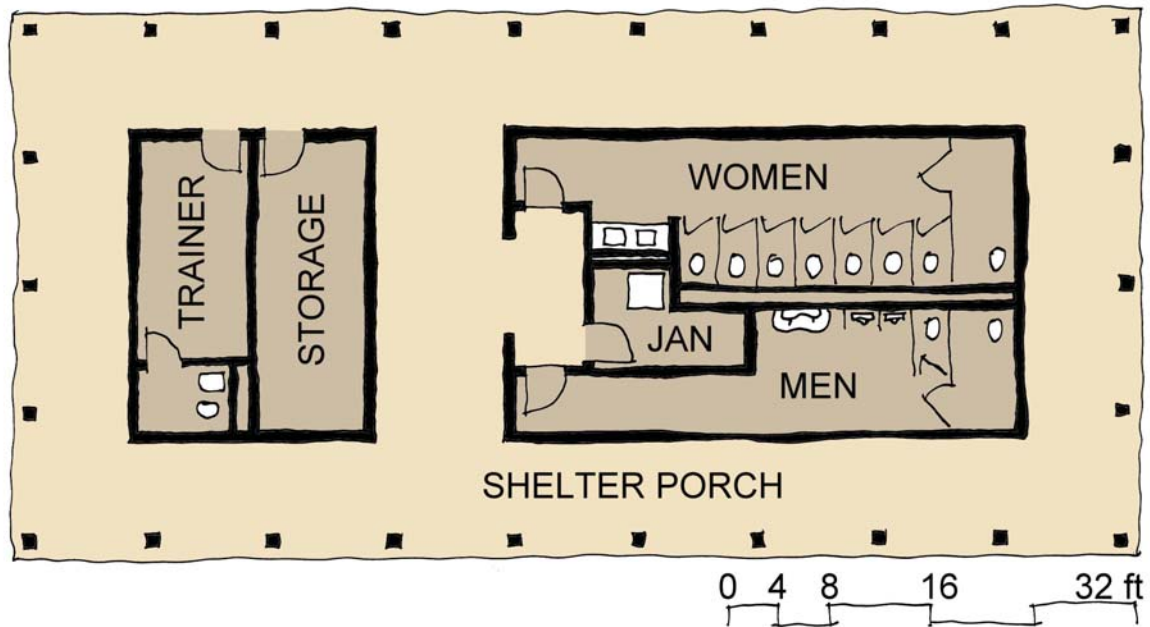
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potential shelter building

Fay School Athletic Complex - Auxiliary Campus

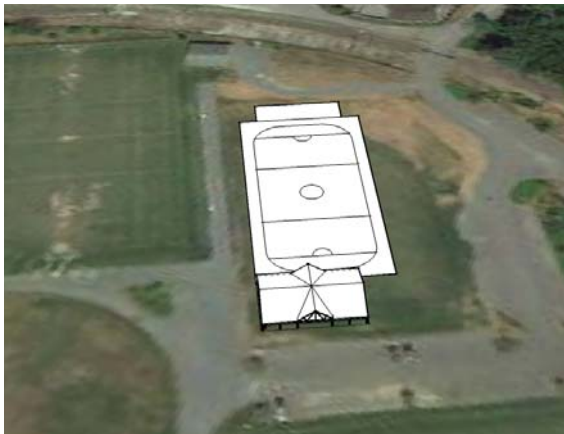
FAY SCHOOL
Athletic Shelter



The test fit includes toilet facilities for the appropriate number of occupants at the Athletic Complex as well as trainer and storage/mechanical space. The continuous porch allows for visitors to take shelter during inclement weather.

THIS OPTION INCLUDES:

*New Slab on Grade Construction - approximately 3,000sf.
Includes sewer connection, drinking fountains, exterior lighting.*

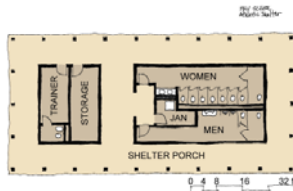


Proposed location with future athletic field



Potential for a future indoor field structure

RECOMMENDATIONS



SELECTED OPTION REVIEW:

Program Fit:

The proposed test fit location and plan allows for the desired program functions (both Phase 1 shelter building and Phase 2 indoor field structure) to work together.

Accessibility for Students & Staff:

The proposed location has easy access to existing parking for students, staff and visitors.

Construction Phasing:

Construction phasing options vary depending on the extent of the projects developed by Fay School. The Phase 1 Shelter Building can be constructed independently from the Phase 2 indoor athletic facility.

Disruption to Existing Programs:

Due to the remote nature of the athletic facility from the main campus, construction phasing issues will be minimal and staging areas are available to allow utilization of the existing fields.

Reuse of Existing Space:

Not Applicable.

Alignment with Strategic Plan:

An athletic support building will help boost the infrastructure for the athletic program at Fay School which is in alignment with the Strategic Plan.

LEARNING SPACES

ISSUES:

Existing Innovation Lab programs are currently subdivided in existing spaces with sloped ceilings that do not facilitate innovation lab activities. Supervision is an issue with the current staff.

GOALS:

Provide flexible spaces that allow diversity and cross-pollination of activities that supplement student curriculum. Spaces must accommodate Primary, Lower and Upper Schools and accommodate various tools, materials and manufacturing technology and equipment. Spaces must be easily supervised and separated to accommodate 'clean' and 'dirty' activities.



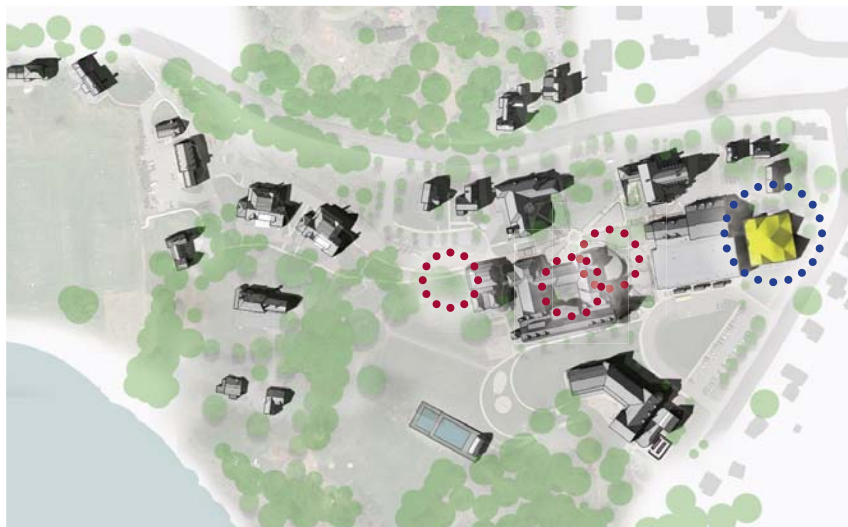
existing conditions

Reinke Building - Second Floor

Current spaces were compared to ideal program requirements and modified space requirements proposed by the design team. The current iLab is divided into six different spaces that were not designed to house the innovation lab programs.

The spaces are located on the second floor of the Reinke Building, which has exposed roof structure that dramatically slopes in each space. This limits the types activities and amount of space that students have to work on various projects.

The existing Reinke Building is located on the eastern side of the main campus. The preferred options (described in detail later in this section) take advantage of a shift of the innovation lab program from the periphery of the campus to the academic core of the main campus at Fay School.



Fay School

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INNOVATION LAB PROGRAM SPACES

Existing & Proposed

The team worked with Fay staff members and ultimately the proposed solution is an Innovation Lab with a net area of 4,500 SF of program space. The new areas were subdivided into four key spaces. After meeting with key staff during programming sessions, the Maker Space and Fabrication Space were combined into one program space to maximize flexibility and use of square footage.

1 MAKER SPACE

workshop (includes technician office, project storage and material storage), workstations, benches, hand tools and equipment for model making and building in wood, metal, plastics and composites.

2 FABRICATION SPACE

3D printing equipment, laser cutter, vinyl plotters, CNC mill and CNC lathes, welding and brazing (ferrous and non-ferrous)

3 DESIGN SPACE

design studio with CAD capability, reprographics and digital creativity. multi-disciplinary space for teaching electronics, structures, pneumatics, mechanisms, robotics, coding and app design. 'brainstorming' spaces and meeting room preferred with smart boards and transparent sheets for 'mind-mapping' office space for teachers and Director of Innovation.

4 TINKER SPACE

General workshop environment for design and low-tech activities geared towards Primary and Lower School students. Green engineering activities could be incorporated into this space.

INNOVATION LAB PROGRAM AREAS

Existing and Proposed

Program Space	Requirements	Location	iLab Program Areas			DRA Revised
			*Existing	Proposed	DRA Proposed	
MAKER SPACE	First Floor Workshop	First Floor Workshop		2,000	1,000	Combined Maker Space & Fabrication Space 2,500
FABRICATION SPACE	First Floor Workshop	First Floor Workshop		1,500	1,000	
DESIGN SPACE	Second Floor Design Studio	Second Floor Design Studio		1,500	1,000	1,000
TINKER SPACE	Second Floor Workshop	Second Floor Workshop		1,000	1,000	1,000
SPACE 1	Reinke Building		1,145			
SPACE 2	Reinke Building		634			
SPACE 3	Reinke Building		639			
SPACE 4	Reinke Building		1,128			
OFFICE	Reinke Building		119			
STORAGE	Reinke Building		121			
		NET Program Area	3,786	6,000	4,000	4,500
		(*1.5) Gross Area	5,414	9,000	6,000	6,750
		(*1.25) Gross Area		7,500	5,000	5,625



Fay School

SOUTHBOROUGH

option 1

Upjohn Building Expansion



This two-story option is an addition to the existing Upjohn Building and Picardi Art Center. The addition would utilize the sloping grade to maximize height of program spaces for the innovation lab.

option 2

Upjohn Building Expansion
with Connection to the Root Building



PREFERRED OPTION for Cost Evaluation

This two-story option is an addition to the existing Upjohn Building and Picardi Art Center. This option would also connect the Picardi Art Center to the Root building, allowing a direct tie from the Arts to the Academic programs in the Root Building. It also proposes a new entry to the Root Building for easier wayfinding.

option 3

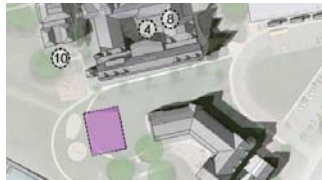
Root Building Addition/Renovation



This one-story option is an addition and partial renovation to the Root Building. Science classrooms on the lower level would have to be relocated to accommodate the new innovation lab program areas, centrally located to the core classroom areas.

option 4a

New Construction Option A



This two-story option proposes new construction at a prime location adjacent to the upper/lower and primary school buildings. This would provide easy access for students of all ages.

option 4b

New Construction Option B



This two-story option proposes new construction at a highly visible location along Main Street. This option is located between the existing Camp Building and Steward Dorms. The proposed location does not provide easy access for students in the primary school building.

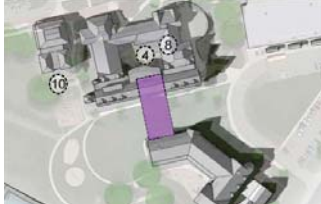


Fay School

SOUTHBOROUGH

option 5

Connect Primary School to Root Building



This one-story option proposes a connection of the upper/lower and primary school buildings. This option would allow easy access for students in all age groups, but would require a modification of site circulation.

option 6a

Courtyard Addition

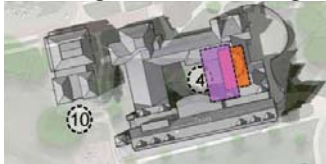


1-Story Courtyard Addition to Courtyard: Option A

This one-story option is adjacent to the Learning Commons on the lower level of the Root Building. An addition would occupy part of the courtyard that currently exists in the central area of the Root Building.

option 6b

2 Story Addition to Courtyard: Option B
Learning Commons Integration



This two-story option is directly connected to the Learning Commons on the lower level of the Root Building and utilizes existing built classroom space on the upper level of the Root Building. An addition would occupy part of the courtyard that currently exists in the central area of the Root Building.

option 6c

1 Story Addition to Courtyard: Option C
Learning Commons Integration



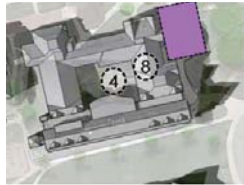
This one-story option is directly connected to the Learning Commons on the lower level of the Root Building. An addition occupies part of the courtyard that exists in the central area of the Root Building, but less than option 6a as it utilizes some classroom spaces on the lower level.

Fay School

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option 7

Patio 2-Story Renovation-Addition Scheme



PREFERRED OPTION for Cost Evaluation

This two-story option utilizes the existing Root Conference Room space on the lower level and occupies part of the existing patio space on the upper level.

A matrix was developed in order to provide information at a glance regarding options for the iLab locations. Ideal options were selected by key participants at Fay School for further review by the design team.

Fay School Master Plan: Innovation Lab Program

OPTIONS MATRIX

DRAFT 8/4/2016

DRAFT

	UPJOHN EXPANSION	UPJOHN EXPANSION W/ CONNECTION TO ROOT BUILDING	ROOT BLDG. ADDITION/ RENOVATION	NEW CONSTRUCTION	NEW CONSTRUCTION	CONNECT PRIMARY TO LOWER-UPPER SCHOOLS	ROOT BUILDING 2 STORY COURTYARD SCHEME	ROOT BUILDING PATIO SCHEME	ROOT BUILDING 1 STORY COURTYARD SCHEME
	1	2	3	4A	4B	5	6A	6B	6C
Considerations									
1. EDUCATIONAL RESULTS									
Program Fit <small>connection to Math-Science-Art</small>	2	5	3	5	3	5	2	3	3
Accessible to all Grades	1	3	5	3	2	5	5	5	5
Transitions Between Buildings	1	4	5	4	2	5	5	4	5
2. PROJECT RESULTS									
Alignment with Strategic Plan	-	-	-	-	-	-	-	-	-
3. PROGRAM VISIBILITY									
Visibility & Site Access for Deliveries	5	5	5	3	5	1	2	2	2
4. CONSTRUCTION ISSUES									
Phasing <small>Order of Construction Temporary Provisions</small>	5	4	1	5	5	1	2	4	2
Disruption to Existing Programs	3	3	1	5	5	3	1	3	2
4 COST									
Potential Donor Support <small>(\$Millions)</small>	3	5	1	3	5	3	3	5	3
TOTALS	20	29	21	28	27	23	20	26	22

NEXT STEPS...

Of the options explored, three were selected by Fay School to investigate broad range potential costs for each option. The selected options were Option 2 (Upjohn Expansion), Option 6c (1-Story Courtyard Addition), and Option 7 (2-Story Patio Renovation/Addition). *Option 7 was developed later in the process after the matrix was completed.*

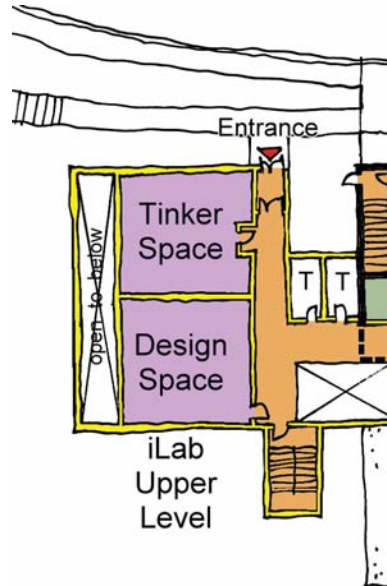


Fay School

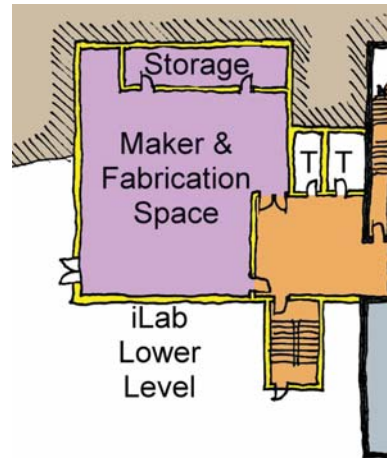
SOUTHBOROUGH

OPTION 2 Upjohn Expansion

UPPER LEVEL connection allows new location for the MAIN ENTRY. This allows the entry to be more central and facilitates the arrival sequence for pedestrians on campus.



LOWER LEVEL connection allows direct path from the inside of the Root Building to both Upjohn and a potential addition for the iLab.



PROS

- Increases visibility of Innovation Lab program on campus
- Facilitates transition between educational spaces and iLab
- Easy site access for deliveries
- Construction Phasing and disruption to other programs is minimal

CONS

This option utilizes a minimal amount of the built environment and yields a higher cost per square foot for construction.

THIS OPTION INCLUDES:

- Addition to Upjohn: 5000sf
 - Renovated Upjohn/Root: 2000sf
 - Connection Addition: 2000sf
 - Added Toilet Core
 - Elevator (part of Connection Addition)
 - Renovation to Hallway/Connector from Root Building
- (For pricing purposes the Upjohn-Root connector and hallway work has been separated from the iLab project costs to allow the project to be completed in phases)*

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OPTION 7

Expand Root Patio upwards and Create Program Area

UPPER LEVEL PATIO EXPANSION

This space allows for shared resources and is adjacent to both the classroom core and the learning commons.

LOWER LEVEL CONVERSION

The existing conference room would be converted to maker/fabrication space. This open space would allow flexible arrangement of iLab program equipment.

THIS OPTION INCLUDES:

Renovated Space:

2500SF

Addition to Patio

Above:

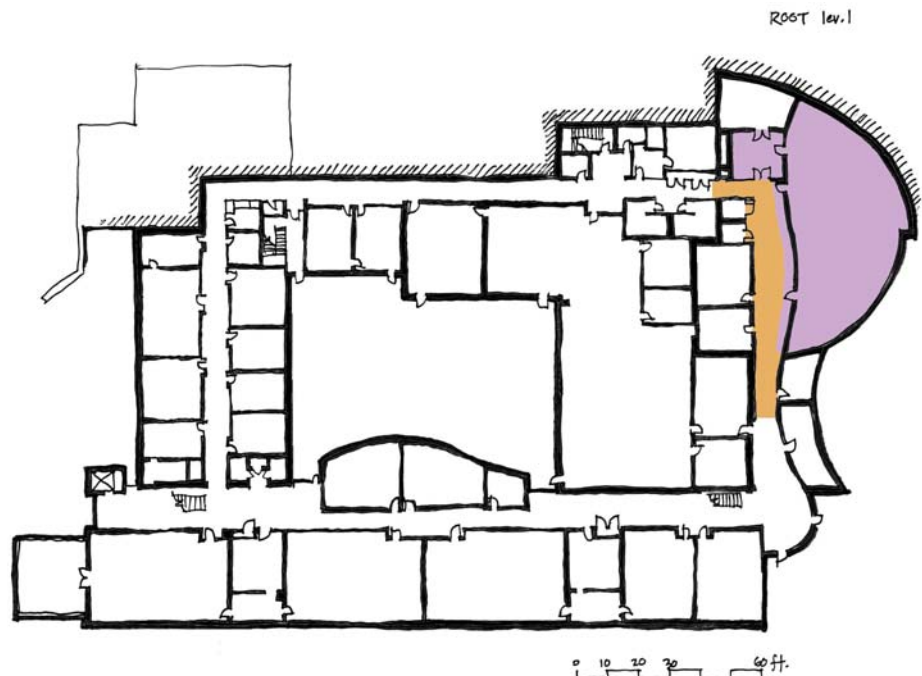
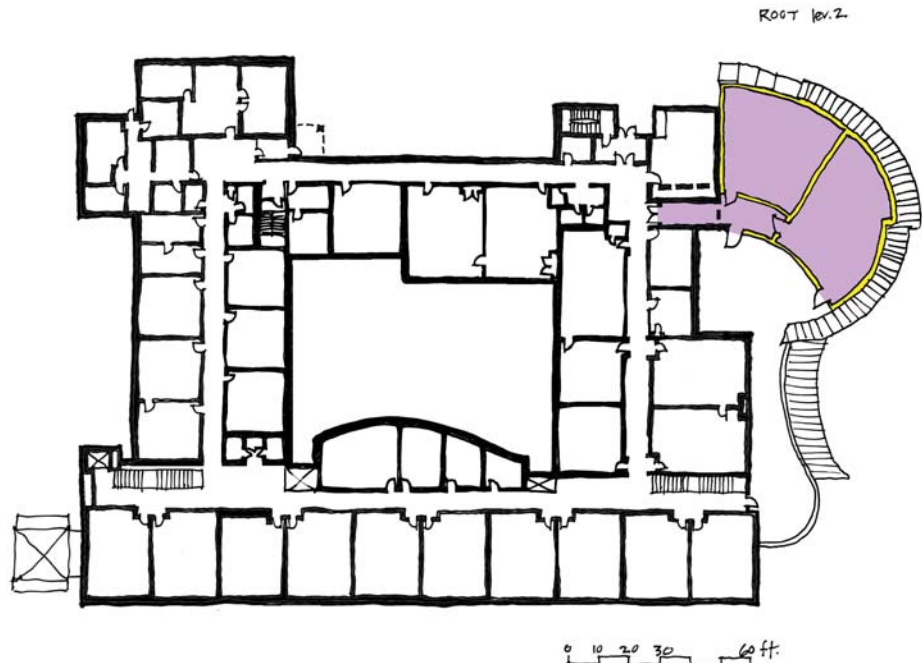
2200SF

PROS

- Increases visibility of Innovation Lab program on campus
- Facilitates transition between educational spaces and iLab
- Easy site access for deliveries
- Construction Phasing and disruption to other programs is minimal

CONS

- The large Root Conference Room Space would have to be relocated or found within another space in the built environment.



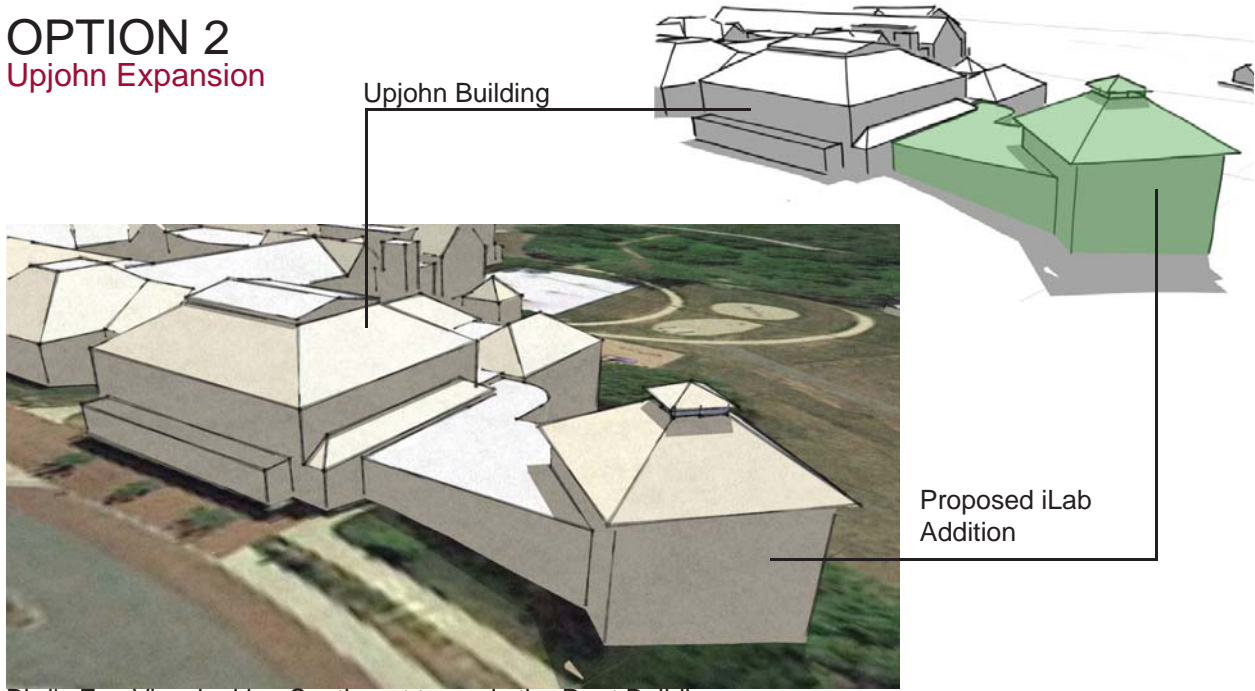
Fay School

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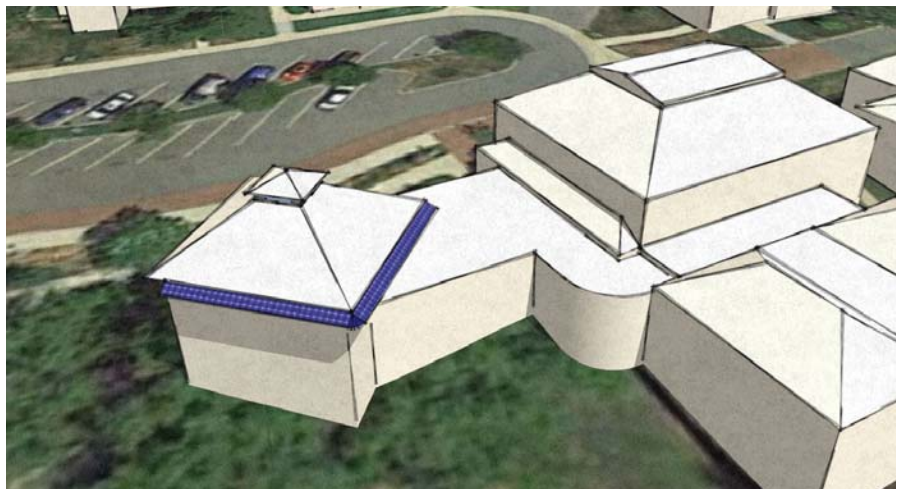
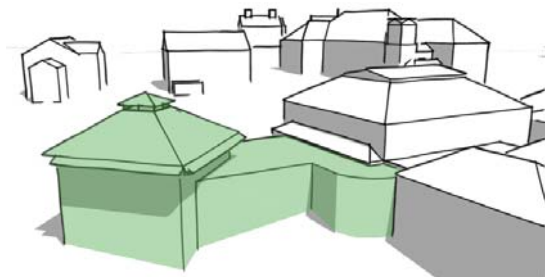
FORM EXPLORATION

Based on the pricing received by Fay School, two of the three options were identified as preferred: Option 2 and Option 7. These were further explored by the DRA study team to review potential massing and scale on the Fay Campus.

OPTION 2 Upjohn Expansion



Bird's Eye View looking Southeast towards the Root Building



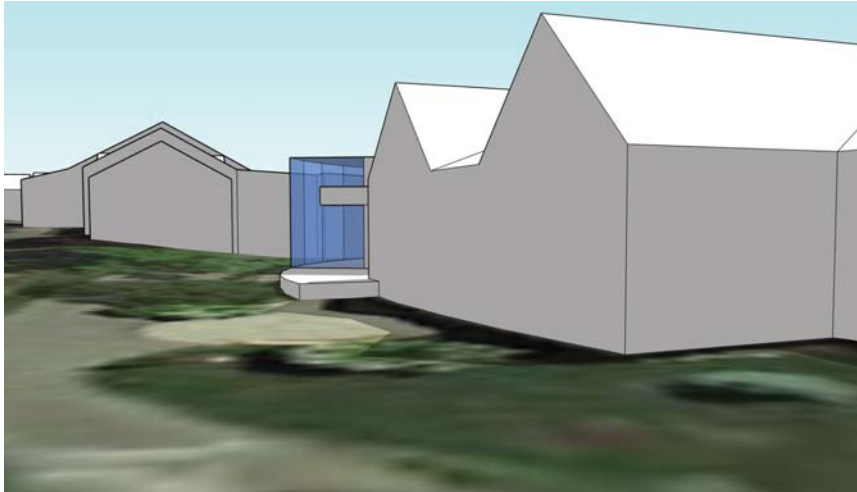
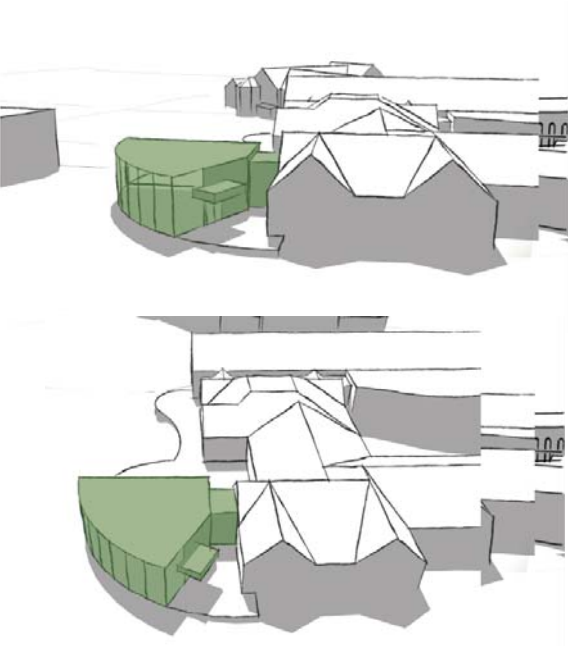
Bird's Eye View looking North towards Visitor Parking

Fay School

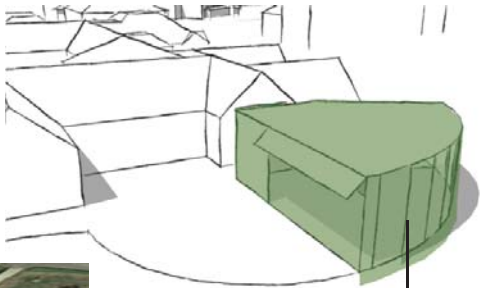
SOUTHBOROUGH

OPTION 7

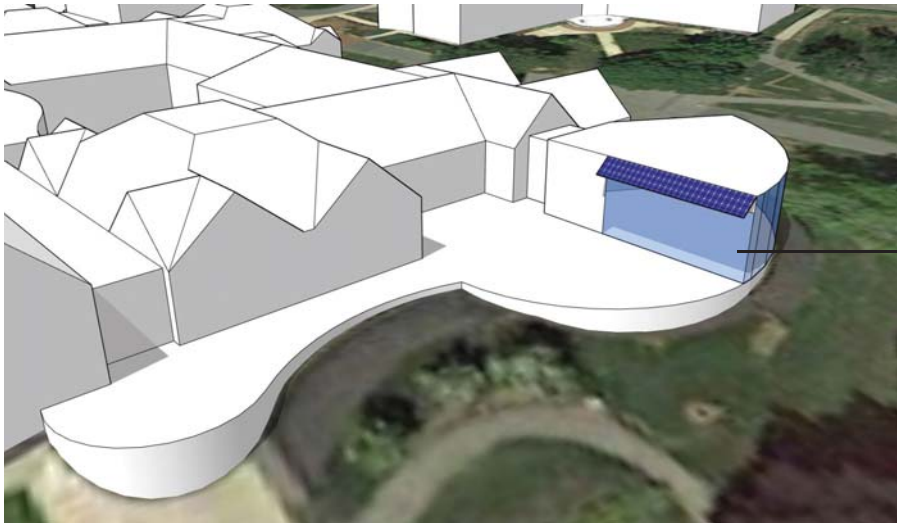
Expand Root Patio upwards and Create Program Area



Pedestrian Approach looking East towards Harris/Harlow



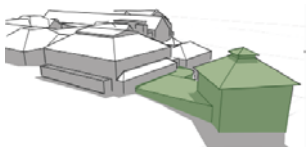
Proposed iLab Addition/Renovation



Bird's Eye View looking North towards Visitor Parking



RECOMMENDATIONS



SELECTED OPTION REVIEW:

Program Fit: The proposed options allow for a more efficient and better-serving Innovation Lab program. Appropriate spaces can be developed from any three of the selected options.

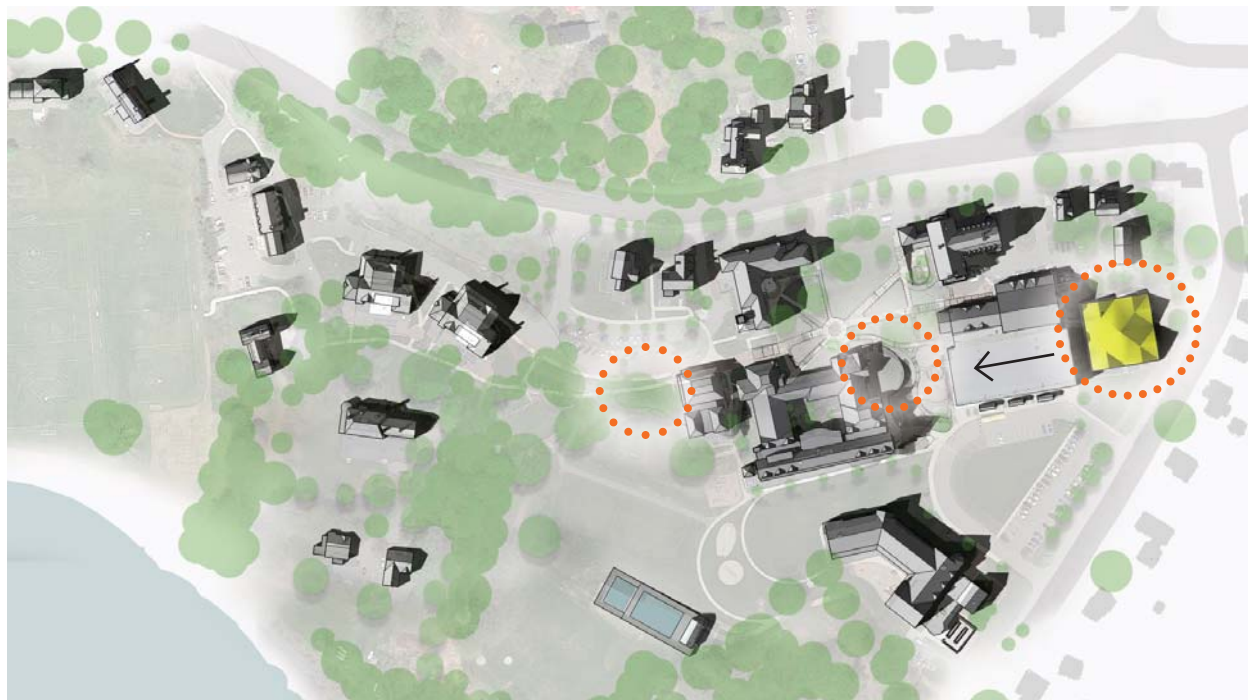
Accessibility for Students & Staff: The proposed locations allow for easy access of both students and faculty due to the proximity to academic spaces.

Construction Phasing: Construction phasing options vary with Options 2 and 7

Disruption to Existing Programs: Existing program disruption is least of a concern with Option 2 and more so with the courtyard and patio scheme options.

Reuse of Existing Space: Existing space is utilized for Option 7.

Alignment with Strategic Plan: All options provide an improved location for the Innovation Lab which strengthens the program and therefore is in alignment with the Fay School Strategic Plan.



Fay School

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F

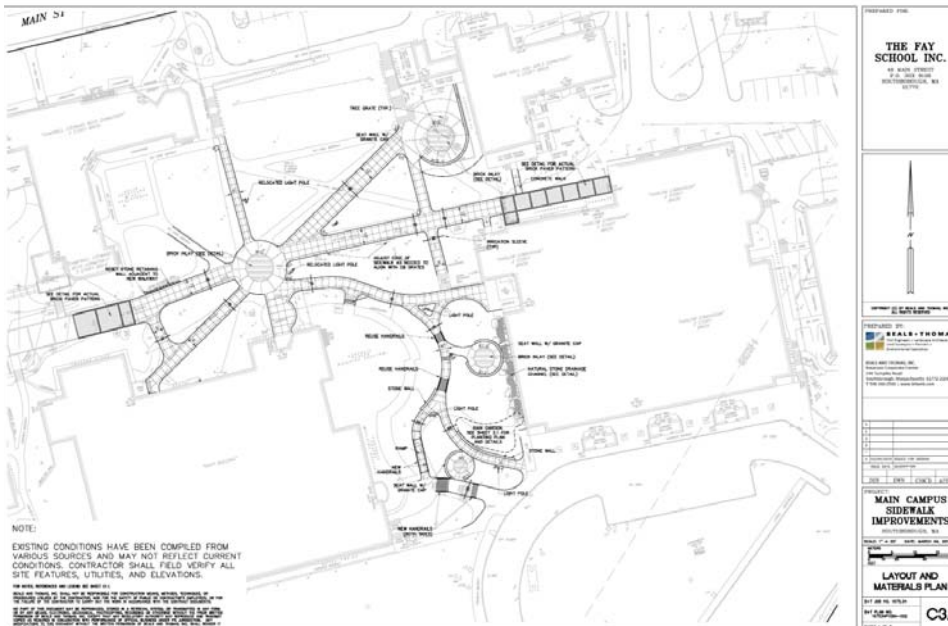
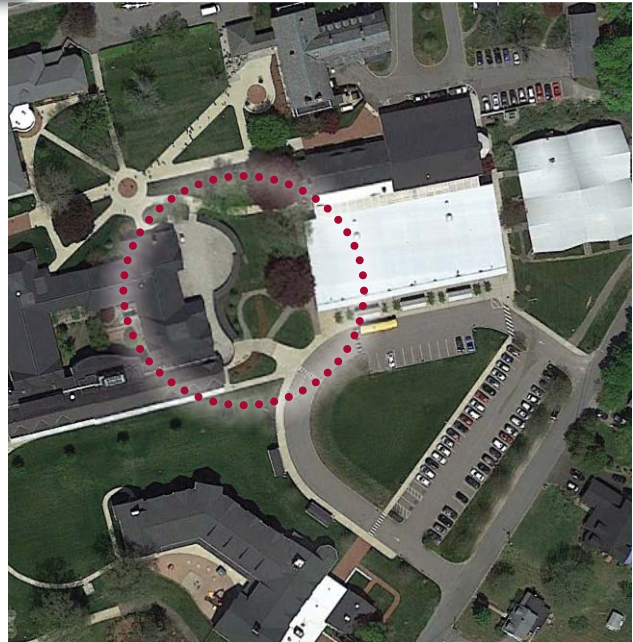
CAMPUS FUTURE

PROPOSED DESIGN Phase II Sidewalk Improvements

existing conditions

Reinke Building
The existing sidewalk configuration between the Root Building and Harris/Harlow Gym is planned for reconfiguration as a second phase of sidewalk work scheduled for Fay School.

Although the design was previously completed by another firm, DRA has included this in our Master Plan scope of work only to show that the other issues associated with the Master Plan scope do not occupy the space between these two buildings. If the work between the Root Building and Harris/Harlow Gym was to proceed, it would not require modifications to accommodate work associated with the Master Plan.



proposed plans

Sidewalk configuration plans prepared by Beals + Thomas



Fay School

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STUDENT LIFE

ISSUE:

The existing school store is located in a basement condition room in the Picardi Art Center with no windows. It is not readily visible and easily accessible to visitors.

GOAL:

Relocate School Store to a more prominent location.

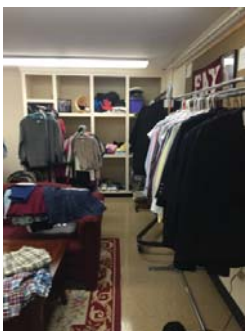
existing conditions

CURRENT LOCATION -
LOWER LEVEL PICARDI ART CENTER



Existing School Store Location -
Lower Level Picardi Art Center

The current 'Mooseduds' program is located in the Camp Building, which is a separate building location from the school store.



Existing School Store
Location -
Lower Level Picardi Art
Center



Existing School Store Location -
Lower Level Picardi Art Center, adjacent to the
Upjohn Building. The current location is not
directly accessible and visible for visitor access.
The current access is through the Picardi Art
Center.

Fay School

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existing conditions

PROPOSED LOCATION - Camp Dining Hall



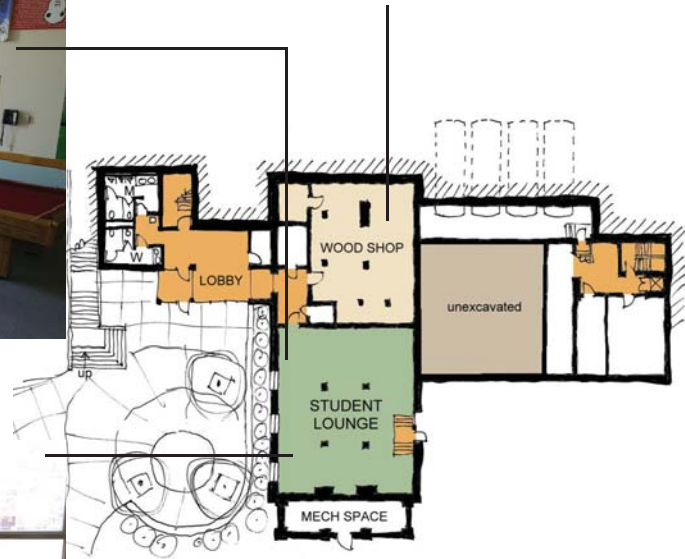
Camp Building View looking West



Existing Wood Shop



Camp Building First Floor: Existing Student Lounge



Camp Building First Floor: Original Basement Plan



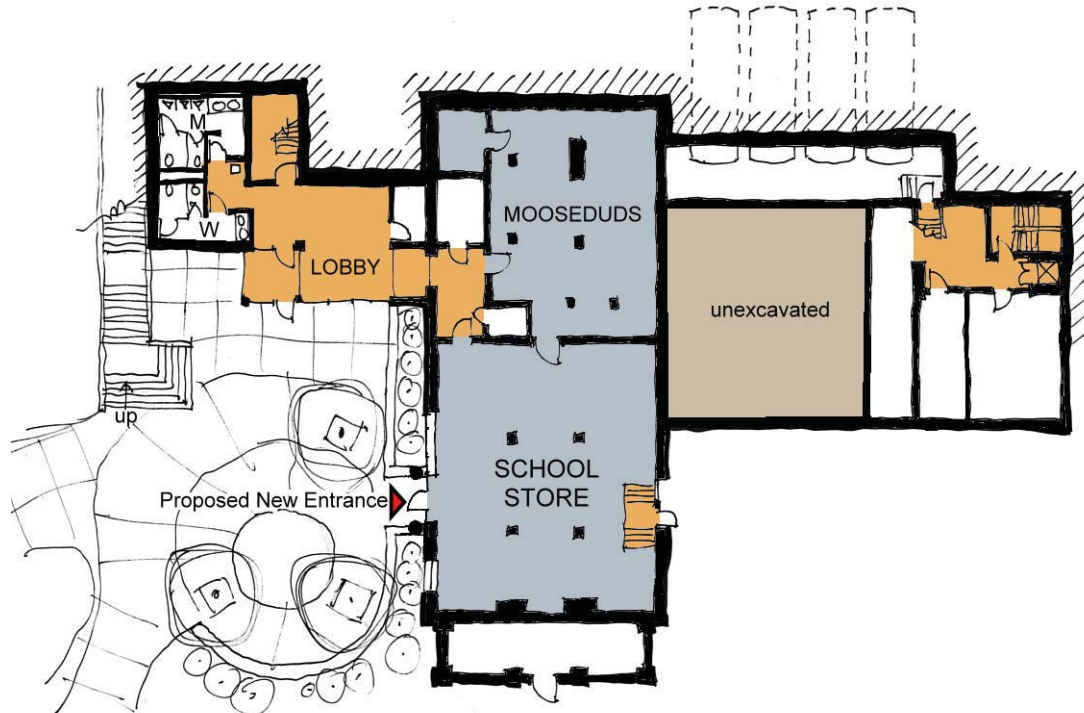
Camp Building First Floor: Existing Student Lounge

Fay School

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proposed test fit

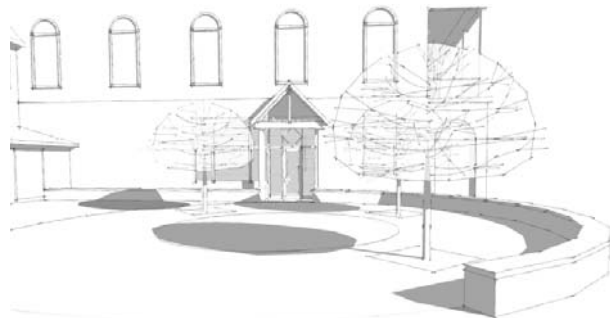
School Store - Camp Building



Camp Building First Floor: Proposed Test Fit for School Store, incorporating the 'Mooseduds' program for reuse gently used school uniforms.



Proposed Exterior Entry and Storefront



Proposed Exterior Entry and Storefront

THIS OPTION INCLUDES:

Renovated Space: 2,600SF

Exterior Envelope Modifications:

Structural Steel required to open west facade to existing plaza

New Storefront, Structural Steel - 500SF



RECOMMENDATIONS



SELECTED OPTION REVIEW:

Program Fit:

The proposed location for the school store allows it to be more visible to pedestrians on campus and allows for natural light to flow into the space.

Accessibility for Students & Staff:

The Camp Building location allows students, staff and visitors to easily access the store from the main quadrangle.

Construction Phasing:

The school store renovation project could be phased over the summer months to allow minimal disruption to the school year. The student lounge activities would need to be temporarily relocated during the summer months.

Disruption to Existing Programs:

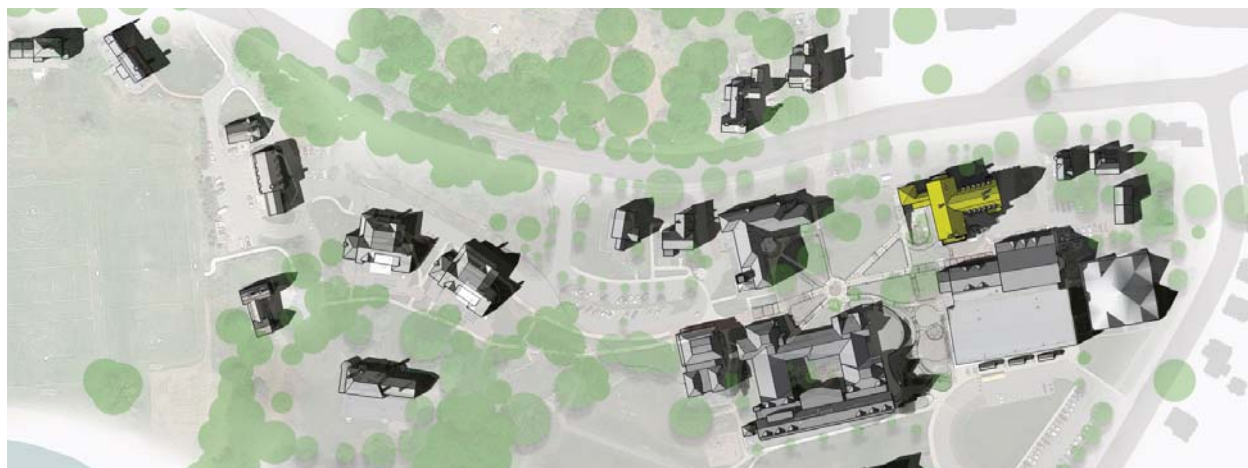
If phased in the summer, the existing school store could be kept in operation during the construction.

Reuse of Existing Space:

The proposed Option 1 is a complete renovation which utilizes 100% existing built environment, therefore minimizing construction costs.

Alignment with Strategic Plan:

The proposed location is central to the main campus and is more visible than the current location. This, in turn, helps with marketing efforts for the Fay School program.



LEARNING SPACES

ISSUE:

The existing two art studios require expansion for current and projected student needs based on the Strategic Plan.

GOAL:

Find a location for a third art studio.



Picardi Art Center - Aerial View



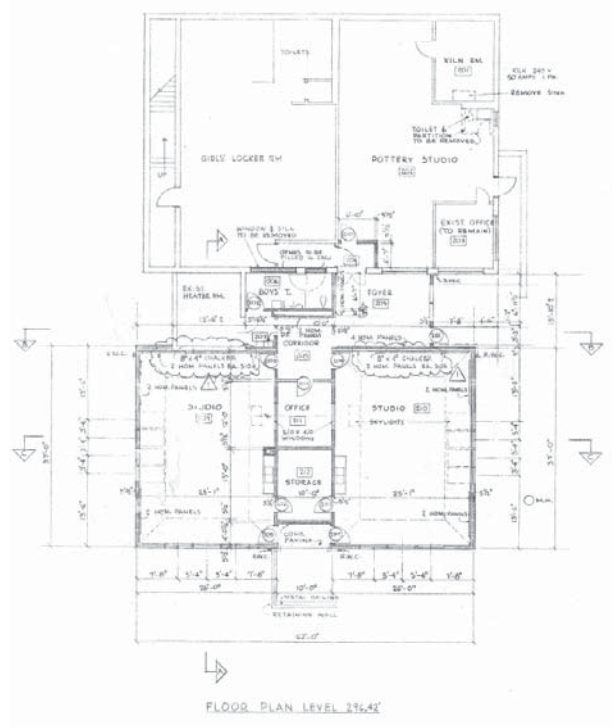
Picardi Art Center - Art Classroom



Picardi Art Center - Ceramics Classroom

existing conditions

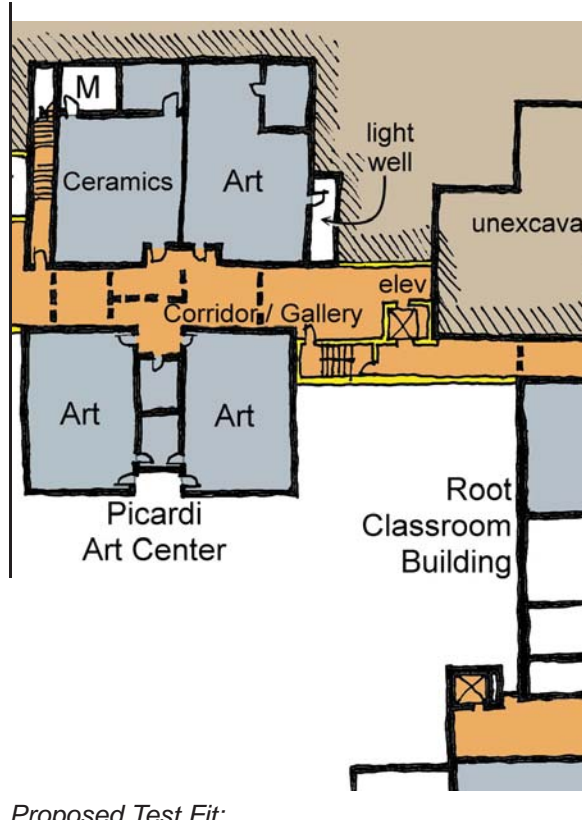
Picardi Art Center



Picardi Art Center - Existing Plan

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Proposed Test Fit:

Relocate Ceramics Studio to former School Store Location

Create Art Studio in former Ceramics Studio

Create Gallery Space in Corridor (upgrade lighting, ceilings, display surface)

THIS OPTION INCLUDES:

Renovated Space:

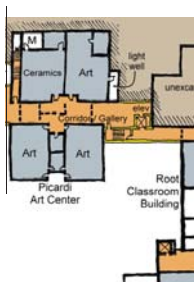
2,200SF for Ceramics Conversion to Art Studio and School Store conversion to Ceramics, Add Kiln Room



Fay School

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RECOMMENDATIONS



SELECTED OPTION REVIEW:

Program Fit:

Adding a third art studio in the existing school store location allows for easy expansion of the existing art program.

Accessibility for Students & Staff:

The proposed location for the third art studio, adjacent to the existing art studios (current school store location) requires no additional accessibility issues.

Construction Phasing:

The art studio renovation could start after the school store is relocated to the Camp Building. This renovation could occur right after the store renovation or wait until the following summer for minimal issues with construction access.

Disruption to Existing Programs:

If phased in the summer, the existing school store space could be renovated with minimal disruption to adjacent programs. Adding a third studio would require relocation of the ceramics studio to the former school store location.

Reuse of Existing Space:

The proposed Option 1 is a complete renovation which utilizes 100% existing built environment, therefore minimizing construction costs.

Alignment with Strategic Plan:

The proposed addition of a third art studio expands the existing art program which is a current necessity at Fay School and supports the Strategic Plan for new enrollment.



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STUDENT LIFE

ISSUE:

The existing student lounge is located in the first floor level of the Camp building. The current location is well suited for upper level students to utilize the lounge although access to the space could be improved as well as the feel of the space once inside. Access to this space is on the East side of the building and not central to boarding student dormitories.

GOAL:

Improve Location and/or facilities for the Student Lounge

existing conditions

Student Lounge - Camp Building



Camp Building - Existing Student Lounge



Camp Building - Existing Student Lounge

Student Center Program

The future Student Center will serve mostly the Upper School students, with a focus on boarding students. Fay School would like this space to be a flexible, multi-purpose space that allows for various evening and weekend activities, including the capability to have school dances. There should be space for table games, an A/V area with a TV but these must be able to be closed off or moved when not in use. A display area for student artwork and iLab projects would also be a plus for the Student Center.

Fay School

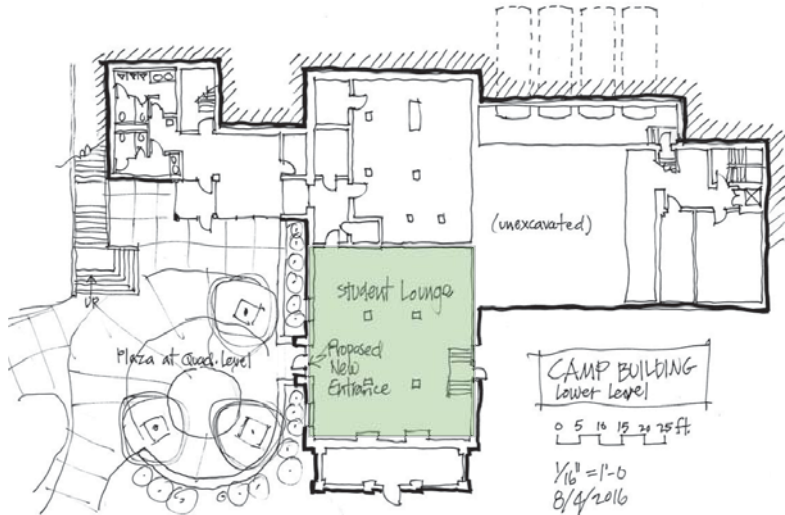
SOUTHBOROUGH

Maintain Existing Location?

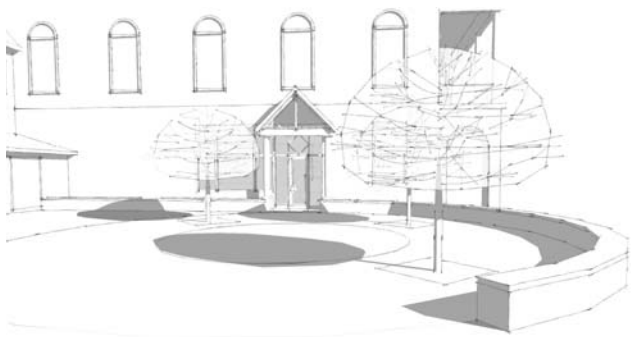
Proposed Modification

The Student Lounge can be improved in its current location by allowing access to the lounge from grade at the adjacent Plaza. By providing access and increasing the natural light in the space, this space will become more inviting and provide easy access for students and staff from other buildings on campus.

This option was not favored and was identified as more favorable for the school store program.



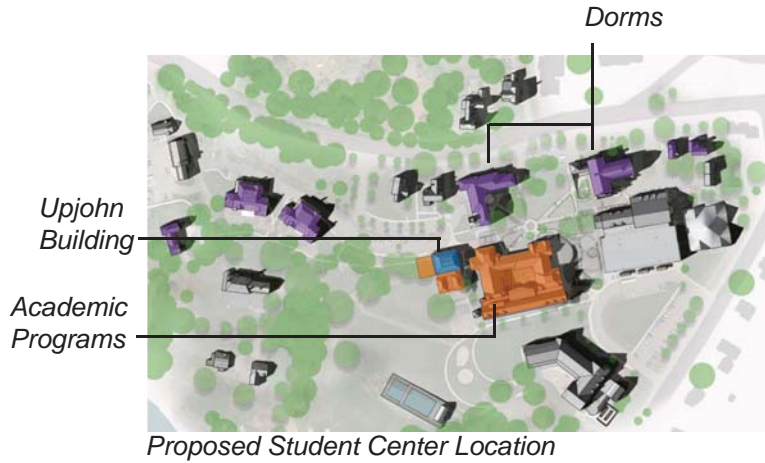
Proposed New Entry from Existing Plaza - perspective looking South



Proposed New Entry from Existing Plaza - perspective looking East towards Camp Dining Hall

Fay School

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Existing Upjohn School Room looking Northeast



Existing Upjohn School Room looking East



Existing Upjohn Building view from Campus

PREFERRED OPTION

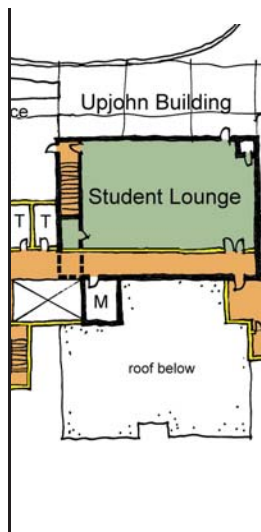
Proposed Modification
The Student Center can be relocated to the Upjohn School Room, which is currently underutilized.

MAIN LEVEL PLAN

The proposed entry would be a newly constructed vestibule to allow redirection of entrance traffic to the Root Building as well as the Student Lounge.

THIS OPTION INCLUDES:

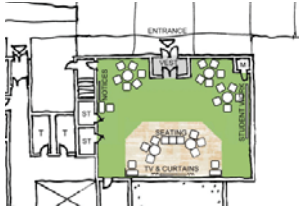
Renovated Space: 3,300SF



Proposed Test fit for Student Center in the Upjohn School Room (shown with no connecting corridor to Root Building)



RECOMMENDATIONS



SELECTED OPTION REVIEW:

Program Fit:

The proposed test fit location and plan allows for the student center to be centrally located amongst the dormitories. This location is also highly visible to visitors and easy to find on campus.

Accessibility for Students & Staff:

The proposed location has easy access to existing parking for students, staff and visitors.

Construction Phasing:

Construction phasing can be isolated to the Upjohn building and construction staging can occur west of the Upjohn, to allow normal traffic flow for students, staff and visitors during construction.

Disruption to Existing Programs:

Due to the location of Upjohn, there may be minor noise disruption to the art rooms below. Construction may be phased to allow a majority of the heavy construction to occur in the summer to minimize noise disturbance of the art programs below.

Reuse of Existing Space:

The existing Upjohn school room is underutilized, therefore relocation of the Student Center to this building would be a good use of the space, and would provide an opportunity to revitalize and energize a part of the history of Fay School.

Alignment with Strategic Plan:

A new student center in a centralized location would be favorable for boarding students. Attracting a greater number of boarding students is a goal of the Strategic Plan.



STUDENT LIFE

ISSUES

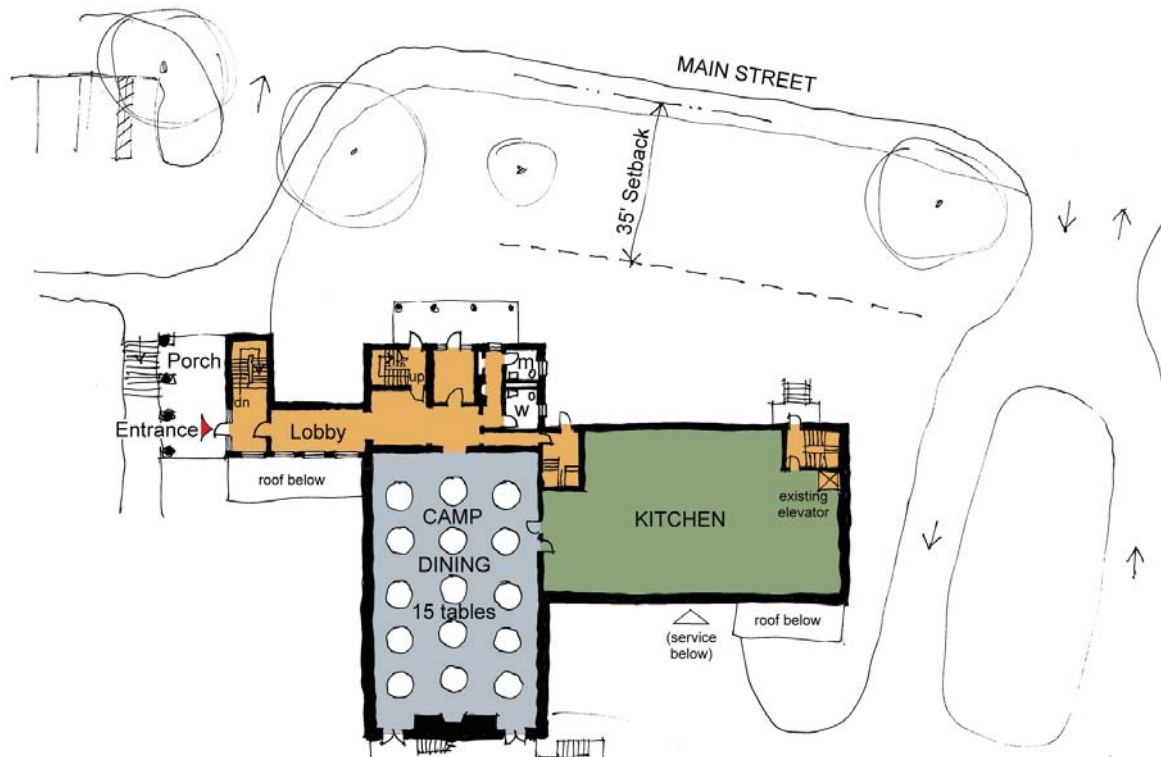
The current dining hall does not fit the projected seating requirements to meet boarding student capacity identified in the Strategic Plan.

The kitchen spaces and delivery sequence to storage spaces needs improvement. (See item M)

GOALS

Accommodate seating count projected in Strategic Plan.

Provide kitchen resources for delivery of goods and service for students and provide space for increased capacity. (See item M)



existing conditions

Main Level Plan with Dining Access via the lobby on the east side of the building.

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proposed test fit

Fay School wishes to continue their tradition of announcements from the Fireplace of the Dining Hall, which requires visual connection to the fireplace from all seating areas. The solution must allow for this continued visual continuity.



PREFERRED OPTION

Expand existing dining room and relocate toilet rooms to be adjacent to the existing lobby.

The Dining Room's capacity is increased to 162 seats. The entrance and toilet area north of the Dining Room becomes an expansion of the Dining Room. New toilets are added on the north side of the lobby west of the Dining Room. This option can stand alone, without kitchen expansion; for kitchen expansion options, please see Item M in this Visioning section of the report.

THIS OPTION INCLUDES:

- 1,600SF interior renovation*
- Upgrade MEPFP, Upgrade Lobby Finishes*
- Addition: 800SF Toilet Core adjacent to Lobby*



RECOMMENDATIONS



SELECTED OPTION REVIEW:

Program Fit:

The proposed option allows for the current number of boarding students to be accommodated in the Camp Dining Hall

Accessibility for Students & Staff:

The expanded dining hall is part of the same space and has easy access for students and staff.

Construction Phasing:

This project can be started independent of the timing of other projects reviewed as part of this master plan. Construction can be consolidated to summer work to provide minimal disruption to the main school year dining hall events.

Disruption to Existing Programs:

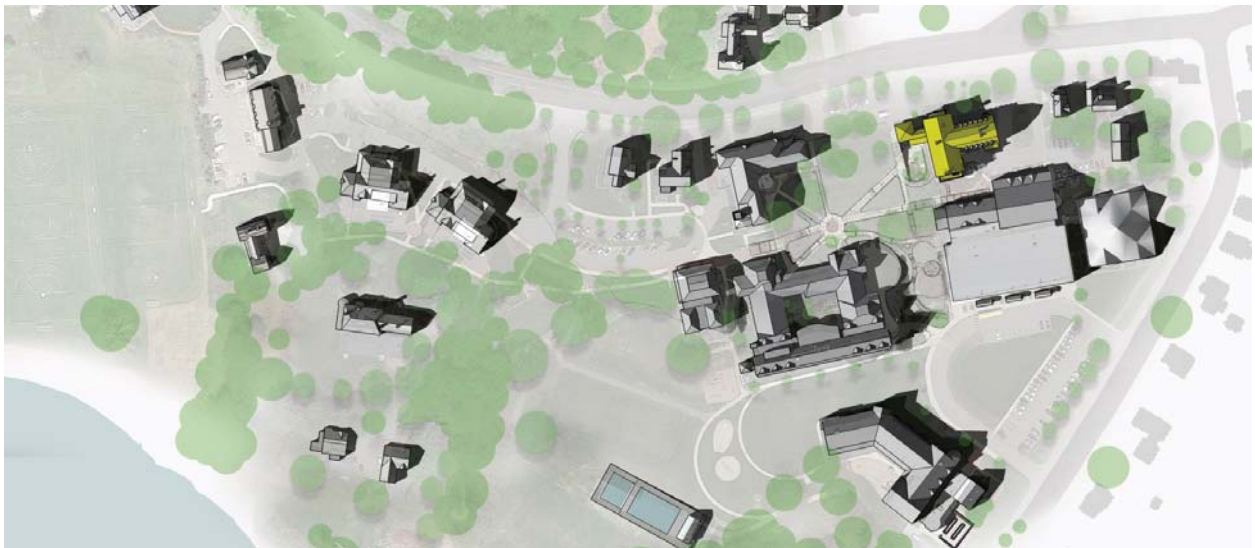
Minor acoustic disruption can be anticipated to summer dining activities. Temporary partitions can be constructed to segregate the construction zone from the remainder of the dining space.

Reuse of Existing Space:

The proposed Option is a complete renovation which utilizes 100% existing built environment, therefore minimizing construction costs.

Alignment with Strategic Plan:

The addition of tables to the main dining table allows for more boarding students to dine at once and therefore is in alignment with the Strategic Plan.



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Fay School

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LEARNING SPACES

ISSUE:

The existing building is currently used for academic programs such as the innovation lab that supports upper and lower school programs and athletic activities. The second floor innovation lab program spaces are divided into several rooms with sloping ceilings, which are not well suited for the innovation lab activities.

GOAL:

Explore best use of Reinke including a possible relocation of students out of Reinke.

existing conditions

Reinke Building



Innovation Lab Tinker Space



Reinke Indoor Turf Practice Field

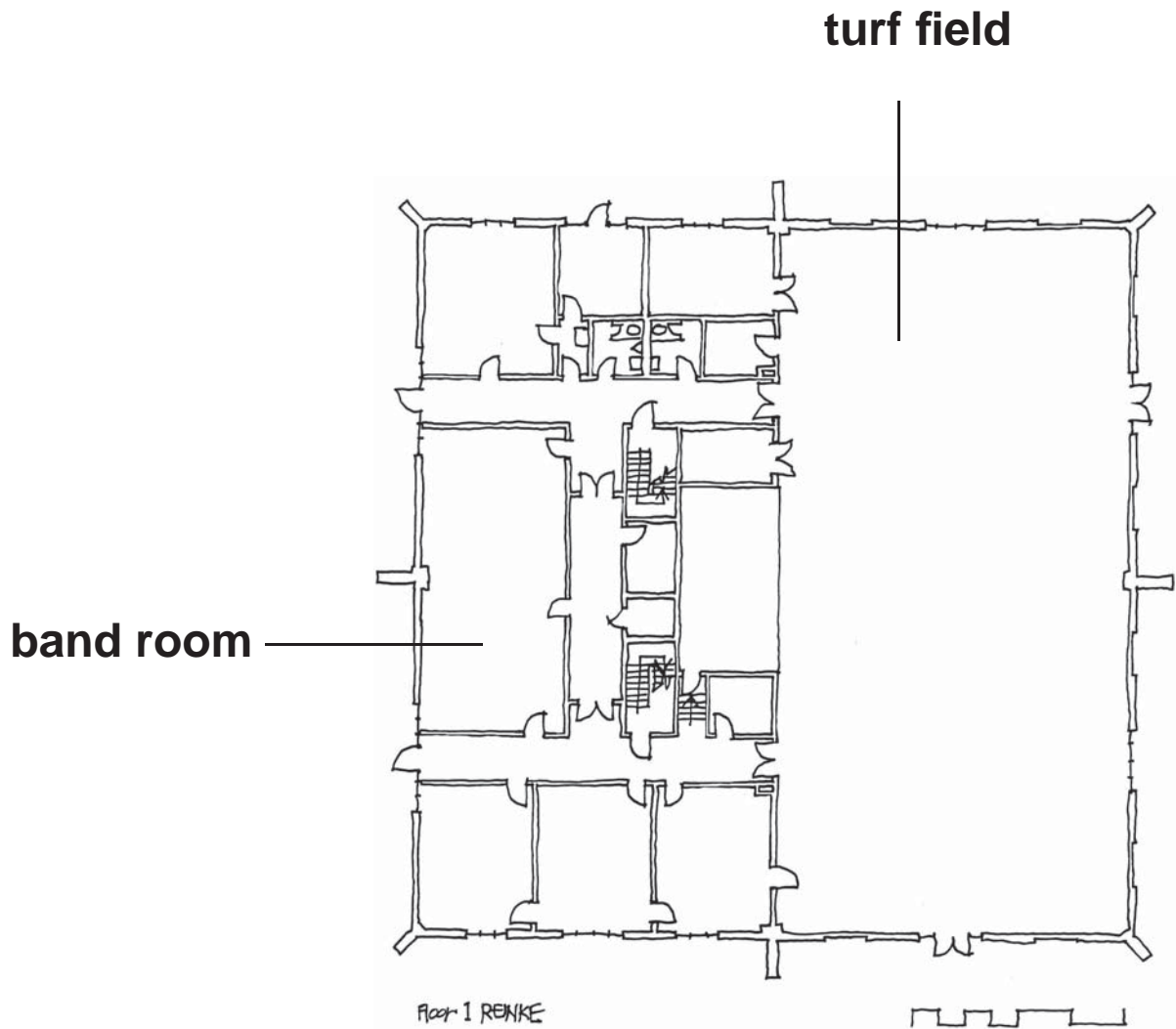


Fay School

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existing conditions

Reinke Building



Fay School

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proposed test fits

Reinke Building

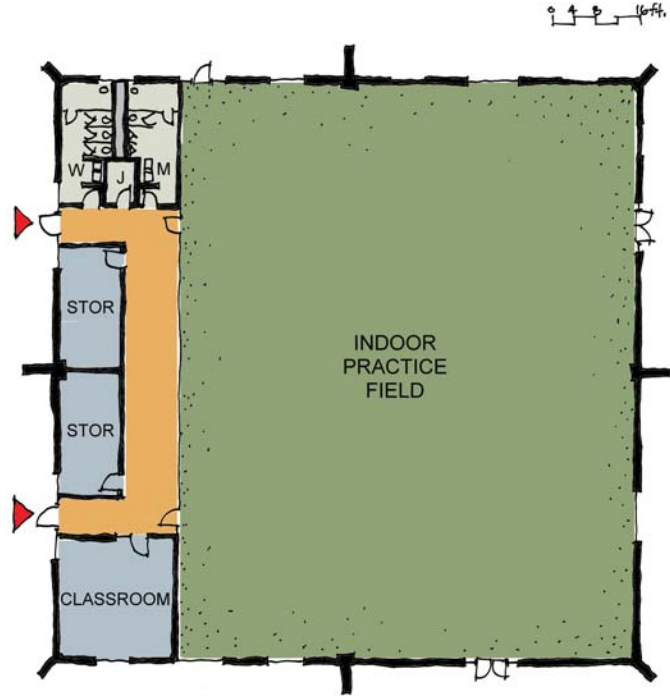
option 1

NOT PREFERRED

Maximize Indoor Turf Field for official field sizes - include spectator seating

THIS OPTION INCLUDES:

10,000SF interior renovation
 Upgrade MEPFP, Upgrade R-Value of existing Envelope,
 Storefront Replacement



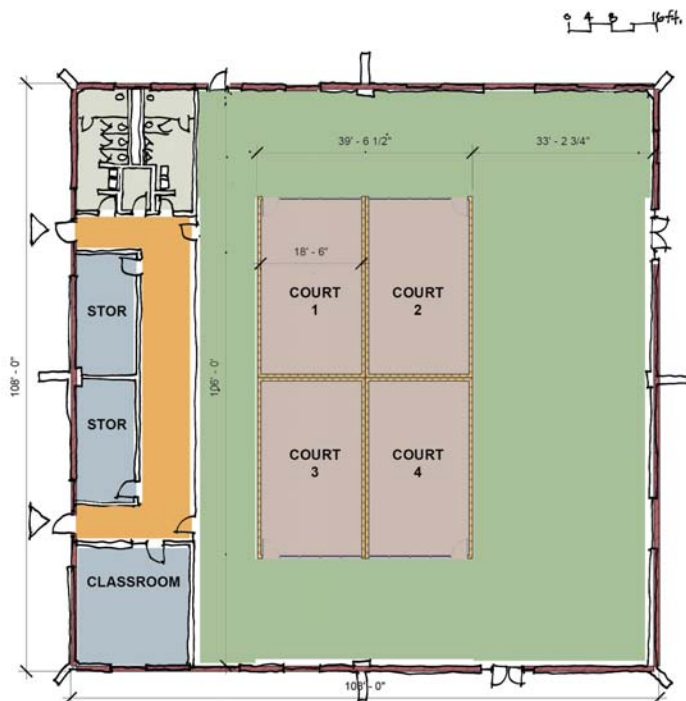
option 2

NOT PREFERRED

Locate Squash Courts and other activities such as ping pong tables

THIS OPTION INCLUDES:

10,000SF interior renovation
 Upgrade MEPFP, Upgrade R-Value of existing Envelope,
 Storefront Replacement



option 3

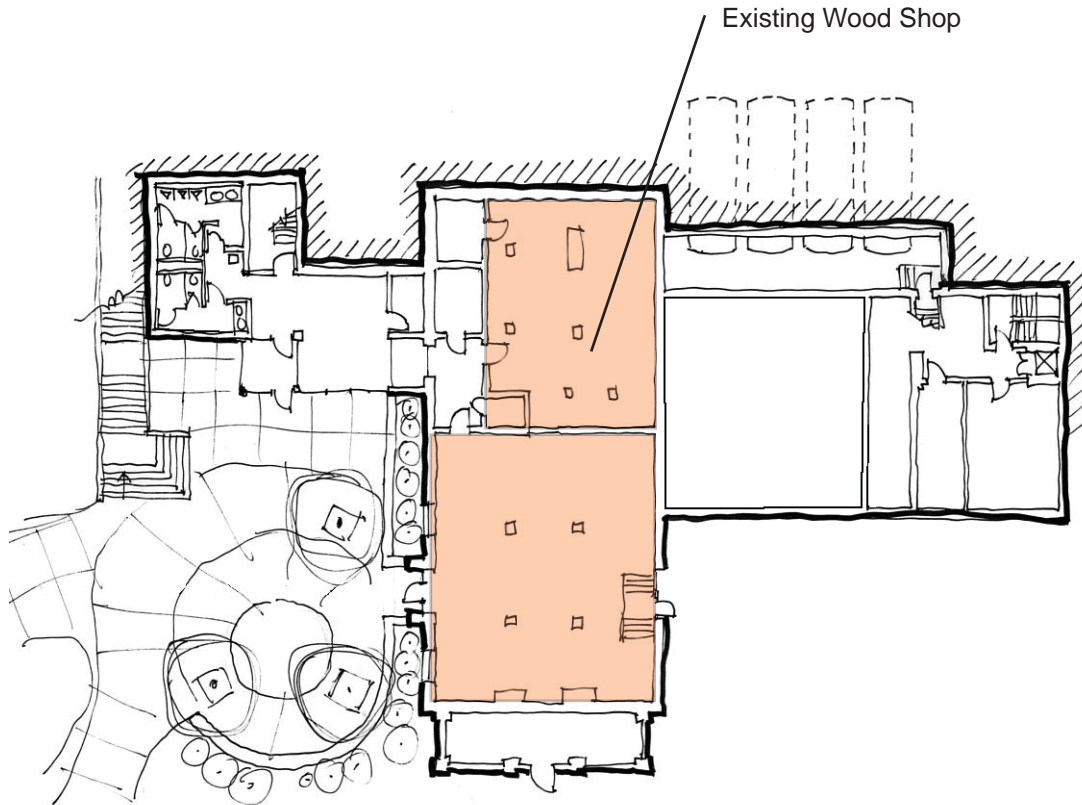
PREFERRED: see page 53

Locate all Music Practice spaces within Reinke - Relocate Band room to large volume space



Fay School

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option 1

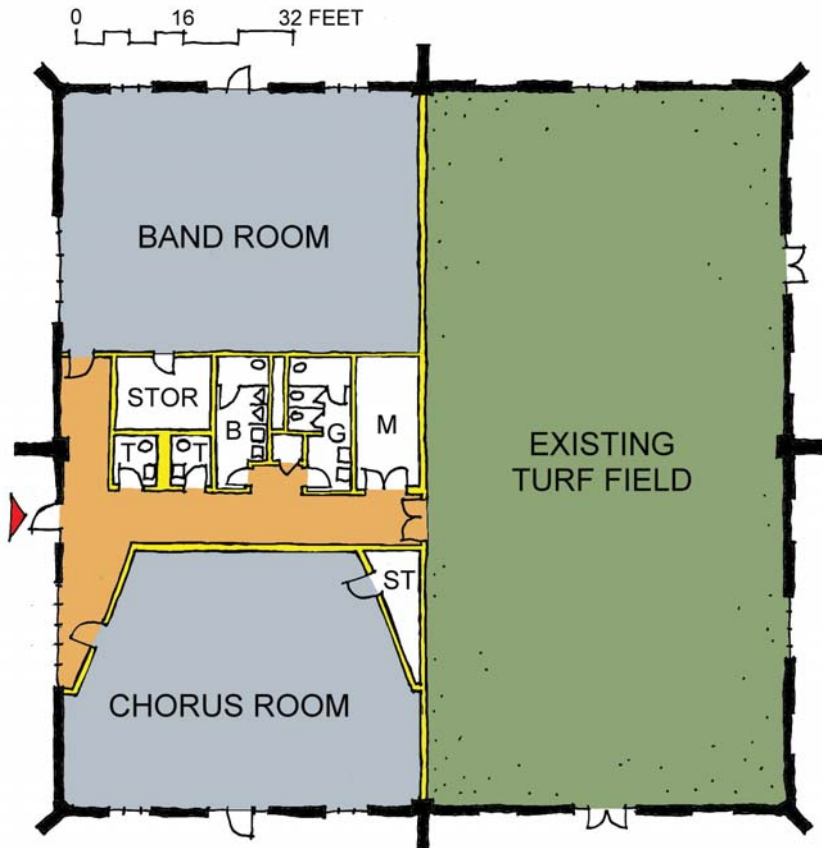
NOT PREFERRED

Utilize Existing Wood Shop and Student Lounge location in the Camp Building

The student lounge space was explored as an option for the new Band hall. Although the size of this space is appropriate in terms of square footage, the height of the space is not optimal for band rehearsals. Acoustic treatment would also be required to isolate this space from the dining hall above, which would further reduce the height.

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option 3

PREFERRED

The band and chorus spaces are currently in spaces that are not acoustically appropriate for the projected enrollments. Band and choral spaces typically require higher ceilings. The dimensions of these spaces are typically associated with the number of occupants and instruments in the space.

THIS OPTION INCLUDES:

*10,000SF interior renovation
Upgrade MEPFP, Upgrade R-Value of existing Envelope*



RECOMMENDATIONS



SELECTED OPTION REVIEW:

Program Fit:

Band and chorus could be consolidated in one building and the Reinke building provides the appropriate opportunity to allow height in the spaces.

Accessibility for Students & Staff:

The Reinke building is located east of the Harris/Harlow gym and is close to the current music programs.

Construction Phasing:

The construction of these spaces would require the innovation lab program and electronic music space to relocate prior to start of construction. This project would require phasing for demolition as well as construction of the new music rooms and would require work to be done over the school year.

Disruption to Existing Programs:

The turf field would not be usable space during the renovations due to envelope upgrade requirements.

Reuse of Existing Space:

The proposed Option 3 is a partial renovation which utilizes 100% existing built environment, therefore minimizing construction costs.

Alignment with Strategic Plan:

The consolidation of the music programs improves the visibility of the programs on campus. The appropriate height spaces allow for students to be focused on the music without acoustic concerns.



ACTIVE SPACES

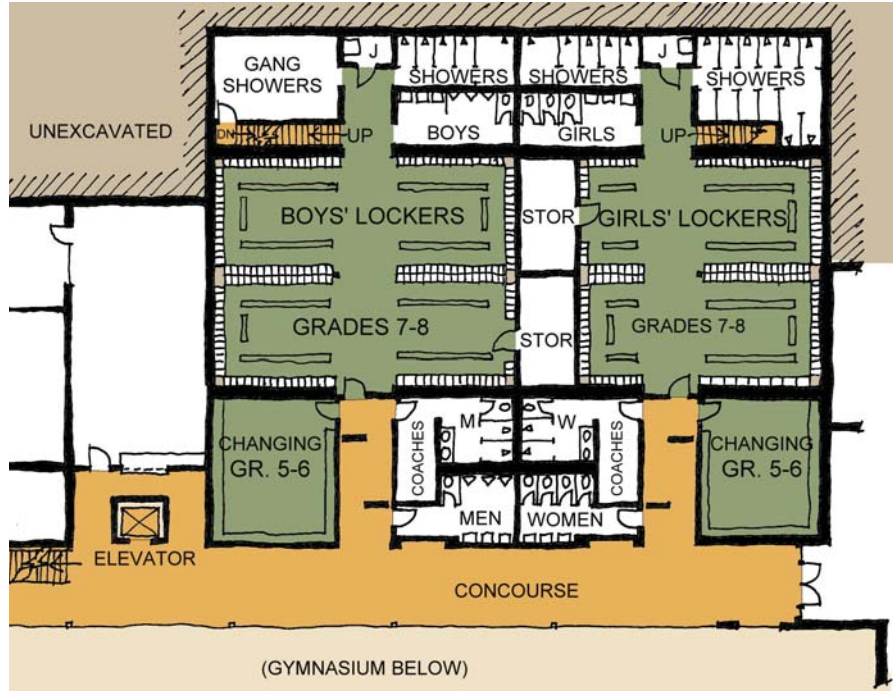
L

ISSUES

There are not enough lockers in the current locker room for projected enrollment, and the current lockers do not fit equipment for the athletes.

GOALS

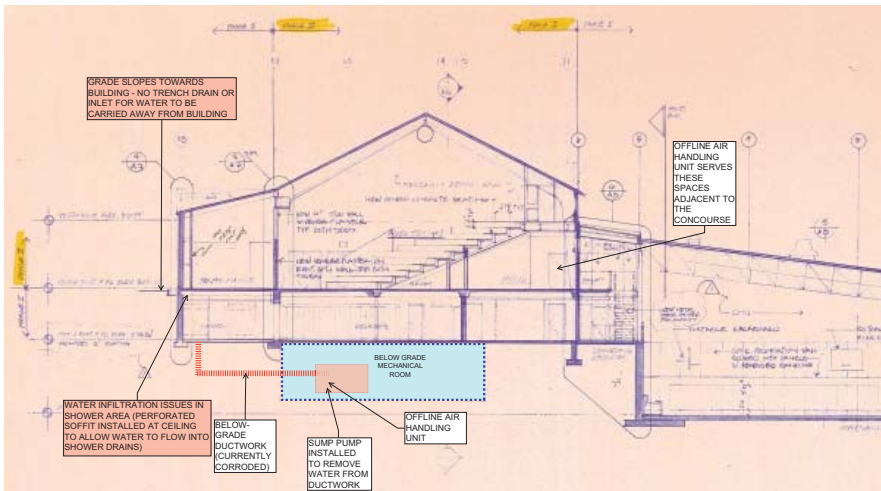
Improve Locker Rooms in Harlow Gym. Provide lockers for 400 students, Visitor Team Rooms, and improve supervision of locker room spaces.



Existing Locker Room Plan

existing conditions

The existing locker room is accessed from the main level of the Harlow Gym. This portion of the building is a partial basement condition.



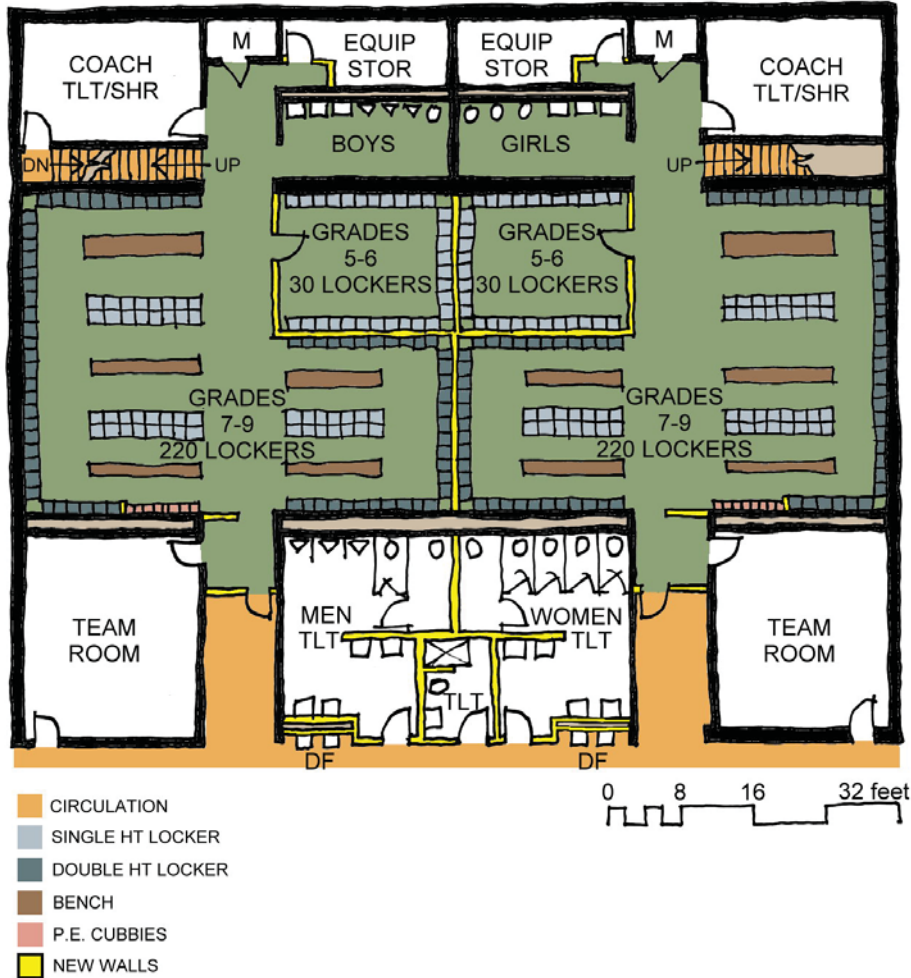
Existing Harris/Harlow Building Section identifying Infiltration Locations

harris/harlow capital improvements

Water infiltration on the lower level of the building is evident in the existing locker room shower area as well as the existing ductwork that runs below grade. A sump pump currently removes water from the ductwork. The air handling unit, which is located in a basement condition mechanical room, is not currently online. These projects would require attention or at the same time as the locker room renovations.

Fay School

SOUTHBOROUGH



option 1 - locker room test fit

PREFERRED

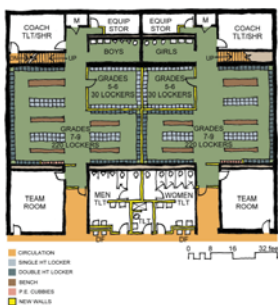
Relocate coach and and team spaces.
 Upgrade toilet rooms and access from the hallway.

THIS OPTION INCLUDES:

Renovated Space:
 5,160SF Full Renovation
Capital Improvements: MEP system upgdgrade
 (price separately)



RECOMMENDATIONS



SELECTED OPTION REVIEW:

Program Fit:

The locker room proposed program allows for additional students to better utilize the locker room spaces.

Accessibility for Students & Staff:

The renovation to the existing locker room would provide more accessible lockers than the current installation.

Construction Phasing:

This project can be started independent of the timing of other projects reviewed as part of this master plan. Capital improvement projects to the Harris/Harlow building and adjacent site are required prior to start of interior renovations for the locker room spaces.

The locker room renovation project would require time during the school year in addition of the summer months due to the high level of plumbing reconfiguration required for the renovation.

Disruption to Existing Programs:

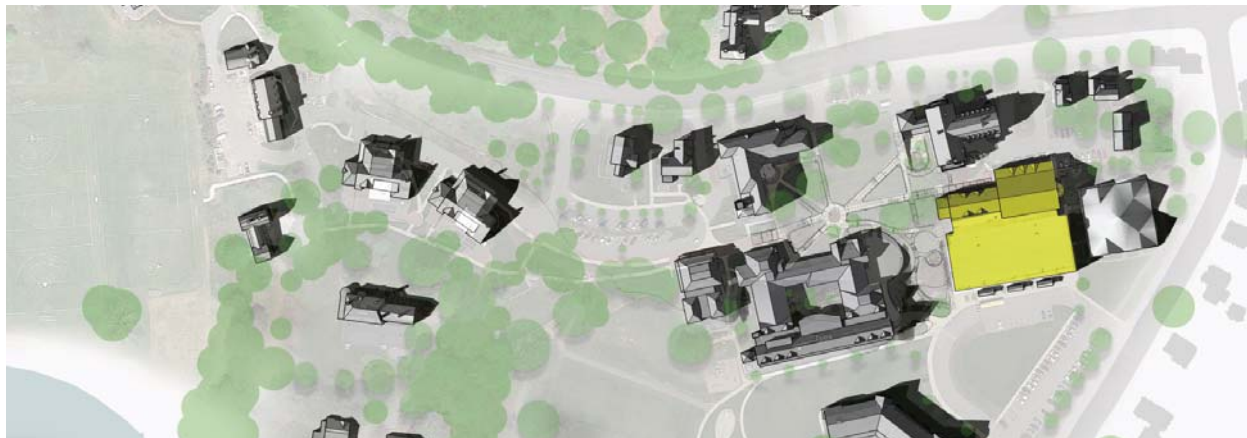
The locker room spaces would be temporarily unavailable during the school year. The project can be phased into two mobilizations to minimize disruption.

Reuse of Existing Space:

The proposed Option is a complete renovation which utilizes 100% existing built environment, therefore minimizing construction costs.

Alignment with Strategic Plan:

The renovation of the locker rooms allows them to better serve students, staff and incoming teams/visitors. This is in alignment with better supporting the Fay School athletics program and therefore in alignment with the Strategic Plan.



Fay School

SOUTHBOROUGH



STUDENT LIFE

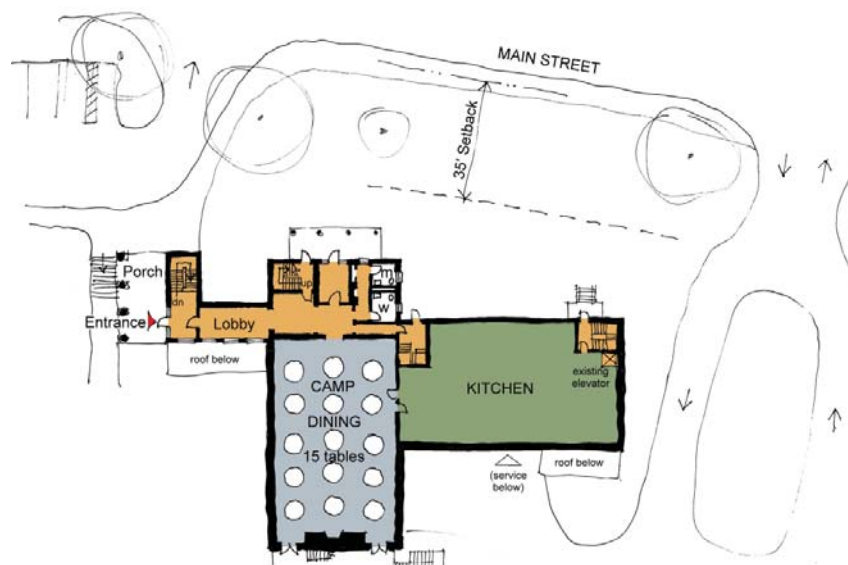
M

ISSUES

The kitchen spaces and delivery sequence to storage spaces needs improvement. The current kitchen layout requires attention to accommodate the future boarding capacity identified in the Fay School Strategic Plan.

GOALS

Provide kitchen resources for delivery of goods and services for students and provide space for increased capacity.



EXISTING KITCHEN EQUIPMENT INVENTORY

- 3ea-True single door roll-in refrigerators
- 1ea-Futura split four door reach-in refrigerator
- 1ea-Kelvinator two door ice cream chest freezer
- 1ea-Witco hot holding box
- 2ea-Vulcan double stack convection ovens
- 1ea-Southbend 6 burner range
- 2ea-Pitco fryolaters
- 1ea-Cleveland tilting skillet
- 1ea-Cleveland double steamer
- 1ea-Market Forge steam jacket kettle
- 1ea-Delfield Alco double door reach-in refrigerator
- 1ea-Hobart floor model mixer
- 1ea-Superior single door reach-in refrigerator
- 1ea-Hoshizaki ice maker
- 1ea-Anvil counter top mixer
- 1ea-Conveyor toaster
- 1ea-Hatco food warming shelf
- 1ea-Hobart am ventless dish machine single phase
- 1ea-14 x 16 combination walk in freezer/refe
- 1ea- 11 x 15 combination walk in freezer/refe

EQUIPMENT WISH LIST

- 1ea 24 x 48 Griddle
- 1ea 24 x 48 Char broiler
- 1ea Double stack convection oven
- 1ea Floor model 40qt mixer
- 1ea 500lb capacity ice maker
- 1ea-Walk-in refrigerator 13 x 8 x 8'7"

STORAGE SPACE AND EXISTING KITCHEN SPACE

- 10' x 20' Paper storage
- 8' x 25' Catering storage
- 7' x 10' Liquor/Beverage
- 25' x 40' Dry storage grocery
- 23'x 25' Prep and office area
- 37'x 41' Hot line bakery dish

existing conditions

The main level kitchen is separate from kitchen storage, which is currently situated on lower levels. This requires elevator service to bring supplies to the kitchen and the existing elevator for Camp building. The elevator should be replaced as part of the kitchen renovation.

Fay School

SOUTHBOROUGH

OPTION 1

Expand Towards Main Street

Kitchen capacity is expanded via an addition to the north (one story), with a new deliveries entrance at Kitchen level. Disadvantages include the need to limit the addition to one story (to avoid blocking dorm windows above); significant changes to building front; concerns regarding building setback from Main Street; and possible street view of dock area.

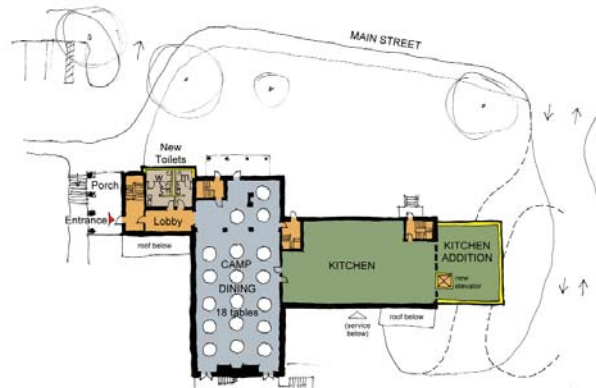


OPTION 2

PREFERRED

Expand East - On Grade Service Entry

Kitchen capacity is expanded via an addition to the east (two stories; addition includes an elevator). This is a natural expansion for this type of building. Advantages include the opportunity for up to two additional stories housing further dorm. Disadvantages include the need to relocate the existing driveway to accommodate the new structure. Deliveries would



THIS OPTION INCLUDES:

Renovated Space: 2,400SF

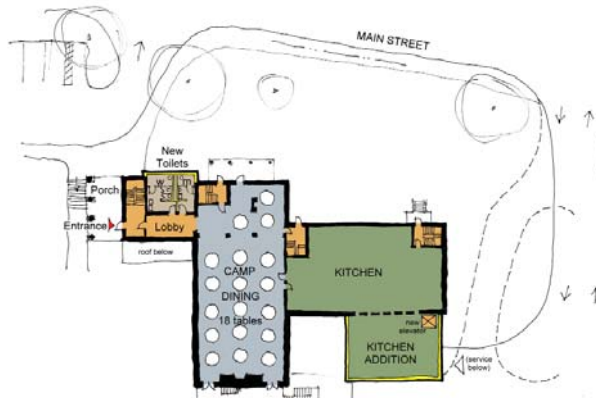
Added Space: 2,000 SF

Includes renovation of existing kitchen area, some structural work may be required to remove existing walls and create a more open kitchen plan; includes site/road work to provide an on-grade service entry.

OPTION 3

Expand East - On Grade Service Entry

Kitchen capacity is expanded via an addition to the south (two stories; addition includes an elevator). Advantages include minimal change to building front. Disadvantages include the lack of building more dorm space above (further stories would block existing dorm windows), and the need to relocate the service entrance to the eastern wall of the addition.



RECOMMENDATIONS



SELECTED OPTION REVIEW:

Program Fit:

The expanded food service program addition would benefit the high demand for increased enrollment.

Accessibility for Food Service Staff:

The kitchen expansion would allow for easier deliveries and transport of supplies within the building. Interior kitchen renovations would allow for more efficient meal planning and preparation.

Construction Phasing:

The addition and renovation for the kitchen expansion would require heavy renovations and would have to be divided into phases to allow for a reduced food service program during construction.

Disruption to Existing Programs:

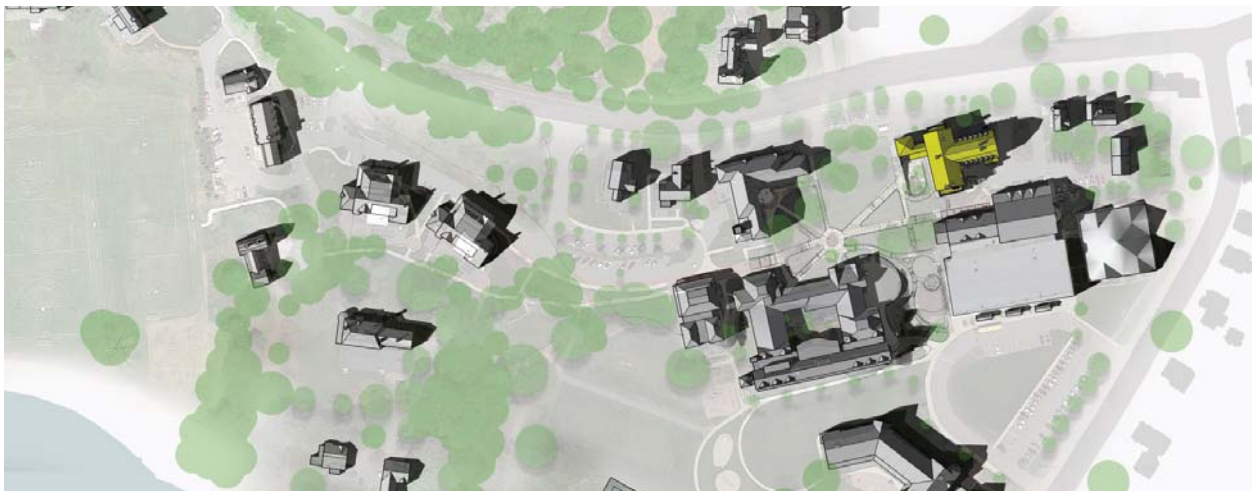
The kitchen renovations would require some modifications to the food service program (whether in house or partially catered) during construction.

Reuse of Existing Space:

The proposed Option 2 is a partial renovation that occupies the maximum amount of existing kitchen space and utilizes some expansion on the east side of the Camp Building.

Alignment with Strategic Plan:

The kitchen expansion will better serve both day and boarding students, staff and visitors.



Fay School

SOUTHBOROUGH



Fay School

SOUTHBOROUGH

LEARNING SPACES

N

ISSUE:

The current library requires upgrades to better support the current curriculum and the projected student population growth outlined in the Strategic Plan.

GOAL:

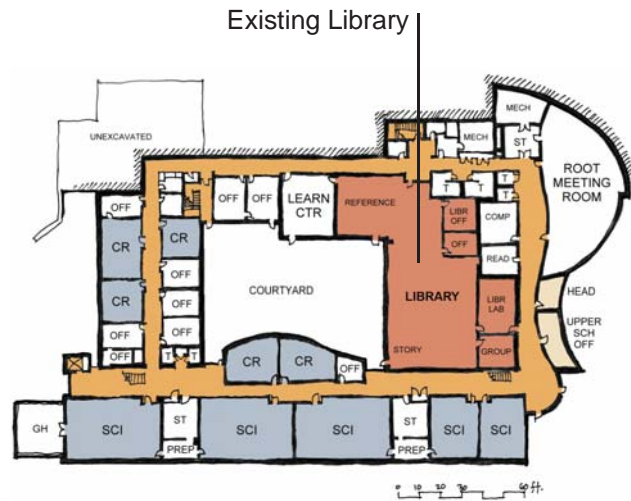
Improve Library and look into possibility for it to become a Learning Commons

- Circulation
- Upper School Classrooms
- Lower School Classrooms
- Administration
- Learning Commons

existing conditions



Level 2 Floor Plan (On Grade Access, South Side)



Level 1 Floor Plan (On Grade Access, South Side)

Fay School

SOUTHBOROUGH

option 1

Integrate future Learning Commons with iLab
This option works with the potential to connect the innovation lab with the Learning Commons. Both of these spaces support the academic programs in collaborative ways.

This utilizes some of the built environment but would also require a partial courtyard addition to accommodate the needs of the Innovation Lab program.

Libraries are currently shifting towards more productive and collaborative spaces that have program areas for 'maker spaces'. Combining the Learning Commons with the Innovation Lab would be a design challenge for acoustics.



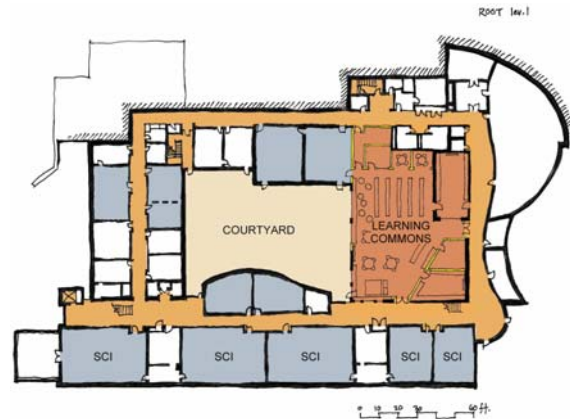
Root Building Lower Level Plan

option 2

PREFERRED OPTION

Future Learning Commons to utilize current location - works with classroom adjustments that align with Strategic Plan projections.

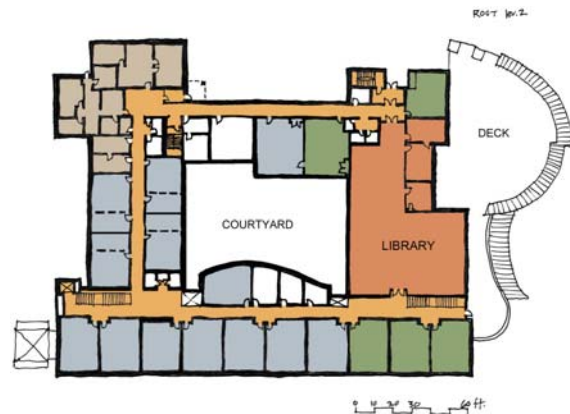
This option enhances the current environment by restructuring the existing support spaces and integrates distance learning and new furniture to create flexible collaboration areas within the Learning Commons space. This plan also provides access to the Learning Commons from the south corridor.



Root Building Lower Level Plan

option 3

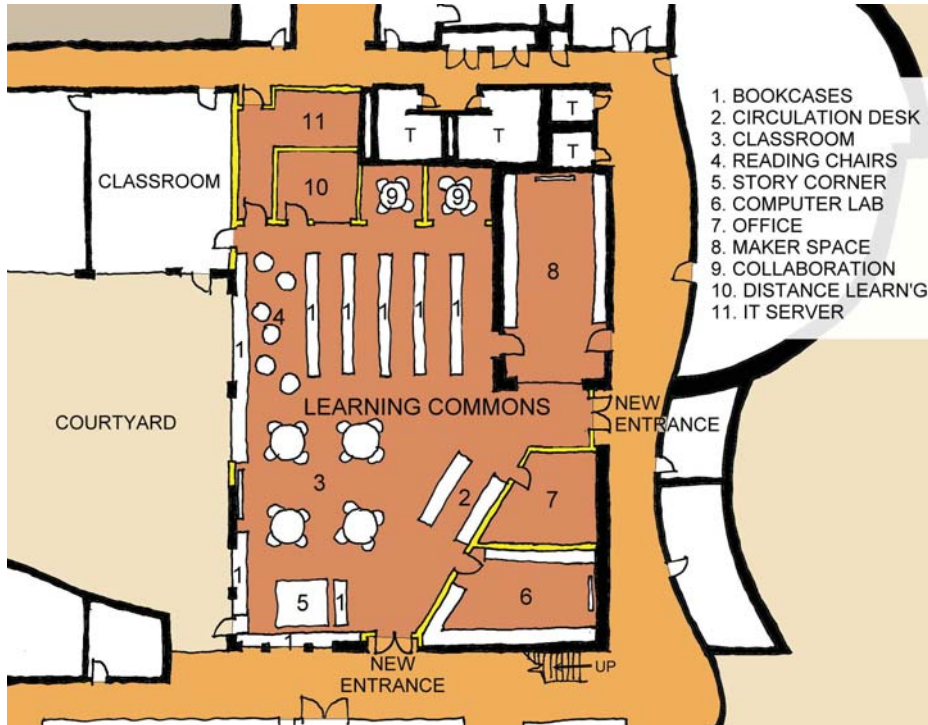
Future Learning Commons to relocate to upper floor of Root Building and utilize patio area. Potential shading device to extend over patio and make space more inviting for outdoor use. This option also works in conjunction with the classroom reconfiguration previously described in Issue 5.



Root Building Lower Level Plan

Fay School

SOUTHBOROUGH



option 2

Learning Commons Renovation in Existing Space

The test fit above allows for support spaces such as an IT server room and an office for the librarian as well as various spaces for collaborative and productive learning support. Students could work on various activities such as distance learning one side of the Learning Commons while space for 'storytime' is shown on the south side.

THIS OPTION INCLUDES:

Renovated Space:

Approximately 5,000SF

Storefront/Door Reconfiguration to access hallways

New Partitions, update all fixtures/diffusers, etc.

RECOMMENDATIONS



SELECTED OPTION REVIEW:

Program Fit:

The proposed modifications for Option 2 of the Learning Commons upgrade allows for all desired programs to fit within the test fit plan included in this report.

Accessibility for Students & Staff:

The proposed modifications do not change the current traffic flow for students and staff to access the Learning Commons, with the exception of providing two additional access points to allow entry from both the south and east corridors.

Construction Phasing:

Construction for the Learning Commons is recommended to be phased over the summer months to minimize impact during the main school year. In order to minimize construction costs, one mobilization is advised for this project. One side of the Learning Commons could be completed prior to the other side to allow some space for students during the school year.

Disruption to Existing Programs:

Existing programs would have minimal acoustic disturbance for those months where construction overlaps the school year.

Reuse of Existing Space:

The proposed Option 2 is a complete renovation which utilizes 100% existing built environment, therefore minimizing construction costs.

Alignment with Strategic Plan:

The proposed Learning Commons update supports the Fay School mission of providing a balanced and challenging education by creating



Fay School

SOUTHBOROUGH

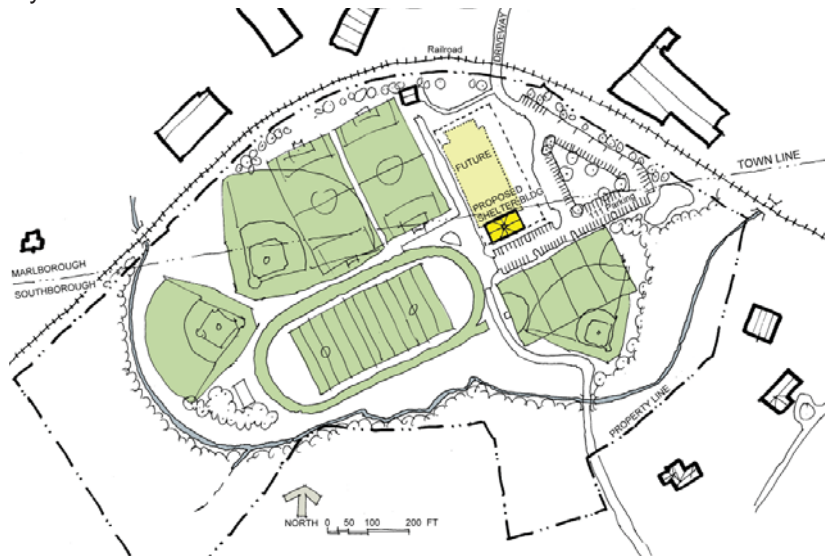
CAMPUS FUTURE

ISSUE

Fay School has a need for an indoor hockey rink on campus to support the athletic program and provide a place on campus for practices, games and tournaments.

GOALS

Identify a possible location for a hockey rink on campus.



proposed option 1

ATHLETIC COMPLEX
LOCATE FUTURE BUILDING



THIS OPTION INCLUDES:

*New Construction: 25,000SF
Arena and spectator space only.
Restroom facilities hosted in athletic support building.*



RECOMMENDATIONS

SELECTED OPTION REVIEW:

Program Fit:

New Construction allows for program development; space available on existing field can accommodate various types of indoor programs, including but not limited to hockey.

Accessibility for Students and Staff:

Close proximity to parking allows easy access for students, staff and visitors.

Construction Phasing:

Due to the remote nature of the athletic complex, construction phasing would have to accommodate spring/summer/fall athletic schedules only. The complex is large enough to allow use of some fields during construction.

Disruption to Existing Programs:

Coordination would be required to ensure minimal disruption to existing athletic practices and games.

Reuse of Existing Space:

N/A

Alignment with Strategic Plan:

Addition of an indoor facility/amenities aligns with targeted enrollment goals.

CAMPUS FUTURE

ISSUE

Students currently have to cross main street in order to access tennis courts.

GOAL

Find a location on the main campus for tennis courts.

existing conditions

The existing tennis courts are located just north of the main campus.



Fay School

SOUTHBOROUGH



THIS OPTION INCLUDES:
8 New Tennis Courts & associated fencing
Expanded septic field relocation



THIS OPTION INCLUDES:
8 New Tennis Courts & associated fencing



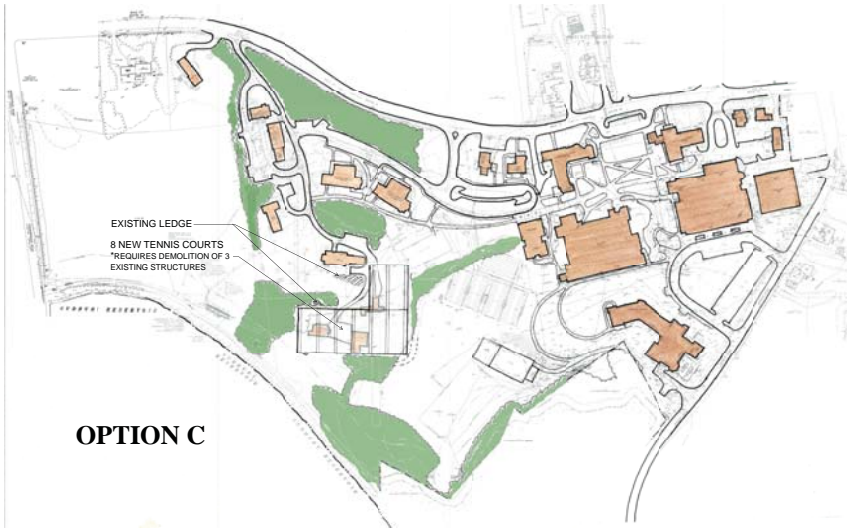
Fay School

SOUTHBOROUGH



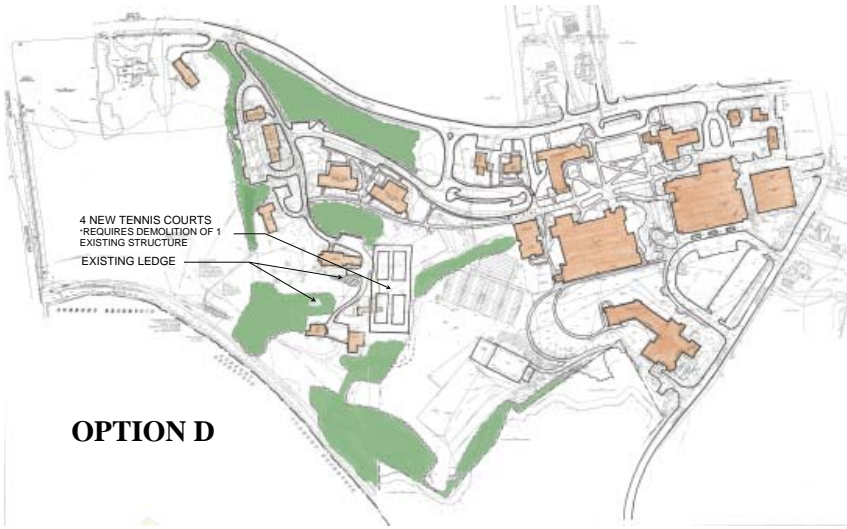
THIS OPTION INCLUDES:

- C1: 6 New Tennis Courts & associated fencing*
- C2: 8 Courts requires additional demo and blasting around Ledge*



THIS OPTION INCLUDES:

- D1: 4 New Tennis Courts & associated fencing*
- D2: 6 Courts require additional demo and blasting around Ledge*



RECOMMENDATIONS

SELECTED OPTION REVIEW:

Program Fit:

The proposed options would allow easy transition from classes to the court locations.

Accessibility for Students and Staff:

The proposed options would minimize student traffic on Main Street.

Construction Phasing:

Each option would require different phasing requirements, depending on whether demolition is required.

Disruption to Existing Programs:

Some existing structures are shown as demolished; the maintenance garage would have to be relocated/reconstructed.

Reuse of Existing Space:

N/A

Fay School

SOUTHBOROUGH

Q

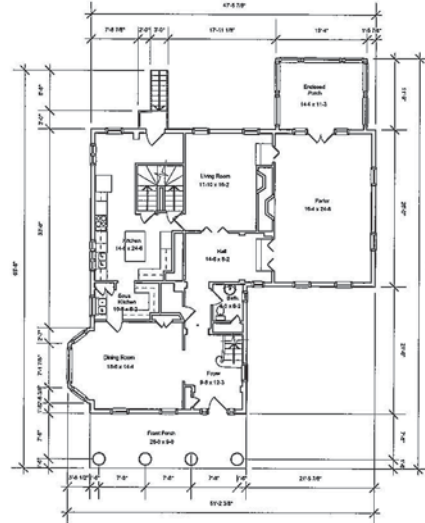
CAMPUS FUTURE

ISSUE

The existing accessible entry to the Fay House (Admissions) is located on the Main Street side of Fay House and not readily visible from Visitor Parking. The main Conference room is located on the second floor of the Fay House, which is not easily accessible.

GOALS

Improve the Admissions entrance sequence from Visitor Parking and provide better access to the Conference Room

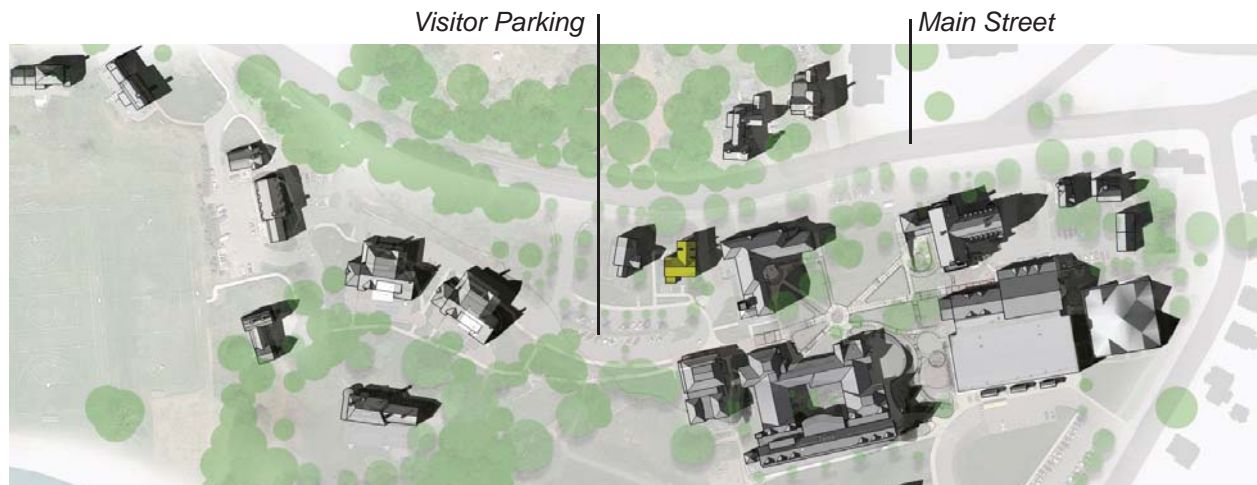


existing conditions

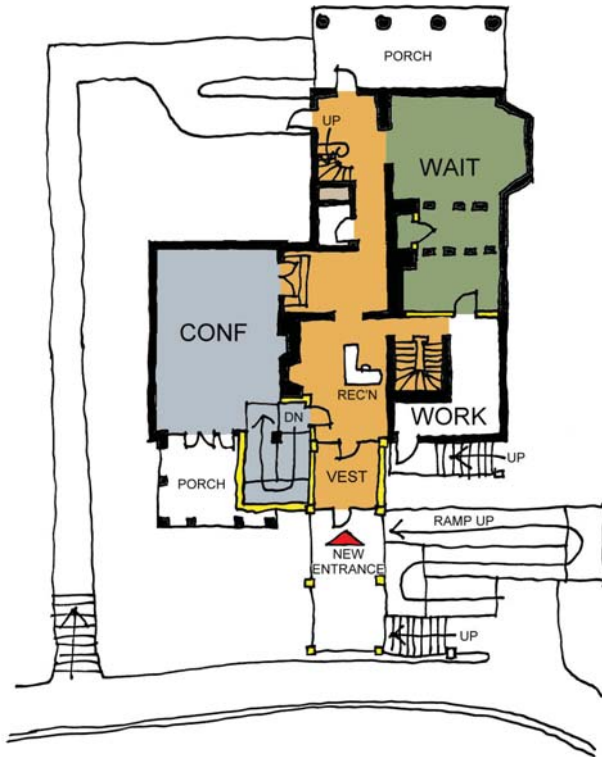
The existing Fay House has stair access from the parking lot and an accessible route via sidewalks that loops around the front of the house to the Main Street Entrance.



Fay House View from Visitor Parking



CAMPUS FUTURE



VISITOR PARKING

Proposed Plan

Improve Admissions entrance from Visitor Parking and provide better access to Conference Room. First floor renovation includes renovating the three main rooms on the first floor and the reception area.

This option allows the entry and reception to have a full view of the visitor parking and approach.

The conference area is relocated to the first floor and maintains a view of the main campus. The main benefit of this first floor location is accessibility without adding a lift or elevator to the Fay House.

Proposed Entry Perspective

Improve Admissions entrance from Visitor Parking and provide better access to Conference Room

THIS OPTION INCLUDES:

First Floor - Waiting Room converted to Conference Room, Office Area to Waiting Area, Kitchen to Work Room. No second floor work proposed.

Addition:

Exterior - addition of new entrance vestibule, ramp and stairs.



RECOMMENDATIONS

SELECTED OPTION REVIEW:

Program Fit:

The proposed entry sequence allows visitors and staff to enter the Fay House from the campus side.

Accessibility for Students and Staff:

Access to the first floor of Fay House will be completely accessible and the Fay Conference room will now be accessible.

Construction Phasing:

Construction can be phased for summer work to minimize disruption to Fay School activities during the school year.

Disruption to Existing Programs:

Admissions offices and support will require temporary relocation during the construction.

Reuse of Existing Space:

The proposed modifications utilize 100% of the Existing Fay House for the program spaces. New construction would be associated with ramp, stair and a vestibule to create a new Entry to the Fay House.

Alignment with Strategic Plan:

The improvements to the Fay House would enable program spaces to become more accessible, which is in alignment with the Strategic Plan.



Fay School

SOUTHBOROUGH



CAMPUS FUTURE

ISSUE

Fay School has a need for squash courts on campus.

GOALS

Identify a possible location for squash courts on campus.

existing conditions

DRA explored options within the built environment for new squash court locations. Other than new construction, Reinke seemed to be the only location that would allow a series of courts that were regulation size (according to US singles squash court standards). The Reinke building has a unique roof structure which can both restrict and accentuate programs based on their physical space needs.



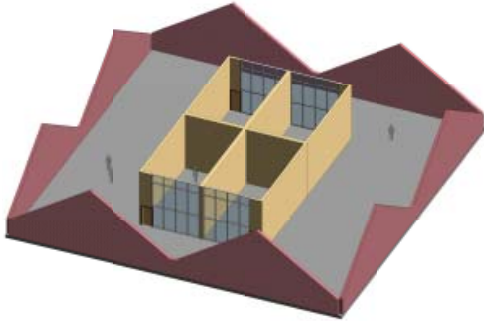
Fay School

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proposed option 1

CENTRALIZED COURTS

4 COURTS IN BUILDING CORE

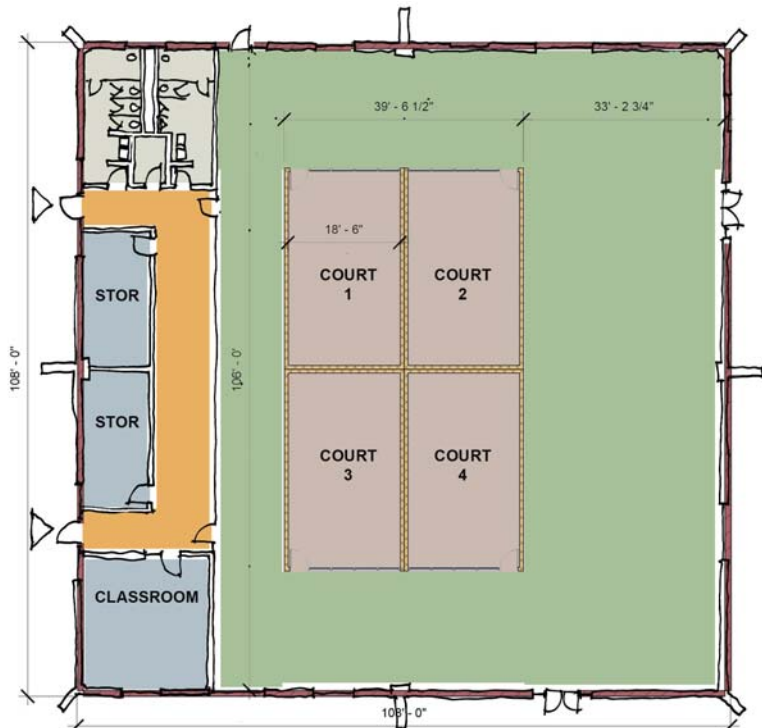


Potential for service corridor, including storage and toilet rooms, to be constructed to maintain current entry points.

Propose vestibule is maintained for entry and exit. All other doors could serve as egress only. Current code requirements need vestibules for entry points in buildings. Egress only doors do not require vestibules.

Potential for maintaining all exterior door and window locations although the existing building envelope requires upgrades to meet current energy efficiency standards.

Consider replacement of exterior doors and windows.



THIS OPTION INCLUDES:

Renovated Space:

10,000 SF

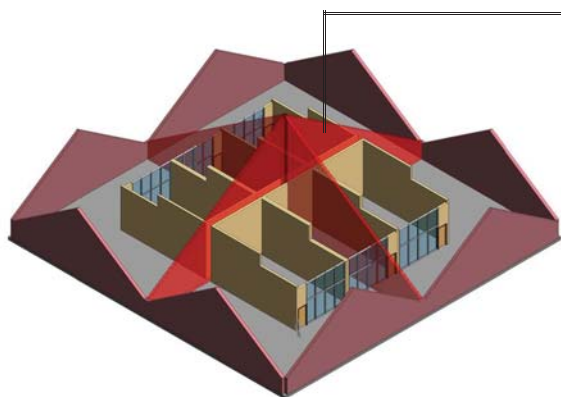
Exterior envelope upgrades including increasing R-value for roof and exterior walls, storefront replacement.



proposed option 2

CENTRALIZED COURTS

6 COURTS IN BUILDING CORE



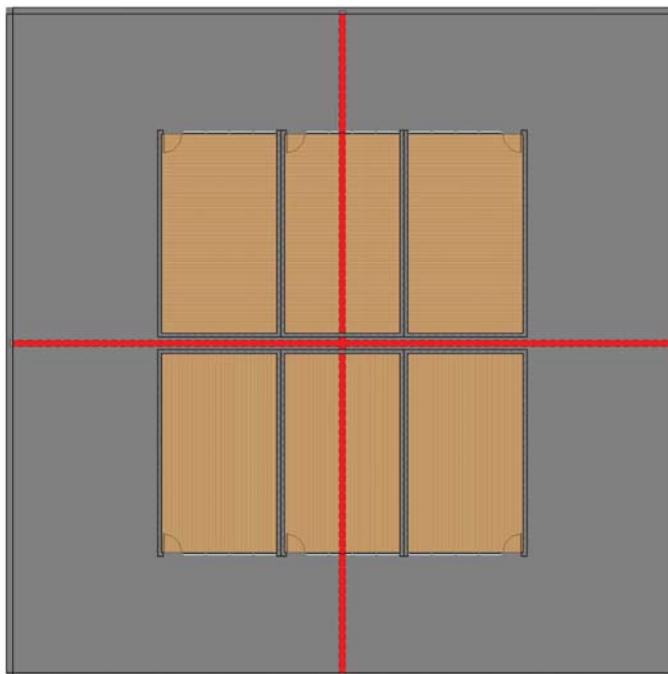
Red walls indicate height of existing structure to top of deck. Further investigation is required to confirm as built condition of existing structure depths. This option works if the existing structure provides enough clearance to construct free-standing squash courts within the existing envelope.

Potential for service corridor, including storage and toilet rooms, to remain if four courts are constructed; access and entry are revised with a 6 court option.

Propose vestibule is maintained for entry and exit. All other doors could serve as egress only.

Potential for maintaining all exterior door and window locations.

Consider replacement of exterior doors and windows.



THIS OPTION INCLUDES:

Renovated Space:

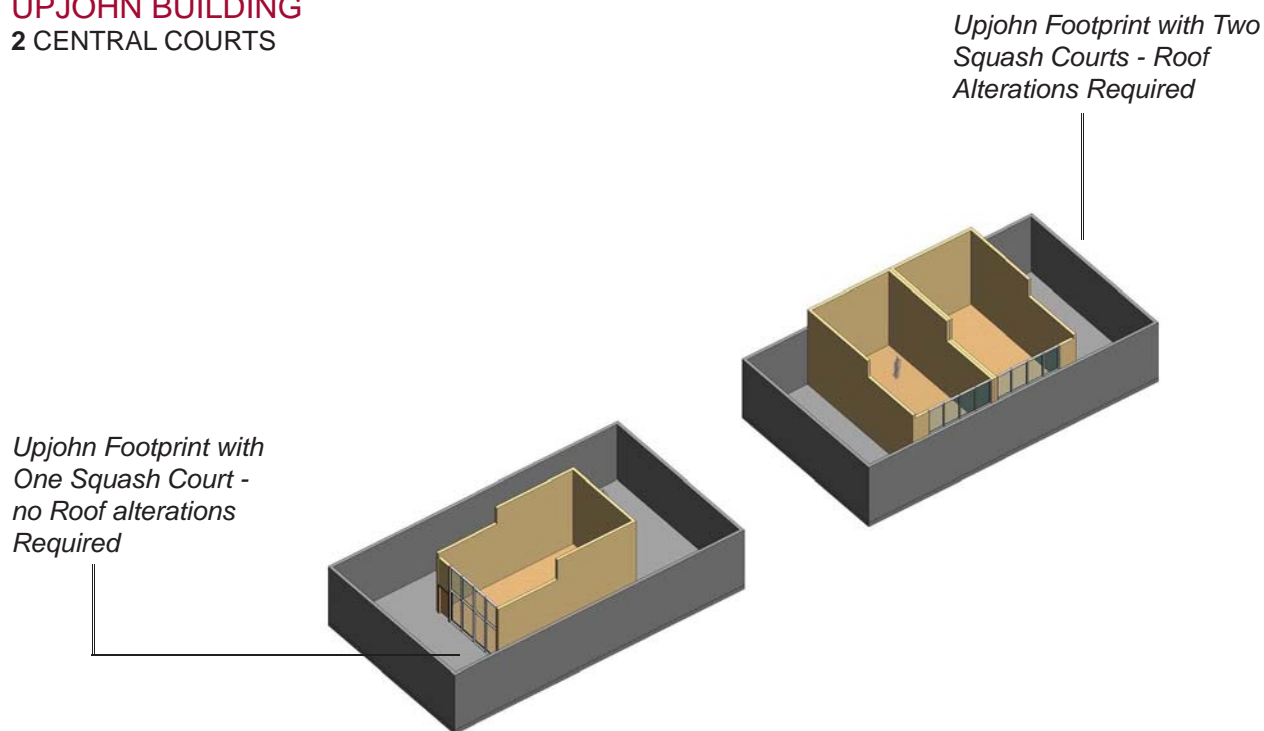
10,000 SF

Exterior envelope upgrades including increasing R-value for roof and exterior walls, storefront replacement.

proposed option 3

UPJOHN BUILDING

2 CENTRAL COURTS



DRA reviewed the feasibility of having squash courts installed in the Upjohn school room. This location has volume, which would allow for the construction of courts although as-built information is required to verify if the structure of the courts would work for tournaments. Based on the existing conditions, the court sizes may be restricted which would allow for practices but not official tournaments. The roof structure would require alterations to fit multiple, tournament sized courts.

The Upjohn building does not currently have toilet facilities, which should be taken into consideration based on the program. Mechanical and Electrical upgrades should also be taken into consideration to provide the appropriate ventilation and lighting required for squash courts.

RECOMMENDATIONS

SELECTED OPTION REVIEW:

The proposed squash court options have been presented to the Fay School for consideration.

These spaces (Reinke & Upjohn) have already been identified for other uses within the Master Plan sequencing as part of the Visioning section of this report.



Fay School

SOUTHBOROUGH
MAIN CAMPUS



- A** 70 Main Street Renovation/ Addition.
- B** Dorm & Faculty upgrades in Steward, Camp, East and Webster House.
- C** Renovate Root to achieve classroom parity.
- D** Athletic Complex Shelter Building
(See Athletic Complex Sequencing next page)
- E** Innovation Lab: Upjohn Expansion or Root Add/Reno
- F** Sidewalk Improvements and Site Drainage Improvements needed for Harris-Harlow
- G** Relocate School Store to former Student Lounge in Camp Building.
- H** Renovate Picardi & move Ceramics to former School Store Location. Former ceramics becomes added art studio.
- I** Create Student Center in Upjohn School Room
- J** Camp Dining Hall Expansion
- K** Renovate Reinke and shift Band and Chorus programs to new location
- L** Renovate Locker Rooms in Harlow Gym
- M** Renovate/Add to Camp Dining Hall Kitchen
- N** Upgrade Library to Learning Commons
- O** Future Indoor Athletic Field
(See Athletic Complex Sequencing next page)
- P** Tennis Courts on Main Campus
- Q** New Ramp and Stairs at Fay House

proposed Master Plan sequencing



- D Proposed shelter building can be constructed as Phase 1 of the Athletic Complex Improvements. Proximity to parking requires minimal site work. Utility connection to sewer required.
- O Future indoor athletic field can be constructed as part of Phase 2 of the Athletic Complex Improvements. Toilets and support spaces in the proposed shelter building can serve the future indoor athletic field program.

proposed Master Plan

APPENDIX

A

Capital Needs Surveys

APPENDIX

B

Air Conditioning Study

APPENDIX C

Cost Estimate Summary

Total Project Budgets

prepared by Drummey Rosane Anderson, Inc.

based on construction costs

prepared by Consigli Construction Co., Inc.

APPENDIX

D

Construction Cost Estimates
prepared by Consigli Construction Co., Inc.

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	10 Middle Rd			Building Address:	10 Middle Rd			
Building Area:	1866			Year Built:	1910			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2- 3-Health & Safety, 4- 5-Health & Safety)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3			4	\$ 3.00	\$12	
Water Closets	2	3			2	\$ 3.00	\$6	
Water heater	2	3	2002	2017	1	\$ 7,500	\$7,500	40 Gal Mega Stor model MS-40 Indirect vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3				\$ 5.00	\$0	copper
Plumbing Drainage	2	3				\$ 4.00	\$0	pvc and cast iron
Fire Protection	1	na				\$ 6.50	\$0	Fire protection not required this is a single family residence/staff
Building Controls	2	na				\$ 5.00	\$0	N/A
Hot Water Boilers & Pumps	2	3	2002	2032	1	\$ -	\$0	Buderus model G115/4 natural gas fired HW boiler. Estimated 30 yr. service life.
Perimeter Heating System	2	3	2000			\$ 4.00	\$0	Terry Oil installed 175' of baseboard
Ductwork System	3	na				\$ 10.00	\$0	No duct work
Indoor Air Handling Units	3	na				\$ 20	\$0	No AC
Split Cooling Units	1	na				\$ 12,000	\$0	none
Hot Water Piping	2	3				\$ 3.00	\$0	copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	10 Middle Rd			Building Address:	10 Middle Rd			
Building Area:	1866			Year Built:	1910			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	3				\$ 250,000	\$0	200 amp 120/240
Electrical Distribution	4	3				\$ 7	\$0	No AC
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	No generator at this location. Not required this is a two family house. Not a dorm
Lighting Systems	4	3				\$ 8	\$0	
Emergency Lighting	1	na				\$2.50	\$0	None
Telecommunication Systems	4	na				\$3.50	\$0	None
Security Systems	3	na				\$ -	\$0	None
Fire Alarm Systems	2	3				\$ -	\$0	Local Smoke Detectors

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:		12 Middle Rd		Building Address:		12 Middle Rd		
Building Area:		1765		Year Built:		1787		
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	2			6	\$ 3.00	\$18	
Water Closets	2	2			2	\$ 3.00	\$6	
Water heater	2	4	2010	2025	1	\$ 7,500	\$7,500	45 Gal Superstor model SSU-45 indirect vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3				\$ 5.00	\$0	copper, new plumbing in kitchen 2008
Plumbing Drainage	2	3				\$ 4.00	\$0	pvc and cast iron
Fire Protection	1	na				\$ 6.50	\$0	Fire protection not required this is a single family residence
Building Controls	2	na				\$ 5.00	\$0	
Hot Water Boilers & Pumps	2	4	2010	2040	1	\$ -	\$0	Buderus model G124X/25 natural gas fired HW boiler. Estimated 30 yr. service life.
Perimeter Heating System	2	3				\$ 4.00	\$0	baseboard
Ductwork System	3	na				\$ 10.00	\$0	No duct work
Indoor Air Handling Units	3	na				\$ 20	\$0	No air handling units
Split Cooling Units	1	na				\$ 12,000	\$0	No AC
Hot Water Piping	2	3				\$ 3.00	\$0	copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	12 Middle Rd			Building Address:	12 Middle Rd			
Building Area:	1765			Year Built:	1787			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	4				\$ 250,000	\$0	200 amp 120/240
Electrical Distribution	4	4				\$ 7	\$0	No AC
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	No generator at this location. Single family residence. Not a dorm
Lighting Systems	4	3				\$ 8	\$0	Replace all lighting systems in building with new LED fixtures.
Emergency Lighting	1	na				\$2.50	\$0	None
Telecommunication Systems	4	na				\$3.50	\$0	None
Security Systems	3	na				\$ -	\$0	None
Fire Alarm Systems	2	3				\$ -	\$0	Local smokes

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	6 Middle Rd			Building Address:	6 Middle Rd			
Building Area:	2247			Year Built:	1910			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3	2006		5	\$ 3.00	\$15	
Water Closets	2	3			3	\$ 3.00	\$9	
Water heater	2	3	2004	2019	1	\$ 7,500	\$7,500	39 Gal Mega Stor model MS-40 indirect vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3				\$ 5.00	\$0	copper
Plumbing Drainage	2	3				\$ 4.00	\$0	pvc and cast iron
Fire Protection	1	na				\$ 6.50	\$0	fire protection not required this is a single family resident/staff
Building Controls	2	na				\$ 5.00	\$0	N/A
Hot Water Boilers & Pumps	2	4	2004	2034	1	\$ -	\$0	Weil McLain model P-WGO-3 natural gas fired HW boiler. 115 MBh. Estimated 30 yr. service life.
Perimeter Heating System	2	4				\$ 4.00	\$0	baseboard
Ductwork System	3	na				\$ 10.00	\$0	No duct work
Indoor Air Handling Units	3	na				\$ 20	\$0	No air handling units
Split Cooling Units	1	na				\$ 12,000	\$0	No AC
Hot Water Piping	2	4				\$ 3.00	\$0	copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	6 Middle Rd			Building Address:	6 Middle Rd			
Building Area:	2247			Year Built:	1910			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	4				\$ 250,000	\$0	200 amp 120/240
Electrical Distribution	4	4				\$ 7	\$0	
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	No generator at this location. Not required this is not a dorm
Lighting Systems	4	3				\$ 8	\$0	
Emergency Lighting	1	na				\$2.50	\$0	None
Telecommunication Systems	4	na				\$3.50	\$0	None
Security Systems	3	na				\$ -	\$0	None
Fire Alarm Systems	2	3				\$ -	\$0	Local Smoke Detectors

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	70 Village Path			Building Address:	70 Village Path			
Building Area:	4780			Year Built:	1988			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	4			7	\$ 3.00	\$21	
Water Closets	2	4			3	\$ 3.00	\$9	
Water heater	2	3				\$ 7,500	\$0	
Domestic Water distribution	2	4				\$ 5.00	\$0	copper
Plumbing Drainage	2	4				\$ 4.00	\$0	pvc
Fire Protection	1	na				\$ 6.50	\$0	Fire protection not required this is a single family residence.
Building Controls	2	na				\$ 5.00	\$0	N/A
Hot Water Boilers & Pumps	2	4				\$ -	\$0	We do install high efficiency boilers when unit(s) are replaced
Perimeter Heating System	2	3				\$ 4.00	\$0	baseboard
Ductwork System	3	na				\$ 10.00	\$0	none
Indoor Air Handling Units	3	na				\$ 20	\$0	none
Split Cooling Units	1	na				\$ 12,000	\$0	none
Hot Water Piping	2	4				\$ 3.00	\$0	copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	none

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	70 Village Path			Building Address:	70 Village Path			
Building Area:	4780			Year Built:	1988			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3		4			\$ 250,000	\$0	200 amp 120/240
Electrical Distribution	4		4			\$ 7	\$0	
Emergency / Optional Standby Power	2		na			\$ 125,000	\$0	No generator at this location. This is a residence. The sewage pump is tied in however to the facilities building generator.
Lighting Systems	4		4			\$ 8	\$0	
Emergency Lighting	1		na			\$2.50	\$0	None
Telecommunication Systems	4		na			\$3.50	\$0	None
Security Systems	3		3			\$ -	\$0	None
Fire Alarm Systems	2		3			\$ -	\$0	Local Smoke Detectors

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:		74 Main St		Building Address:		74 Main St		
Building Area:		6443		Year Built:		1988		
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	4			14	\$ 3.00	\$42	
Water Closets	2	4			5	\$ 3.00	\$15	
Water heater	2	4	2008	2023	1	\$ 7,500	\$7,500	Superstor indirect vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	4				\$ 5.00	\$0	copper
Plumbing Drainage	2	3				\$ 4.00	\$0	pvc
Fire Protection	1	na				\$ 6.50	\$0	Fire protection not required this is a single family residence
Building Controls	2	na				\$ 5.00	\$0	N/A
Hot Water Boilers & Pumps	2	4	2008	2038	1	\$ -	\$0	Buderus natural gas fired HW boiler. Estimated 30 yr. service life.
Perimeter Heating System	2	4				\$ 4.00	\$0	none
Ductwork System	3	3				\$ 10.00	\$0	yes
Indoor Air Handling Units	3	3				\$ 20	\$0	yes
Cooling Systems	3	3	1974	1989	2		\$0	Allied Air model 2SCU13LE cooling units. Estimated 15 yr. service life.
	3	3	?	?				Williams Co model 7527 Cooling Unit.
Hot Water Piping	2					\$ 3.00	\$0	copper
Roof Exhaust Fans	3					\$ 5,000.00	\$0	none

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:			74 Main St		Building Address:		74 Main St	
Building Area:			6443		Year Built:		1988	
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	4				\$ 250,000	\$0	200 amp 120/240
Electrical Distribution	4	4				\$ 7	\$0	
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	No generator at this location. Not required this is not a dorm.
Lighting Systems	4	3				\$ 8	\$0	
Emergency Lighting	1	na				\$2.50	\$0	None
Telecommunication Systems	4	na				\$3.50	\$0	None
Security Systems	3	3				\$ -	\$0	Wired in system. We are currently looking at re-instating.
Fire Alarm Systems	2	3				\$ -	\$0	Local Smokes

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:		76 Main St		Building Address:		76 Main St		
Building Area:		4568		Year Built:		1984		
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	4			6	\$ 3.00	\$18	
Water Closets	2	4			3	\$ 3.00	\$9	
Water heater	2	5	2014	2029	1	\$ 7,500	\$7,500	45 Gal HTP Superstor model SSO-45 Indirect vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	4				\$ 5.00	\$0	copper
Plumbing Drainage	2	3				\$ 4.00	\$0	pvc
Fire Protection	1	na				\$ 6.50	\$0	Fire protection not required this is a single family residence not a dorm.
Building Controls	2	na				\$ 5.00	\$0	
Hot Water Boilers & Pumps	2	4	2011	2041	1	\$ -	\$0	Buderus natural gas fired HW boiler. 104 MBH. Estimated 30 yr. service life.
Perimeter Heating System	2	4				\$ 4.00	\$0	baseboard
Ductwork System	3	na				\$ 10.00	\$0	None
Indoor Air Handling Units	3	na				\$ 20	\$0	none
Split Cooling Units	1	na				\$ 12,000	\$0	No AC
Hot Water Piping	2	4				\$ 3.00	\$0	copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	76 Main St			Building Address:	76 Main St			
Building Area:	4568			Year Built:	1984			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	4				\$ 250,000	\$0	200 amp 120/240
Electrical Distribution	4	4				\$ 7	\$0	
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	No generator at this location. Not required this is a single family not a dorm
Lighting Systems	4	4				\$ 8	\$0	
Emergency Lighting	1	na				\$2.50	\$0	None
Telecommunication Systems	4	na				\$3.50	\$0	None
Security Systems	3	3				\$ -	\$0	They have a standalone system that they use.
Fire Alarm Systems	2	3				\$ -	\$0	Local Smoke Detectors

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Brackett House		Building Address:	31 Main St				
Building Area:	5544		Year Built:	1860				
SYSTEM	System Priority 1 to 4 (1=Health & Safety, 2=High, 3=Medium, 4=Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3			4	\$ 3.00	\$12	
Water Closets	2	3			2	\$ 3.00	\$6	
Water heater	2	3	x	x	1	\$ 7,500	\$7,500	80 Gal Vaughn S80RR Electric WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3				\$ 5.00	\$0	copper
Plumbing Drainage	2	2	1953	1983	1	x	#VALUE!	pvc and cast iron. We are required by DEP to this system into our existing WWTF by the end of 2017.
Fire Protection	1	na				\$ 6.50	\$0	No fire protection in this building. Not a dorm.
Building Controls	2	na				\$ 5.00	\$0	
Hot Water Boilers & Pumps	2	na				\$ -	\$0	This is a oil to gas converted chamber. We have this scheduled under this years capital budget to be replaced the fall of 2016, pending budget approval.
Perimeter Heating System	2	na				\$ 4.00	\$0	None
Ductwork System	3	3				\$ 10.00	\$0	Heat Duct 1980 A/C 2010
Indoor Air Handling Units	3		2010	2030		\$ 20	\$0	Estimated 20 yr. service life. Existing gas fired hot air furnace.
Cooling Systems	3		2011	2026	2		\$0	Coaire model COTC30M2Z cooling units. Estimated 15 yr. service life.
Hot Water Piping	2	3				\$ 3.00	\$0	None
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Brackett House		Building Address:	31 Main St				
Building Area:	5544		Year Built:	1860				
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	4				\$ 250,000	\$0	Existing 325 amp 120/240 volt
Electrical Distribution	4	4				\$ 7	\$0	
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	No generator at this location. Not required this is not a dorm.
Lighting Systems	4	3				\$ 8	\$0	Completed in 2014
Emergency Lighting	1	0				\$2.50	\$0	None
Telecommunication Systems	4	3				\$3.50	\$0	None
Security Systems	3	na				\$ -	\$0	Genetec security system installed in 2014
Fire Alarm Systems	2	3				\$ -	\$0	Fire Alarm system does not need renovation.

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Dinning Hall			Building Address:	48 Main St			
Building Area:	24655			Year Built:	1924			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3	2006		30	\$ 3.00	\$90	90% of sinks have hands free faucets installed. Remainder are in apartments. Those are replaced as needed
Water Closets	2	3			12	\$ 3.00	\$36	
Water heater	2	3	2010	2025	1	\$ 7,500	\$7,500	85 Gal RUUD G91-300A-1 direct vent WH. Estimated 15 yr. service life.
	2	5	2015	2030	1	\$ 7,500	\$7,500	80 Gal HTP PH199-80 direct vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	2				\$ 5.00	\$0	
Plumbing Drainage	2	3	?			x	#VALUE!	5,000 Gallon Grease Interceptor. Age unknown
Fire Protection	1					\$ 6.50	\$0	5 year inspection done March 2015
Building Controls	2	2				\$ 5.00	\$0	
Hot Water Boilers & Pumps	2	2	1988	2018	1	\$ -	\$0	Weil McLain model EGH-115 HW Boiler. 500 MBH. Estimated 30 yr. service life.
	2	2	2004	2034	1			Weil McLain model EGH-115 HW Boiler. 500 MBH. Estimated 30 yr. service life.
Perimeter Heating System	2	1	2015	2035	1		\$0	Trane Cabinet Unit Heater. Estimated 20 yr. service life.
Ductwork System	3	na				\$ 10.00	\$0	None
Indoor Air Handling Units	3	na	2013	2033			\$0	None
Chillers	3	na	2013	2028	1		\$0	None
Hot Water Piping	2	2				\$ 3.00	\$0	Installed original in 1924
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Dinning Hall			Building Address:	48 Main St			
Building Area:	24655			Year Built:	1924			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	3				\$ 250,000	\$0	Existing 800 amp 120/208 volt
Electrical Distribution	4	2				\$ 7	\$0	
Emergency / Optional Standby Power	2	3				\$ 125,000	\$0	On 80 KW Kohler Generator. Installed in 2014. Generator supplies, card access system, fire alarms, carbon monoxide, boiler * and hot water. *The Danfoss valves in rooms do not operate without power.
Lighting Systems	4	3				\$ 8	\$0	Lighting upgraded under an upgrade project in 2014
Emergency Lighting	1	3				\$2.50	\$0	
Telecommunication Systems	4	3				\$3.50	\$0	
Security Systems	3	4				\$ -	\$0	Upgraded system to Genetec in 2014
Fire Alarm Systems	2	4				\$ -	\$0	On generator

Fay School									
Capital Needs Survey Form									
10/11/2016									
Building Name:		Dorm A 80			Building Address:		80 Village Path		
Building Area:		9925			Year Built:		2008		
SYSTEM	System Priority 1 to 5 (1=Health & Safety, 2- 1=Poor, 5 Excellent)	System Rating 1 to 5 (1=Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS	
Division 2 - Site Construction									
Site - Fuel Tanks	N/A					N/A	N/A	N/A	
Division 21, 22, 23 - Mechanical									
Faucets & Sinks	2	4	2009			\$ 3.00	\$0	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace all fixtures with low flow institutional grade type.	
Water Closets	2	4	2009			\$ 3.00	\$0	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace all fixtures with low flow institutional grade type.	
Water heater	2	4	2009	2024	1		\$0	Lochinvar model AWN285PM direct vent VH. Solar HW collectors on roof. Estimated 15 yr. service life.	
Domestic Water distribution	2	4	2009			\$ 5.00	\$0	Estimated 50 yr. service life. Typically piping systems last much longer. Portions of building built/renovated at various years. Replace entire domestic water piping system.	
Plumbing Drainage	2	4	2009			\$ 4.00	\$0	Estimated 50 yr. service life. Typically piping systems last much longer. Replace and/or service existing drainage system(s)	
Fire Protection	1	5	2009			\$ 6.50	\$0	Estimated 30 yr. service life. Sprinkler system is currently limited to (2) rooms. Provide full building sprinkler system.	
Building Controls	2	4	2009			\$ 5.00	\$0	Estimated 15 yr. service life. Portions of building built/renovated at various years. Provide DDC control system for entire building.	
Hot Water Boilers & Pumps	2	4	2009	2039	1	\$ -	\$0	Aerco model KC natural gas fired HW boiler. 930 MBH. Estimated 30 yr. service life.	
Perimeter Heating System	2	na	2009			\$ 4.00	\$0	Estimated 20 yr. service life. Typically systems last much longer. Portions of building built/renovated at various years. Replace existing perimeter radiation. Provide new control valves.	
Ductwork System	3	4	2009			\$ 10.00	\$0	Estimated 30 yr. service life. Typically duct systems last much longer. Portions of building built/renovated at various years. Replace entire existing ductwork system. Provide new ventilation ductwork where required.	
Indoor Air Handling Units	3	4	2009			\$ 20	\$0	Estimated 20 yr. service life. Replace existing library air handling unit. Ductwork replacement included in section above. Heating, cooling, ventilation, and new thermostats included.	
Chillers	3	4	2009	2024			\$0	Carrier model RAN chiller shared between dorms. Estimated 15 yr. service life.	
Split Cooling Units	1	na	2009	2024	1			Carrier model 38MV split cooling unit serving head end. Estimated 15 yr. service life.	
Hot Water Piping	2	4	2009			\$ 3.00	\$0	Estimated 30 yr. service life. Typically systems last much longer. Portions of building built/renovated at various years. Provide new hot water piping system and valves.	
Roof Exhaust Fans	3	na	2009			\$ 5,000.00	\$0	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace exhaust fans and ductwork. Fans are of varying ages from 50+ to 5 years. Price includes replacement of all fans. Ductwork replacement included in pricing for "Heating/Ventilation Ductwork" section above.	

Fay School									
Capital Needs Survey Form									
10/11/2016									
Building Name:		Dorm A 80			Building Address:		80 Village Path		
Building Area:		9925			Year Built:		2008		
SYSTEM	System Priority 1 to 5 (1-Health & Safety, 2- 1 to 5 (1 Poor, 5 Excellent)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS	
Division 26, 27, 28 - Electrical									
Electrical Service	3	5	2009			\$ 250,000	\$0	Replace existing switchgear in its entirety. Upsize service to 1600A@ 208/120V, 3 phase to accommodate for future air conditioning loads.	
Electrical Distribution	4	5	2009			\$ 7	\$0	Replace all branch panels throughout the building. Existing panels are overloaded, and the addition of future AC units is not currently possible. Replace all receptacles throughout the building to properly accommodate for teacher equipment (refrigerators, microwaves, etc.).	
Emergency / Optional Standby Power	2	5	2009			\$ 125,000	\$0	Add 100KW generator (and associated electrical gear) to provide optional standby power to heating, refrigeration, and IT systems.	
Lighting Systems	4	5	2009			\$ 8	\$0	Replace all lighting systems in building with new LED fixtures.	
Emergency Lighting	1	5	2009			\$2.50	\$0	Emergency lighting does not appear to need renovation. However, we recommend that a local inspector reviews the entire building for code compliance.	
Telecommunication Systems	4	4	2009			\$3.50	\$0	Replace IT infrastructure wiring and pathways, data jacks, paging system, and voice communication systems in their entirety. Projector and classroom audiovisual systems do not require renovation or replacement.	
Security Systems	3	5	2009			\$ -	\$0	Security systems are in good condition, and do not require renovation or replacement.	
Fire Alarm Systems	2	5	2009			\$ -	\$0	Fire Alarm system does not need renovation.	

Existing 250 amp 120/208 volt

On the 250 Cummins Generator installed in 2009. Generator runs the card access, fire alarms, carbon monoxide alarms and the emergency lights.

These do not qualify for the Mass energy upgrade due to the relative young age of lighting

On generator

Genetec 2014

On Generator

Fay School									
Capital Needs Survey Form									
10/11/2016									
Building Name:		Dorm B 90			Building Address:		90 Village Path		
Building Area:		9925			Year Built:		2008		
SYSTEM	System Priority 1 to 5 (1=Health & Safety, 2-5 1=Poor, 5 Excellent)	System Rating 1 to 5 (1=Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS	
Division 2 - Site Construction									
Site - Fuel Tanks	N/A					N/A	N/A	N/A	
Division 21, 22, 23 - Mechanical									
Faucets & Sinks	2	4	2009			\$ 3.00	\$0	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace all fixtures with low flow institutional grade type.	
Water Closets	2	4	2009			\$ 3.00	\$0	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace all fixtures with low flow institutional grade type.	
Water heater	2	4	2009	2024	1		\$0	Lochinvar model AWN285PM direct vent VH. Solar HW collectors on roof. Estimated 15 yr. service life.	
Domestic Water distribution	2	4	2009			\$ 5.00	\$0	Estimated 50 yr. service life. Typically piping systems last much longer. Portions of building built/renovated at various years. Replace entire domestic water piping system.	
Plumbing Drainage	2	4	2009			\$ 4.00	\$0	Estimated 50 yr. service life. Typically piping systems last much longer. Replace and/or service existing drainage system(s)	
Fire Protection	1	5	2009			\$ 6.50	\$0	Estimated 30 yr. service life. Sprinkler system is currently limited to (2) rooms. Provide full building sprinkler system.	
Building Controls	2	5	2009			\$ 5.00	\$0	Estimated 15 yr. service life. Portions of building built/renovated at various years. Provide DDC control system for entire building.	
Hot Water Boilers & Pumps	2	4	2009	2039	1	\$ -	\$0	Aerco model KC natural gas fired HW boiler. 930 MBH. Estimated 30 yr. service life.	
Perimeter Heating System	2	na	2009			\$ 4.00	\$0	Estimated 20 yr. service life. Typically systems last much longer. Portions of building built/renovated at various years. Replace existing perimeter radiation. Provide new control valves.	
Ductwork System	3	4	2009			\$ 10.00	\$0	Estimated 30 yr. service life. Typically duct systems last much longer. Portions of building built/renovated at various years. Replace entire existing ductwork system. Provide new ventilation ductwork where required.	
Indoor Air Handling Units	3	4	2009			\$ 20	\$0	Estimated 20 yr. service life. Replace existing library air handling unit. Ductwork replacement included in section above. Heating, cooling, ventilation, and new thermostats included.	
Chillers	3	4	2009	2024			\$0	Carrier model RAN chiller shared between dorms. Estimated 15 yr. service life.	
Split Cooling Units	1	na	2009	2024	1			Carrier model 38MV split cooling unit serving head end. Estimated 15 yr. service life.	
Hot Water Piping	2	4	2009			\$ 3.00	\$0	Estimated 30 yr. service life. Typically systems last much longer. Portions of building built/renovated at various years. Provide new hot water piping system and valves.	
Roof Exhaust Fans	3	na	2009			\$ 5,000.00	\$0	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace exhaust fans and ductwork. Fans are of varying ages from 50+ to 5 years. Price includes replacement of all fans. Ductwork replacement included in pricing for "Heating/Ventilation Ductwork" section above.	

This building is a dorm room and is 100% sprinkled

This building is monitored by Metasys

Fay School									
Capital Needs Survey Form									
10/11/2016									
Building Name:		Dorm B 90			Building Address:		90 Village Path		
Building Area:		9925			Year Built:		2008		
SYSTEM	System Priority 1 to 5 (1-Health & Safety, 2- 1 to 5 (1 Poor, 5 Excellent)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS	
Division 26, 27, 28 - Electrical									
Electrical Service	3	5	2009			\$ 250,000	\$0	Replace existing switchgear in its entirety. Upsize service to 1600A@ 208/120V, 3 phase to accommodate for future air conditioning loads.	
Electrical Distribution	4	5	2009			\$ 7	\$0	Replace all branch panels throughout the building. Existing panels are overloaded, and the addition of future AC units is not currently possible. Replace all receptacles throughout the building to properly accommodate for teacher equipment (refrigerators, microwaves, etc.).	
Emergency / Optional Standby Power	2	5	2009			\$ 125,000	\$0	Add 100KW generator (and associated electrical gear) to provide optional standby power to heating, refrigeration, and IT systems.	
Lighting Systems	4	5	2009			\$ 8	\$0	Replace all lighting systems in building with new LED fixtures.	
Emergency Lighting	1	5	2009			\$2.50	\$0	Emergency lighting does not appear to need renovation. However, we recommend that a local inspector reviews the entire building for code compliance.	
Telecommunication Systems	4	4	2009			\$3.50	\$0	Replace IT infrastructure wiring and pathways, data jacks, paging system, and voice communication systems in their entirety. Projector and classroom audiovisual systems do not require renovation or replacement.	
Security Systems	3	5	2009			\$ -	\$0	Security systems are in good condition, and do not require renovation or replacement.	
Fire Alarm Systems	2	5	2009			\$ -	\$0	Fire Alarm system does not need renovation.	

Existing 400 amp 120/208 volt

On the 250 Cummins Generator installed in 2009. Generator runs the card access, fire alarms, carbon monoxide alarms and the emergency lights.

These do not qualify for the Mass energy upgrade due to the relative young age of lighting

On generator

Genetec 2014

On Generator

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	East House			Building Address:	44 Main St			
Building Area:	1920			Year Built:	1924			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3	1991		9	\$ 3.00	\$27	New plumbing for kitchen and bathrooms done by P.J. Plumbing in 1991
Water Closets	2	3	1991		3	\$ 3.00	\$9	New plumbing for kitchen and bathrooms done by P.J. Plumbing in 1991
Water heater	2	5	2014	2029	1	\$ 7,500	\$7,500	45 Gal HTP Superstor model SSO-45 indirect vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3	1991			\$ 5.00	\$0	copper
Plumbing Drainage	2	3	1991			\$ 4.00	\$0	pvc and cast iron
Fire Protection	1	4	1991			\$ 6.50	\$0	Dorm rooms and common rooms serviced 100% by sprinklers. Installed by Robert O'Brien in 1991
Building Controls	2	na				\$ 5.00	\$0	None
Hot Water Boilers & Pumps	2	5	2014	2044	1	\$ -	\$0	Buderus model GC124-18/3 HW boiler. 74 MBH. Estimated 30 yr. service life.
Perimeter Heating System	2	3				\$ 4.00	\$0	Baseboard
Ductwork System	3	na				\$ 10.00	\$0	None
Indoor Air Handling Units	3	na				\$ 20	\$0	None
Split Cooling Units	1	na				\$ 12,000	\$0	None
Hot Water Piping	2	3	1991			\$ 3.00	\$0	Buderus model GC124-18/3 HW boiler. 74 MBH. Estimated 30 yr. service life.
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	East House		Building Address:	44 Main St				
Building Area:	1920		Year Built:	1924				
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	4				\$ 250,000	\$0	Existing 200 amp 120/240 volt
Electrical Distribution	4	3				\$ 7	\$0	
Emergency / Optional Standby Power	2	3				\$ 125,000	\$0	On 11 kW Kohler Generator. Generator services Fire Alarms, boiler, hot water and emergency exit signs and egress lights.
Lighting Systems	4	3	2014			\$ 8	\$0	Replace all lighting systems in building with new LED fixtures in 2014
Emergency Lighting	1	3				\$2.50	\$0	On 11 kW Kohler Generator. Generator services Fire Alarms, boiler, hot water and emergency exit signs and egress lights.
Telecommunication Systems	4	3				\$3.50	\$0	
Security Systems	3	5	2014			\$ -	\$0	Genetec 2014
Fire Alarm Systems	2	4	1991			\$ -	\$0	On 11 KW Kohler Generator. Fire Alarm added in 1991 by Santella Electric

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Facilities East			Building Address:	44R Main St			
Building Area:	3830			Year Built:	1920-1986			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	na			-	\$ 3.00	\$0	Plumbing has been drained and shut off. Building is used only for storage.
Water Closets	2	na			-	\$ 3.00	\$0	Plumbing has been drained and shut off. Building is used only for storage.
Water heater	2	na	2005	2020	1	\$ 7,500	\$7,500	30 Gal Reliance model 5-30-20RS960 Electric WH. Estimated 15 yr. service life. Unit off and drained.
Domestic Water distribution	2	na				\$ 5.00	\$0	
Plumbing Drainage	2	na				\$ 4.00	\$0	
Fire Protection	1	na				\$ 6.50	\$0	
Building Controls	2	na				\$ 5.00	\$0	
Heating	2	na	1987	2007	1	\$ -	\$0	Electric baseboard heaters and electric unit heaters. Estimated 20 yr. service life.
Perimeter Heating System	2	na				\$ 4.00	\$0	None
Ductwork System	3	na				\$ 10.00	\$0	None
Indoor Air Handling Units	3	na				\$ 20	\$0	None
Split Cooling Units	1	na				\$ 12,000	\$0	None
Hot Water Piping	2	na				\$ 3.00	\$0	Copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Facilities East		Building Address:	44R Main St				
Building Area:	3830		Year Built:	1920-1986				
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	3				\$ 250,000	\$0	Existing 200 amp 120/240 volt
Electrical Distribution	4	3				\$ 7	\$0	
Emergency / Optional Standby Power	2	3				\$ 125,000	\$0	Not needed
Lighting Systems	4	2				\$ 8	\$0	
Emergency Lighting	1	2				\$2.50	\$0	
Telecommunication Systems	4	2				\$3.50	\$0	
Security Systems	3	5				\$ -	\$0	System updated to Genetec in 2014
Fire Alarm Systems	2	2				\$ -	\$0	

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Facilities South			Building Address:	60 Main St			
Building Area:	5120			Year Built:	1935			
SYSTEM	System Priority 1 to 4 (1=Health & Safety, 2=High, 3=Medium, 4=Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2					\$ 3.00	\$0	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace all fixtures with low flow institutional grade type.
Water Closets	2	na				\$ 3.00	\$0	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace all fixtures with low flow institutional grade type.
Water heater	2	na				\$ 7,500	\$0	Estimated 15 yr. service life. Replace in 2030 with high efficiency condensing water heater.
Domestic Water distribution	2	na				\$ 5.00	\$0	Estimated 50 yr. service life. Typically piping systems last much longer. Portions of building built/renovated at various years. Replace entire domestic water piping system.
Plumbing Drainage	2	na				\$ 4.00	\$0	Estimated 50 yr. service life. Typically piping systems last much longer. Replace and/or service existing drainage system(s)
Fire Protection	1	na				\$ 6.50	\$0	Estimated 30 yr. service life. Sprinkler system is currently limited to (2) rooms. Provide full building sprinkler system.
Building Controls	2	na				\$ 5.00	\$0	Estimated 15 yr. service life. Portions of building built/renovated at various years. Provide DDC control system for entire building.
Hot Water Boilers & Pumps	2	na				\$ -	\$0	Estimated 30 yr. service life. Replace in 2045 in-kind with high efficiency hot water condensing boilers and hot water pumps with VFD's.
Perimeter Heating System	2	na				\$ 4.00	\$0	Estimated 20 yr. service life. Typically systems last much longer. Portions of building built/renovated at various years. Replace existing perimeter radiation. Provide new control valves.
Ductwork System	3	na				\$ 10.00	\$0	Estimated 30 yr. service life. Typically duct systems last much longer. Portions of building built/renovated at various years. Replace entire existing ductwork system. Provide new ventilation ductwork where required.
Indoor Air Handling Units	3	na				\$ 20	\$0	Estimated 20 yr. service life. Replace existing library air handling unit. Ductwork replacement included in section above. Heating, cooling, ventilation, and new thermostats included.
Split Cooling Units	1	na				\$ 12,000	\$0	Estimated 15 yr. service life. In-kind replacement of split AC units serving data rooms, offices, and special needs classrooms.
Hot Water Piping	2	na				\$ 3.00	\$0	Estimated 30 yr. service life. Typically systems last much longer. Portions of building built/renovated at various years. Provide new hot water piping system and valves.
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace exhaust fans and ductwork. Fans are of varying ages from 50+ to 5 years. Price includes replacement of all fans. Ductwork replacement included in pricing for "Heating/Ventilation Ductwork" section above.

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Facilities South			Building Address:	60 Main St			
Building Area:	5120			Year Built:	1935			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	3				\$ 250,000	\$0	Replace existing switchgear in its entirety. Upsize service to 1600A@ 208/120V, 3 phase to accommodate for future air conditioning loads.
Electrical Distribution	4	3				\$ 7	\$0	Replace all branch panels throughout the building. Existing panels are overloaded, and the addition of future AC units is not currently possible. Replace all receptacles throughout the building to properly accommodate for teacher equipment (refrigerators, microwaves, etc.).
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	Add 100KW generator (and associated electrical gear) to provide optional standby power to heating, refrigeration, and IT systems.
Lighting Systems	4	2				\$ 8	\$0	Replace all lighting systems in building with new LED fixtures.
Emergency Lighting	1	na				\$2.50	\$0	Emergency lighting does not appear to need renovation. However, we recommend that a local inspector reviews the entire building for code compliance.
Telecommunication Systems	4	na				\$3.50	\$0	Replace IT infrastructure wiring and pathways, data jacks, paging system, and voice communication systems in their entirety. Projector and classroom audiovisual systems do not require renovation or replacement.
Security Systems	3	na				\$ -	\$0	Security systems are in good condition, and do not require renovation or replacement.
Fire Alarm Systems	2	na				\$ -	\$0	Fire Alarm system does not need renovation.

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Facilities West			Building Address:	72 Main St (100 Village Path)			
Building Area:	12945			Year Built:	2008			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	5	2008		4	\$ 3.00	\$12	New building have low flow fixtures
Water Closets	2	5			2	\$ 3.00	\$6	
Water heater	2	4	2008	2023	1		\$0	
Domestic Water distribution	2	5	2008			\$ 5.00	\$0	copper
Plumbing Drainage	2	5	2008			\$ 4.00	\$0	pvc
Fire Protection	1	5	2008			\$ 6.50	\$0	This building is 100% sprinkled
Building Controls	2	4	2008			\$ 5.00	\$0	This building is on our Metasys system
Hot Water Boilers & Pumps	2	4	2008	2038	1	\$ -	\$0	Aerco model KC natural gas fired HW boiler. 930 MBH. Estimated 30 yr. service life.
Perimeter Heating System	2	na				\$ 4.00	\$0	None
Ductwork System	3	4	2008			\$ 10.00	\$0	yes
Indoor Air Handling Units	3	4	2008			\$ 20	\$0	yes
Split Cooling Units	1	na	2008	2023			\$0	Carrier model 24APA 5 ton cooling unit. Estimated 15 yr. service life. Third floor only
Hot Water Piping	2	5	2008			\$ 3.00	\$0	None
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Facilities West		Building Address:	72 Main St (100 Village Path)				
Building Area:	12945		Year Built:	2008				
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	5	2008			\$ 250,000	\$0	Existing 100 amp 277/480 volt
Electrical Distribution	4	5	2008			\$ 7	\$0	New building, no upgrades to existing service needed.
Emergency / Optional Standby Power	2		2008			\$ 125,000	\$0	This building in its entirety is on the 250 kW Cummins generator.
Lighting Systems	4		2008			\$ 8	\$0	This building was evaluated during our lighting upgrade project in 2014 and if they found a light that would qualify for upgrading it was replaced.
Emergency Lighting	1	5	2008			\$2.50	\$0	
Telecommunication Systems	4	4	2008			\$3.50	\$0	
Security Systems	3	5				\$ -	\$0	Genetec 2014
Fire Alarm Systems	2	5				\$ -	\$0	Building in on generator the 250 KW Cummings Generator

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Goodnow House			Building Address:	25 Middle Rd		THIS BUILDING IS PHYSICALLY CONNECTED TO PRIMARY SCHOOL AND IS A PART OF THAT BUILDING.	
Building Area:	3440			Year Built:	1820			
SYSTEM	System Priority 1 to 4 (1=Health & Safety, 2=High, 3=Medium, 4=Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	5	2011		4	\$ 3.00	\$12	This building was updated in 2008 when it became part of the Primary School. Fixtures were upgraded at that time.
Water Closets	2	5	2011		2	\$ 3.00	\$6	This building was updated in 2008 when it became part of the Primary School. Fixtures were upgraded at that time.
Water heater	2	5	2011			\$ 7,500	\$0	Condensing Lockinvar Knight
Domestic Water distribution	2	5	2011			\$ 5.00	\$0	This building water service is provided by the Primary School water service.
Plumbing Drainage	2	5	2011			\$ 4.00	\$0	This building water service is provided by the Primary School water service.
Fire Protection	1	5	2011			\$ 6.50	\$0	This building is 100% sprinkled. Installed with Primary School was built in 2011
Building Controls	2	5	2011			\$ 5.00	\$0	This building is on our Metasys system
Hot Water Boilers & Pumps	2	na				\$ -	\$0	Off of Primary School, copper
Perimeter Heating System	2	na				\$ 4.00	\$0	None
Ductwork System	3	4	2011			\$ 10.00	\$0	Installed when upgraded with Primary School
Indoor Air Handling Units	3	4	2011			\$ 20	\$0	This building is on the Primary School chiller.
Split Cooling Units	1	na				\$ 12,000	\$0	This building is on the Primary School chiller.
Hot Water Piping	2	4				\$ 3.00	\$0	Hot water supplied from a water heater located in the Primary School. Copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Goodnow House		Building Address:	25 Middle Rd		THIS BUILDING IS PHYSICALLY CONNECTED TO PRIMARY SCHOOL AND IS A PART OF THAT BUILDING.		
Building Area:	3440		Year Built:	1820				
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 26, 27, 28 - Electrical								
Electrical Service	3	5				\$ 250,000	\$0	
Electrical Distribution	4	5				\$ 7	\$0	
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	No generator for this location. This is not a dorm building.
Lighting Systems	4	5	2011			\$ 8	\$0	Did not qualify for the lighting upgrade do to the updates that happened in 2008
Emergency Lighting	1	5	2011			\$2.50	\$0	This apartment was upgraded in 2011 when Primary School was built
Telecommunication Systems	4	4				\$3.50	\$0	
Security Systems	3	5	2011			\$ -	\$0	No security system in this apartment
Fire Alarm Systems	2	5	2011			\$ -	\$0	This apartment is tied into the Primary Schools fire alarm system

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Harris Harlow			Building Address:	5/9 Middle Rd			
Building Area:	45150			Year Built:	1956-1993			
SYSTEM	System Priority 1 to 4 (1-High, 2-Medium, 3-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3			73	\$ 3.00	\$219	shower valves leak in most student showers
Water Closets	2	3			19	\$ 3.00	\$57	
Water heater	2	5	2015	2030	1	\$ 7,500	\$7,500	119 Gal HTP model PH199-119 direct vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3				\$ 5.00	\$0	copper
Plumbing Drainage	2	3				\$ 4.00	\$0	pvc and cast iron
Fire Protection	1	4				\$ 6.50	\$0	Building is 100% sprinklered
Building Controls	2	4				\$ 5.00	\$0	Currently only the new Trane Chiller and unit ventilators in the music rooms, dance studio and theater are serviced by Trane Automation
Hot Water Boilers & Pumps	2	4	2014	2044	2	\$ -	\$0	Buderus model GE515/7 natural gas HW boilers. 3.35 MMBH. Estimated 30 yr. service life. This provides heat to the Auditorium and to the bathrooms and trainers rooms
Additional Heating	2	5	2014	2044	2	\$ -	\$0	Trane model CGA Unit Heaters/Ventilators. 400 MBH. Services heat in the music rooms, dance studio and theater
Perimeter Heating System	2	3				\$ 4.00	\$0	unit ventilators, ducts and baseboards
Ductwork System	3	3				\$ 10.00	\$0	A fresh air intake duct is compromised in the lowest level air handler room.
Indoor Air Handling Units	3	3				\$ 20	\$0	Tranue unit ventilators
Chiller Units	3	5	2015	2035	1		\$0	Trane model CGAM 70 ton chiller. Estimated 20 yr. service life.
Hot Water Piping	2	3	2015			\$ 3.00	\$0	New HTP (20 gallon) condensing water heater
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	yes

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Harris Harlow			Building Address:	5/9 Middle Rd			
Building Area:	45150			Year Built:	1956-1993			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	4				\$ 250,000	\$0	Existing 800 amp 120/208 volt
Electrical Distribution	4	4				\$ 7	\$0	This building is serviced by a 60 KW generator located by Reinke Bldg. The generator provides power for card access, fire alarms, boiler and hot water. THIS BUILDING DOES NOT HAVE LIGHTS ON THE GENERATOR.
Emergency / Optional Standby Power	2	3				\$ 125,000	\$0	60 KW Kohler Generator, installed in 2006.
Lighting Systems	4	3				\$ 8	\$0	Under a light project upgrade the lights were updated in 2014
Emergency Lighting	1	3				\$2.50	\$0	
Telecommunication Systems	4	3				\$3.50	\$0	
Security Systems	3	5				\$ -	\$0	Genetec installed in 2014
Fire Alarm Systems	2	4				\$ -	\$0	100%

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Kidder House			Building Address:	66 Main St			
Building Area:	8260			Year Built:	1879			
SYSTEM	System Priority 1 to 4 (1-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	2			24	\$ 3.00	\$72	
Water Closets	2	2			8	\$ 3.00	\$24	
Water heater	2	4	2009	2024	1	\$ 7,500	\$7,500	80 Gal Super Stor model SSU80 indirect vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3				\$ 5.00	\$0	Inspection completed in 2005 by National Home Inspection Services. Water service feed is galvanized. Existing pipes a mixture of copper and brass. Cast Iron drains
Plumbing Drainage	2	3	1986			x	#VALUE!	pvc and cast iron (2) 1,500 gallon septic tanks inline. This building is to be tied into our existing WWTF by the end of the 2017 per DEP
Fire Protection	1	na				\$ 6.50	\$0	No sprinklers in this building, not a dorm
Building Controls	2	na				\$ 5.00	\$0	None
Hot Water Boilers & Pumps	2	4	2009	2039	2	\$ -	\$0	Buderus model G234X/35 natural gas HW boiler. 160 MBH. Superstore 80 gallon indirect
Perimeter Heating System	2	2				\$ 4.00	\$0	baseboard
Ductwork System	3	na				\$ 10.00	\$0	None
Indoor Air Handling Units	3	na				\$ 20	\$0	None
Split Cooling Units	1	na				\$ 12,000	\$0	None
Hot Water Piping	2	2				\$ 3.00	\$0	copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Kidder House			Building Address:	66 Main St			
Building Area:	8260			Year Built:	1879			
SYSTEM	System Priority 1 to 4 (1-High, 2-Medium, 3-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	2				\$ 250,000	\$0	Existing 200 amp 120/240 volt
Electrical Distribution	4	1				\$ 7	\$0	Capacity of Main Disconnect - 60 amps x 8
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	
Lighting Systems	4					\$ 8	\$0	
Emergency Lighting	1					\$2.50	\$0	
Telecommunication Systems	4	1				\$3.50	\$0	
Security Systems	3	na				\$ -	\$0	
Fire Alarm Systems	2	2				\$ -	\$0	Fire Alarm panel and smokes upgraded in 2011

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Picardi			Building Address:	Main St (10 Village Path)			
Building Area:	2420			Year Built:	1987			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3			15	\$ 3.00	\$45	
Water Closets	2	3			6	\$ 3.00	\$18	
Water heater	2	3	2006	2021	1	\$ 7,500	\$7,500	40 Gal RUUD model PVP40F direct vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3				\$ 5.00	\$0	
Plumbing Drainage	2	2				\$ 4.00	\$0	
Fire Protection	1	na				\$ 6.50	\$0	None
Building Controls	2	na				\$ 5.00	\$0	None
Hot Water Boilers & Pumps	2	2				\$ -	\$0	Utica model 225AGB natural gas fired HW boiler. Estimated 30 yr. service life.
Perimeter Heating System	2	2	1987	2007	2,420	\$ 4.00	\$9,680	Boiler to be replaced under Capital Project fall of 2016
Ductwork System	3	3				\$ 10.00	\$0	None
Indoor Air Handling Units	3	3	2012			\$ 20	\$0	
Split Cooling Units	1	na				\$ 12,000	\$0	None
Hot Water Piping	2	3				\$ 3.00	\$0	
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Picardi			Building Address:	Main St (10 Village Path)			
Building Area:	2420			Year Built:	1987			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 26, 27, 28 - Electrical								
Electrical Service	3	3				\$ 250,000	\$0	
Electrical Distribution	4	3				\$ 7	\$0	
Emergency / Optional Standby Power	2	2				\$ 125,000	\$0	On the 80 KW Kohler generator. Card access and fire alarms on the generator
Lighting Systems	4	2	2014			\$ 8	\$0	Lighting was upgraded 2014 under a lighting upgrade program
Emergency Lighting	1	2				\$2.50	\$0	
Telecommunication Systems	4					\$3.50	\$0	
Security Systems	3	3				\$ -	\$0	Genetec 2014
Fire Alarm Systems	2	3	2010			\$ -	\$0	Fire Alarm wiring was re-wired by Santella Electric in 2010

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Primary School			Building Address:	25 Middle Rd			
Building Area:	36084			Year Built:	2011			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	4	51		33	\$ 3.00	\$99	Plumbing installed new when built in 2011.
Water Closets	2	4	24		16	\$ 3.00	\$48	Plumbing installed new when built in 2011.
Water heater	2	4	2011	2026	1		\$0	Lochinvar model SS8081 Indirect Vent WH. Estimated 15 yr. service life.
		4	2011	2026	1		\$0	Lochinvar model TNA251-100 direct vent condensing WH. Estimated 15 yr. service life.
		4	2011	2026	1		\$0	Lochinvar model TNA126-060 direct vent condensing WH. Estimated 15 yr. service life.
Domestic Water distribution	2	4				\$ 5.00	\$0	All piping installed new when built in 2011
Plumbing Drainage	2	4	2011			x	#VALUE!	1,500 Gallon Grease Interceptor
		4	2011			x	#VALUE!	Sewer pump tank not a grinder station.
Fire Protection	1	4				\$ 6.50	\$0	100% of the building is sprinklered
Building Controls	2	4				\$ 5.00	\$0	This system is 100% by Metasys system.
Hot Water Boilers & Pumps	2	4	2014	2044	2	\$ -	\$0	Buderus model GB312-240 natural gas fired HW boilers. These two boilers were originally installed in 2011 but one failed due to the wrong glycol being installed and a failure in the aluminum casting. These are two new boilers installed in 2014.
Perimeter Heating System	2	4				\$ 4.00	\$0	New installed when building built in 2011
Ductwork System	3	4				\$ 10.00	\$0	New installed when building built in 2011
Indoor Air Handling Units	3	4				\$ 20	\$0	New installed when building built in 2011
Chillers	3	4	2011	2026	1		\$0	Trane model CGAM 70 ton chiller. Installed new when building built in 2011 Estimated 15 yr. service life.
Hot Water Piping	2	4	2011			\$ 3.00	\$0	New installed when building built in 2011
Roof Exhaust Fans	3	4	2011			\$ 5,000.00	\$0	New installed when building built in 2011

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Primary School		Building Address:	25 Middle Rd				
Building Area:	36084		Year Built:	2011				
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-High, 3-Medium, 4-Low)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	4	2011			\$ 250,000	\$0	New installed when building built in 2011. Existing 1600 amp 120/208 volt
Electrical Distribution	4	4	2011			\$ 7	\$0	New installed when building built in 2011
Emergency / Optional Standby Power	2	na	na			\$ 125,000	\$0	No generator, this building is academic only and does not need a generator. There is a poured pad and conduits in place on the south side of building for future if needed.
Lighting Systems	4	4	2011			\$ 8	\$0	Not done under the lighting upgrade program 2014 because it is a new building and did not qualify for the upgrades.
Emergency Lighting	1	4	2011			\$2.50	\$0	New installed when building built in 2011.
Telecommunication Systems	4	4	2011			\$3.50	\$0	New installed when building built in 2011.
Security Systems	3	4	2014			\$ -	\$0	Card access is updated in 2014 - Siemens Genetec system
Fire Alarm Systems	2	4	2011			\$ -	\$0	New installed when building built in 2011

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Reinke			Building Address:	5 Middle Rd			
Building Area:	17272			Year Built:	1963			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	2			9	\$ 3.00	\$27	
Water Closets	2	2			9	\$ 3.00	\$27	
Water heater	2	1	2005	2020	1	\$ 7,500	\$7,500	40 Gal GE model SG40T12AVG00 direct vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	2				\$ 5.00	\$0	copper
Plumbing Drainage	2	3				\$ 4.00	\$0	pvc/cast iron
Fire Protection	1	na				\$ 6.50	\$0	No Sprinklers
Building Controls	2	na				\$ 5.00	\$0	None
Hot Water Boilers & Pumps	2	3	2005	2035	1	\$ -	\$0	Hydrotherm model MR-1200B gas fired HW boiler. 960 MBH. Estimated 30 yr. service life.
Perimeter Heating System	2	2				\$ 4.00	\$0	We are having issues regulating the temperature of the building due to
Ductwork System	3	na				\$ 10.00	\$0	Original for fresh air to gym area
Indoor Air Handling Units	3	2				\$ 20	\$0	Heat and fresh air for the gym - NOT IN USE
Split Cooling Units	1	na				\$ 12,000	\$0	None
Hot Water Piping	2	2				\$ 3.00	\$0	None
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	yes

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Reinke			Building Address:	5 Middle Rd			
Building Area:	17272			Year Built:	1963			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	3				\$ 250,000	\$0	Existing 200 amp 120/208 volt 3 phase
Electrical Distribution	4	2				\$ 7	\$0	
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	Classrooms only, generator not needed
Lighting Systems	4	3				\$ 8	\$0	Completed 2014
Emergency Lighting	1	3				\$2.50	\$0	
Telecommunication Systems	4	3				\$3.50	\$0	
Security Systems	3	3				\$ -	\$0	Card access upgraded to Genetec in 2014
Fire Alarm Systems	2	3				\$ -	\$0	

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:		Root MARS Wing		Building Address:		15 Middle Road		THIS IS A WING IN ROOT BUILDING THAT WAS ADDED IN 1983 BUT IS PART OF THE ROOT BUILDING AND CAN BE ADDED TO THAT SURVEY
Building Area:		26000		Year Built:		1984		
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3				\$ 3.00	\$0	COUNTED IN ROOT BLDG NUMBERS
Water Closets	2	3	1983			\$ 3.00	\$0	COUNTED IN ROOT BLDG NUMBERS
Water heater	2	3	2000	2015	1	\$ 7,500	\$7,500	72 Gallon Rheem-Ruud model G72-250A direct vent WH. Estimated 15 yr. service life.
	2	3	2006	2021	1	\$ 7,500	\$7,500	48 Gallon Rheem-Ruud model G50-60N direct vent WH. Estimated 15 yr. service life.
	2	4	2014	2029	1	\$ 7,500	\$7,500	30 Gallon Bradford White model M230L6DS-INCM electric WH. Estimated 15 yr. service life.
Domestic Water distribution	2	4	1983			\$ 5.00	\$0	
Plumbing Drainage	2	4	1983			\$ 4.00	\$0	
Fire Protection	1	4	1983			\$ 6.50	\$0	This area is 100% sprinkled
Building Controls	2	4	1983			\$ 5.00	\$0	This area is controlled on Metasys
Hot Water Boilers & Pumps	2	2				\$ -	\$0	
Perimeter Heating System	2	3				\$ 4.00	\$0	
Ductwork System	3	4				\$ 10.00	\$0	
Indoor Air Handling Units	3	3				\$ 20	\$0	
Chillers	3	3	2001	2016	1		\$0	Trane model RTAA 60 ton chiller. Estimated 15 yr. service life.
Hot Water Piping	2	4				\$ 3.00	\$0	
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Root MARS Wing			Building Address:	15 Middle Road		THIS IS A WING IN ROOT BUILDING THAT WAS ADDED IN 1983 BUT IS PART OF THE ROOT BUILDING AND CAN BE ADDED TO THAT SURVEY	
Building Area:	26000			Year Built:	1984			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 26, 27, 28 - Electrical								
Electrical Service	3	3				\$ 250,000	\$0	COUNTED IN ROOT BLDG. NUMBERS
Electrical Distribution	4	3				\$ 7	\$0	
Emergency / Optional Standby Power	2	3				\$ 125,000	\$0	
Lighting Systems	4	4				\$ 8	\$0	Replace all lighting systems in building with new LED fixtures.
Emergency Lighting	1	4				\$2.50	\$0	Emergency lighting does not appear to need renovation. However, we recommend that a local inspector reviews the entire building for code compliance.
Telecommunication Systems	4	3				\$3.50	\$0	Replace IT infrastructure wiring and pathways, data jacks, paging system, and voice communication systems in their entirety. Projector and classroom audiovisual systems do not require renovation or replacement.
Security Systems	3	4				\$ -	\$0	Genetec system installed in 2014
Fire Alarm Systems	2	4				\$ -	\$0	Fire Alarm system does not need renovation.

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Root Academic Building			Building Address:	15 Middle Rd			
Building Area:	33221			Year Built:	1984			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2- 3-Health & Safety, 4- 5-Health & Safety)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3			46	\$ 3.00	\$138	99% are handsfree
Water Closets	2	3			22	\$ 3.00	\$66	99% are handsfree
Water heater	2	3	2009	2024	1	\$ 7,500	\$7,500	45 Gal State Patriot model PCE5220RTA Electric WH. Estimated 15 yr. service life.
		4	2014	2029	1	\$ 7,500	\$7,500	30 Gal Rheem electric WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3				\$ 5.00	\$0	Estimated 50 yr. service life. Typically piping systems last much longer. Portions of building built/renovated at various years. Replace entire domestic water piping system.
Plumbing Drainage	2	3	2001			x	#VALUE!	5,000 Gallon Lab Acid Waste Tank. This tank has ground water infiltration issues. Was sealed back in 2011 but failed.
Fire Protection	1	4				\$ 6.50	\$0	100% sprinklered
Building Controls	2	4				\$ 5.00	\$0	The existing 3/4 of Root Building with the exception of the Mars Wing and the business office is now controlled by Metesys
Hot Water Boilers & Pumps	2	3	1984	2014	1	\$ -	\$0	Hydro Therm model MR1800B gas fired HW boiler. 1.44 MMBH. Estimated 30 yr. service life.
	2	2	2016	2046	1	\$ -	\$0	Two (2) Lochinvar FBN-1251 high efficiency boilers, two new Taco F12009 hot water pumps, new expansion tank and air separator.
Perimeter Heating System	2	5	2014	2034	33,221	\$ 4.00	\$132,884	Trane unit ventilators and baseboard heating. Estimated 20 yr. service life.
Ductwork System	3	3				\$ 10.00	\$0	New duct work in the business office for the heat and AC installed in 2010. Old duct work that supplied heat in halls and some offices abandoned ?
Indoor Air Handling Units	3	3				\$ 20	\$0	Lifebreath model 300DCS heat recovery unit. Estimated 20 yr. service life. This unit services the business office and head of schools area heat and A/C.
Chillers	3	5					\$0	Trane 70 ton chiller. Estimated 15 yr. service life. This chiller unit is only for 3/4 of Root Bldg. Does not include the Mars Wing or the business office/head of schools office.
Split Cooling Units	1	na	2010	2025				Fujitsu Halcyon model 18Rux split cooling unit serving IT room. Estimated 15 yr. service life. Unit is on the 80 kw generator.
	3	na	1986	2001	1			Carrier model 38CKB cooling unit. Estimated 15 yr. service life. NOT USED ANYMORE. These areas serviced by the new Trane 70 ton chiller
	3	na	2012	2027	1			First Co cooling unit. Estimated 15 yr. service life.
Hot Water Piping	2	3				\$ 3.00	\$0	copper
Roof Exhaust Fans	3	3				\$ 5,000.00	\$0	none

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Root Academic Building		Building Address:	15 Middle Rd				
Building Area:	33221		Year Built:	1984				
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	3				\$ 250,000	\$0	Existing 600 amp 277/480 volt
Electrical Distribution	4	3				\$ 7	\$0	
Emergency / Optional Standby Power	2	3				\$ 125,000	\$0	80 KW generator serves to run the following, boiler, fire alarms, card access and AC unit for the IT server room. There is also an outlet in the Business office labeled "ON GENERATOR" with power.
Lighting Systems	4	4				\$ 8	\$0	Complete 2014
Emergency Lighting	1	4				\$2.50	\$0	On generator
Telecommunication Systems	4	3				\$3.50	\$0	Replace IT infrastructure wiring and pathways, data jacks, paging system, and voice communication systems in their entirety. Projector and classroom audiovisual systems do not require renovation or replacement.
Security Systems	3	4				\$ -	\$0	Genetec system installed in 2014
Fire Alarm Systems	2	4				\$ -	\$0	Fire Alarm system does not need renovation. On generator

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	South Barn Apartment			Building Address:	60 Main St			
Building Area:	540			Year Built:	1935			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2- 3-Health & Safety, 4- 5-Health & Safety)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3			3	\$ 3.00	\$9	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace all fixtures with low flow institutional grade type.
Water Closets	2	3			1	\$ 3.00	\$3	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace all fixtures with low flow institutional grade type.
Water heater	2	3	2003	2018	1	\$ 7,500	\$7,500	40 Gal. AO Smith model PEC-40-918 Electric WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3				\$ 5.00	\$0	copper
Plumbing Drainage	2	3	1978			x	#VALUE!	pvc 1,000 gallon cesspool shared with South House. This system is required to be tied into the WWTF by the end of 2017.
Fire Protection	1	na				\$ 6.50	\$0	Not required this is an apartment no dorm rooms
Building Controls	2	na				\$ 5.00	\$0	None
Hot Water Boilers & Pumps	2	na				\$ -	\$0	
Perimeter Heating System	2	3				\$ 4.00	\$0	Electric baseboard
Ductwork System	3	na				\$ 10.00	\$0	None
Indoor Air Handling Units	3	na				\$ 20	\$0	None
Split Cooling Units	1	na				\$ 12,000	\$0	None
Hot Water Piping	2	3				\$ 3.00	\$0	
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	South Barn Apartment		Building Address:	60 Main St				
Building Area:	540		Year Built:	1935				
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	3				\$ 250,000	\$0	20/240 volt 100 Sub
Electrical Distribution	4	3				\$ 7	\$0	
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	No generator needed. Residential apartment no dorms.
Lighting Systems	4	3				\$ 8	\$0	
Emergency Lighting	1	na				\$2.50	\$0	
Telecommunication Systems	4	na				\$3.50	\$0	Replace IT infrastructure wiring and pathways, data jacks, paging system, and voice communication systems in their entirety. Projector and classroom audiovisual systems do not require renovation or replacement.
Security Systems	3	na				\$ -	\$0	None
Fire Alarm Systems	2	na				\$ -	\$0	Local smoke alarms

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:		South House		Building Address:		60 Main St		
Building Area:		2340		Year Built:		1930		
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	2			6	\$ 3.00	\$18	
Water Closets	2	2			3	\$ 3.00	\$9	
Water heater	2	3	2014	2029	1	\$ 7,500	\$7,500	50 Gal GE model GE50M06AAG electric WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3				\$ 5.00	\$0	copper
Plumbing Drainage	2	2	1978			x	#VALUE!	pvc and cast iron. Shared cesspool with South Barn. 1,000 gallon. This needs to be tied into the WWTF by the end of 2017 per DEP
Fire Protection	1	na				\$ 6.50	\$0	Not required an apartment with no dorm rooms
Building Controls	2	na				\$ 5.00	\$0	none
Hot Water Boilers & Pumps	2	3	1989			\$ -	\$0	Installed Becket flame retention oil burner by Terry Oil. December 1989
Perimeter Heating System	2	2				\$ 4.00	\$0	baseboard
Ductwork System	3	na				\$ 10.00	\$0	None
Indoor Air Handling Units	3	na				\$ 20	\$0	None
Split Cooling Units	1	na				\$ 12,000	\$0	None
Hot Water Piping	2	2				\$ 3.00	\$0	copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	South House			Building Address:	60 Main St			
Building Area:	2340			Year Built:	1930			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	3				\$ 250,000	\$0	Existing 200 amp 120/240 volt
Electrical Distribution	4	3				\$ 7	\$0	
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	Not needed no dorm rooms
Lighting Systems	4	3				\$ 8	\$0	
Emergency Lighting	1	na				\$2.50	\$0	
Telecommunication Systems	4	na				\$3.50	\$0	
Security Systems	3	na				\$ -	\$0	None
Fire Alarm Systems	2	na				\$ -	\$0	Local fire alarms

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:		Steward Dorms		Building Address:		50 Main St		
Building Area:		27095		Year Built:		1978 / 2008		
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3	2008		35	\$ 3.00	\$105	New sinks and faucets in common bathrooms 2nd and 3rd floors as of 2014. Wellness (1st floor) all new 2008
Water Closets	2	3			30	\$ 3.00	\$90	same note at above
Water heater	2	2	2006	2021	1	\$ 7,500	\$7,500	AO Smith direct vent WH. Estimated 15 yr. service life.
	2	2	2004	2019	1	\$ 7,500	\$7,500	AO Smith model HW-670-932 direct vent WH. Estimated 15 yr. service life.
	2	2	2004	2024	1	\$ 2,000	\$2,000	AO Smith model T200A hot water storage tank. Estimated 20 yr. service life.
Domestic Water distribution	2	3	1978			\$ 5.00	\$0	copper
Plumbing Drainage	2	3	1978			\$ 4.00	\$0	cast iron
Fire Protection	1	4	1978			\$ 6.50	\$0	100% sprinkled
Building Controls	2	3				\$ 5.00	\$0	Wellness air handling unit on Metasys
Hot Water Boilers & Pumps	2	3	2009			\$ -	\$0	Hydro Therm
Perimeter Heating System	2	3				\$ 4.00	\$0	unit heaters
Ductwork System	3	3				\$ 10.00	\$0	yes, in Wellness Level
Indoor Air Handling Units	3	3				\$ 20	\$0	only in Wellness Level
Split Cooling Units	1	3				\$ 12,000	\$0	13 - McQuay A/C unit vents Forced Hot Water Wellness Floor 2 ceiling carrier A/C units (Conf. Room and Nurses Room) 2 Carrier split compressors 1 Carrier A/C compressor 1 Air Handler for A/C & Heat for Wellness rooms TO BE REPLACED
Hot Water Piping	2	3				\$ 3.00	\$0	copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Steward Dorms			Building Address:	50 Main St			
Building Area:	27095			Year Built:	1978 / 2008			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	4				\$ 250,000	\$0	1 200 amp 277/480 volt - Wellness Floor 1 400 amp 120/208 volt - Steward Dorm Floors
Electrical Distribution	4	4				\$ 7	\$0	
Emergency / Optional Standby Power	2	3				\$ 125,000	\$0	On 80 kW Kohler generator. Generator runs card access, fire alarms, carbon monoxide, boiler and 24 hr. egress lights. Does not run the hot water.
Lighting Systems	4	4				\$ 8	\$0	replaced in 2014
Emergency Lighting	1	4				\$2.50	\$0	100%, Wellness replaced in 2008
Telecommunication Systems	4	3				\$3.50	\$0	Replace IT infrastructure wiring and pathways, data jacks, paging system, and voice communication systems in their entirety. Projector and classroom audiovisual systems do not require renovation or replacement.
Security Systems	3	4				\$ -	\$0	Genetec card access system installed in 2014
Fire Alarm Systems	2	4				\$ -	\$0	Fire Alarm system does not need renovation.

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:		Todd House		Building Address:		33 Main St		
Building Area:		5508		Year Built:		1870		
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3	2008		10	\$ 3.00	\$30	All fixtures replaced since 1975. Newest apartment remodeled in 2008
Water Closets	2	3			4	\$ 3.00	\$12	
Water heater	2	5	2015	2030	1	\$ 7,500	\$7,500	60 Gal HTP model SSO-60 indirect vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	4	1975			\$ 5.00	\$0	copper
Plumbing Drainage	2	3	2006	2036	1	x	#VALUE!	pvc and cast iron. 1,500 Gal Septic Tank w/ Leach field. Estimated 30 yr. service llife. DEP requires this building to be tied into WWTF by end of 2017
Fire Protection	1	na				\$ 6.50	\$0	No sprinkler, a multifamily residence no dorm rooms
Building Controls	2	na				\$ 5.00	\$0	None
Hot Water Boilers & Pumps	2	5	2008/2015			\$ -	\$0	First Co. 36MBXB-HW - services apartment C. Buderus BUDG234X38 services other two apartments. Mega-store MS53 indirect wtr heater installed by Jamie Oil
Perimeter Heating System	2	3	1998			\$ 4.00	\$0	baseboard and radiator
Ductwork System	3	na				\$ 10.00	\$0	None
Indoor Air Handling Units	3	na				\$ 20	\$0	None
Split Cooling Units	1	na				\$ 12,000	\$0	None
Hot Water Piping	2	3				\$ 3.00	\$0	copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Todd House			Building Address:	33 Main St			
Building Area:	5508			Year Built:	1870			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	3	2008			\$ 250,000	\$0	Existing 200 amp 120/240 volt 80% of house has old wiring. Knob and Tube gone
Electrical Distribution	4	3				\$ 7	\$0	
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	Generator not required, residential apartment no dorm rooms
Lighting Systems	4	3				\$ 8	\$0	Replace all lighting systems in building with new LED fixtures.
Emergency Lighting	1	na				\$2.50	\$0	None
Telecommunication Systems	4	na				\$3.50	\$0	None
Security Systems	3	na				\$ -	\$0	None
Fire Alarm Systems	2	3				\$ -	\$0	Local fire alarms

Fay School									
Capital Needs Survey Form									
10/11/2016									
Building Name:	Upjohn			Building Address:	x			THIS IS THE UPPER LEVEL OF PICARDI ART CENTER. CAN BE COMBINED WITH PICARDI	
Building Area:	6336			Year Built:	1889				
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS	
Division 2 - Site Construction									
Site - Fuel Tanks	N/A					N/A	N/A	N/A	
Division 21, 22, 23 - Mechanical									
Faucets & Sinks	2	na			15	\$ 3.00	\$45		
Water Closets	2	na			6	\$ 3.00	\$18		
Water heater	2	na				\$ 7,500	\$0		
Domestic Water distribution	2	na				\$ 5.00	\$0		
Plumbing Drainage	2	na				\$ 4.00	\$0		
Fire Protection	1	na				\$ 6.50	\$0		
Building Controls	2	na				\$ 5.00	\$0		
Heating	2	4	2013	2033	2	\$ -	\$0	AirTemp model VG75A gas fired furnace. 126 MBH. Estimated 20 yr. service life.	
	2	4	2012	2032	1	\$ -	\$0	Ducane model 80G1UH gas fired furnace. 132 MBH. SERVICES SCHOOL STORE Estimated 20 yr. service life.	
Perimeter Heating System	2	na				\$ 4.00	\$0		
Ductwork System	3	3				\$ 10.00	\$0	yes	
Indoor Air Handling Units	3	na				\$ 20	\$0	none	
Split Cooling Units	1	na				\$ 12,000	\$0	none	
Hot Water Piping	2	na				\$ 3.00	\$0	copper	
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	no	

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Upjohn		Building Address:	x		THIS IS THE UPPER LEVEL OF PICARDI ART CENTER. CAN BE COMBINED WITH PICARDI		
Building Area:	6336		Year Built:	1889				
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	3				\$ 250,000	\$0	Existing 200 amp 120/208 volt
Electrical Distribution	4	3				\$ 7	\$0	
Emergency / Optional Standby Power	2	3				\$ 125,000	\$0	On the 80 kW generator. The card access and fire alarms on the generator
Lighting Systems	4	3				\$ 8	\$0	Replaced in 2014 under a lighting upgrade program
Emergency Lighting	1					\$2.50	\$0	
Telecommunication Systems	4	na				\$3.50	\$0	
Security Systems	3	4				\$ -	\$0	Updated to Genetec in 2014
Fire Alarm Systems	2	4				\$ -	\$0	On generator

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:		Waters House		Building Address:		54 Main St		
Building Area:		3024		Year Built:		1860		
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2- (1-Poor, 5 Excellent)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3			6	\$ 3.00	\$18	
Water Closets	2	3			2	\$ 3.00	\$6	
Water heater	2	5	2014	2029	1	\$ 7,500	\$7,500	60 Gal HTP model SSO-60 Indirect vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3				\$ 5.00	\$0	copper
Plumbing Drainage	2	3				\$ 4.00	\$0	pvc and cast iron
Fire Protection	1	na				\$ 6.50	\$0	Not required two family residence no dorm rooms
Building Controls	2	na				\$ 5.00	\$0	None
Hot Water Boilers & Pumps	2	5	2014			\$ -	\$0	Buderer GC124-3215
Perimeter Heating System	2	3				\$ 4.00	\$0	baseboard
Ductwork System	3	na				\$ 10.00	\$0	None
Indoor Air Handling Units	3	na				\$ 20	\$0	None
Split Cooling Units	1	na				\$ 12,000	\$0	None
Hot Water Piping	2	3				\$ 3.00	\$0	copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Waters House			Building Address:	54 Main St			
Building Area:	3024			Year Built:	1860			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	3				\$ 250,000	\$0	Existing 200 amp 120/240 volt
Electrical Distribution	4	3				\$ 7	\$0	
Emergency / Optional Standby Power	2	na				\$ 125,000	\$0	Not required residence no dorm rooms
Lighting Systems	4	3				\$ 8	\$0	
Emergency Lighting	1	na				\$2.50	\$0	None
Telecommunication Systems	4	na				\$3.50	\$0	None
Security Systems	3	na				\$ -	\$0	None
Fire Alarm Systems	2	3				\$ -	\$0	Local Smoke Alarms

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Webster House			Building Address:	46 Main St			
Building Area:	3776			Year Built:	1920			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS
Division 2 - Site Construction								
Site - Fuel Tanks	N/A					N/A	N/A	N/A
Division 21, 22, 23 - Mechanical								
Faucets & Sinks	2	3	1973		8	\$ 3.00	\$24	New plumbing and fixtures installed in apartment in 1973 and new plumbing and fixtures installed in 2nd and 3rd floor in 1979
Water Closets	2	3			4	\$ 3.00	\$12	
Water heater	2	3	2005	2020	1	\$ 7,500	\$7,500	75 Gal RUUD model MR75 direct vent WH. Estimated 15 yr. service life.
Domestic Water distribution	2	3				\$ 5.00	\$0	copper
Plumbing Drainage	2	3				\$ 4.00	\$0	
Fire Protection	1	4	1979			\$ 6.50	\$0	Dorm rooms and common rooms are covered 100% with sprinklers. Installed done in 1979
Building Controls	2	na				\$ 5.00	\$0	
Hot Water Boilers & Pumps	2	4	2011			\$ -	\$0	Lakeside Oil installed gas boiler and logmatic in May 2011
Perimeter Heating System	2	3	1979			\$ 4.00	\$0	baseboard
Ductwork System	3	na				\$ 10.00	\$0	None
Indoor Air Handling Units	3	na				\$ 20	\$0	None
Split Cooling Units	1	na				\$ 12,000	\$0	None
Hot Water Piping	2	3				\$ 3.00	\$0	Switched from radiator to baseboard no date maybe 1979. copper
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	None

Fay School								
Capital Needs Survey Form								
10/11/2016								
Building Name:	Webster House		Building Address:	46 Main St				
Building Area:	3776		Year Built:	1920				
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS

Division 26, 27, 28 - Electrical								
Electrical Service	3	3	1979			\$ 250,000	\$0	Existing 200 amp 120/240 volt. Installed in 1979. Complete re-wiring
Electrical Distribution	4	3	1979			\$ 7	\$0	
Emergency / Optional Standby Power	2	3				\$ 125,000	\$0	P
Lighting Systems	4					\$ 8	\$0	Replace all lighting systems in building with new LED fixtures if qualified in 2014
Emergency Lighting	1	3	1994			\$2.50	\$0	
Telecommunication Systems	4	3				\$3.50	\$0	
Security Systems	3	4	2014			\$ -	\$0	Genetec system installed in 2014
Fire Alarm Systems	2	3	1994			\$ -	\$0	Installed by Santella Electric in 1994. On 11 KW generator

Fay School									
Capital Needs Survey Form									
10/11/2016									
Building Name:		WWTF			Building Address:		110 Village Path (72A Main S		
Building Area:		x			Year Built:		2008		
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2- 3-Operational, 4-Other)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS	
Division 2 - Site Construction									
Site - Fuel Tanks	N/A					N/A	N/A	N/A	
Division 21, 22, 23 - Mechanical									
Faucets & Sinks	2	4				\$ 3.00	\$0	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace all fixtures with low flow institutional grade type.	
Water Closets	2	na				\$ 3.00	\$0	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace all fixtures with low flow institutional grade type.	
Water heater	2	na				\$ 7,500	\$0	Unknown	
Domestic Water distribution	2	4				\$ 5.00	\$0	Estimated 50 yr. service life. Typically piping systems last much longer. Portions of building built/renovated at various years. Replace entire domestic water piping system.	
Plumbing Drainage	2	4				\$ 4.00	\$0	Estimated 50 yr. service life. Typically piping systems last much longer. Replace and/or service existing drainage system(s)	
Fire Protection	1	4				\$ 6.50	\$0	Estimated 30 yr. service life. Sprinkler system is currently limited to (2) rooms. Provide full building sprinkler system.	
Building Controls	2	4				\$ 5.00	\$0	Estimated 15 yr. service life. Portions of building built/renovated at various years. Provide DDC control system for entire building.	
Hot Water Boilers & Pumps	2	na				\$ -	\$0	Served by Facilities West.	
Perimeter Heating System	2	4				\$ 4.00	\$0	Estimated 20 yr. service life. Typically systems last much longer. Portions of building built/renovated at various years. Replace existing perimeter radiation. Provide new control valves.	
Ductwork System	3	4				\$ 10.00	\$0	Estimated 30 yr. service life. Typically duct systems last much longer. Portions of building built/renovated at various years. Replace entire existing ductwork system. Provide new ventilation ductwork where required.	
Indoor Air Handling Units	3	4				\$ 20	\$0	Estimated 20 yr. service life. Replace existing library air handling unit. Ductwork replacement included in section above. Heating, cooling, ventilation, and new thermostats included.	
Split Cooling Units	1	na				\$ 12,000	\$0	Estimated 15 yr. service life. In-kind replacement of split A/C units serving data rooms, offices, and special needs classrooms.	
Hot Water Piping	2	4				\$ 3.00	\$0	Estimated 30 yr. service life. Typically systems last much longer. Portions of building built/renovated at various years. Provide new hot water piping system and valves.	
Roof Exhaust Fans	3	na				\$ 5,000.00	\$0	Estimated 20 yr. service life. Portions of building built/renovated at various years. Replace exhaust fans and ductwork. Fans are of varying ages from 50+ to 5 years. Price includes replacement of all fans. Ductwork replacement included in pricing for "Heating/Ventilation Ductwork" section above.	

Lab sink only

None

Fay School									
Capital Needs Survey Form									
10/11/2016									
Building Name:		WWTF		Building Address:		110 Village Path (72A Main S			
Building Area:		x		Year Built:		2008			
SYSTEM	System Priority 1 to 4 (1-Health & Safety, 2-)	System Rating 1 to 5 (1 Poor, 5 Excellent)	Last Major Reconstruction (Year)	Projected Replacement (Year)	Quantity	Unit Price	Current Replacement Cost	REMARKS	

Division 26, 27, 28 - Electrical									
Electrical Service	3	4				\$ 250,000	\$0	Replace existing switchgear in its entirety. Upsize service to 1600A@ 208/120V, 3 phase to accommodate for future air conditioning loads.	
Electrical Distribution	4	4				\$ 7	\$0	Replace all branch panels throughout the building. Existing panels are overloaded, and the addition of future AC units is not currently possible. Replace all receptacles throughout the building to properly accommodate for teacher equipment (refrigerators, microwaves, etc.).	
Emergency / Optional Standby Power	2	4				\$ 125,000	\$0	Add 100KW generator (and associated electrical gear) to provide optional standby power to heating, refrigeration, and IT systems.	
Lighting Systems	4	4				\$ 8	\$0	Replace all lighting systems in building with new LED fixtures.	
Emergency Lighting	1	4				\$2.50	\$0	Emergency lighting does not appear to need renovation. However, we recommend that a local inspector reviews the entire building for code compliance.	
Telecommunication Systems	4	4				\$3.50	\$0	Replace IT infrastructure wiring and pathways, data jacks, paging system, and voice communication systems in their entirety. Projector and classroom audiovisual systems do not require renovation or replacement.	
Security Systems	3	4				\$ -	\$0	Security systems are in good condition, and do not require renovation or replacement.	
Fire Alarm Systems	2	4				\$ -	\$0	Fire Alarm system does not need renovation.	

Existing 400 amp 277/480 volt

On 250 kW Cummins Generator. Power, fire alarms, card access and plant operation

Genetec 2014

On Generator

Fay School Air Conditioning Study

Buildings Included:

Camp Dining Room (2nd & 3rd Floors)

Steward Dorm (2nd & 3rd Floors)

Webster House

East House

Fay School
48 Main St,
Southborough, MA 01772

Date: July 1, 2016

Prepared by:
Consulting Engineering Services, Inc.
811 Middle Street, Middletown, Connecticut 06457
CES PN 2016100.00

OVERVIEW

1. The purpose of this study is to provide recommendations for air conditioning systems for several existing buildings. The buildings which have been included are Camp Dining Room (2nd & 3rd Floors), Steward Dorm (2nd & 3rd Floors), Webster House, East House. Please note, CES has not reviewed existing conditions of these buildings at this time.
2. Multiple HVAC system types were considered in this study. Significant emphasis was put into the following factors:
 - a. **Scheduling and timing** aspects of the installation of each system. With limited time during summer breaks, the selected system should be minimally invasive and quickly installed.
 - b. **Rework and disruption** of ceilings, soffits, and existing utilities would be costly and time consuming, rendering some of the systems ineffective for this project. For example, adding large ductwork would require entirely new ceilings, soffits, and reconstruction of existing infrastructure.
 - c. **Efficiency** of mechanical equipment is a major factor in the selection of systems for this study. In addition to first cost, annual operating costs were also considered seriously during this process.

RECOMMENDATIONS

1. A variable refrigerant volume (VRV) system is recommended for providing cooling to the buildings studied. The VRV system is comprised of the addition of four major components to each building, several grade mounted heat pump units, refrigerant flow controllers, refrigerant piping and VRV indoor air handlers. This system uses refrigerant piping to convey refrigerant between indoor air handlers and a grade mounted heat pump unit. The cooled refrigerant provides cooling to the space via the coil located in the indoor air handler and rejects heat back into the refrigerant pipe loop after it exits the coil. The refrigerant pipe then takes the heat and transfers it to any space within the same refrigerant pipe loop calling for heating or to the grade mounted heat pump for discharge of heat to atmosphere.
 - a. Each occupied space requiring cooling will receive an indoor VRV unit which may be exposed wall mounted, or floor mounted. Several styles of indoor VRV units are available to meet specific requirements of the School, all with comparable pricing and compatibility. Refrigerant piping will be routed from the indoor unit to a central controller located in an attic or basement. From the controller, another set of refrigerant pipes will be routed to the outdoor condensing unit on grade. Condensate piping from the indoor units will be collected and discharged to an acceptable location.
 - b. The existing building heating systems will remain as-is.
 - c. A new thermostat will be provided for individual control of each space with an indoor VRV unit.
 - d. Ventilation will be provided by the existing operable windows.
 - e. Life expectancy of equipment will generally vary depending on the level of maintenance and service taking place. New VRV systems have an average life expectancy of approximately 20 years.

2. Electrical Impacts:

- a. New circuit breakers and feeders to indoor VRV units and outdoor condensing units will be required. Additional wiring for a service receptacle at the outdoor unit will also be provided.

3. Structural Impacts:

- a. A concrete pad will be required for mounting of the outdoor condensing unit at grade.

4. Architectural impacts:

- a. A screening enclosure may be required at the outdoor condensing unit to avoid visual impacts.
- b. Ceiling patching and repair may be required to accommodate new piping and wiring for the VRV system.

5. Opinion of Probable Construction Cost

- a. The following opinion of probable construction costs includes all mechanical and electrical items relating to the purchase, installation, and commissioning of the VRV system. Soft costs, GC fees, escalation, architectural and structural impacts, and other project costs are not included in these estimates.

Building	Approximate Area of Renovation (SF)	Indoor VRV Units (#)		Total Capacity (Ton)	Outdoor VRV Units	Mechanical & Electrical Opinion of Construction Cost (\$)
		1/2 Ton	1 Ton			
Steward Dorm (2nd & 3rd floors)	18,000 (est.)	37	10	29	(3) 10-ton modules	\$230,000
Camp Dining (2nd & 3rd floors)	9,000 (est.)	30	4	19	(2) 10-ton modules	\$165,000
Webster House	3,776	6	-	3	(1) 6-ton module	\$32,000
East House	1,920	6	1	4	(1) 6-ton module	\$38,000

Fay School Master Plan Project Budget Summary Sheet

Final Sequencing

DRA Project # 16009.00

SEQUENCE	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	REMARKS	COST/ SF	CONSTRUCTION COST	TOTAL PROJECT COST
A	Conversion of Residential Home to Dormitory spaces for 15 students and (2) faculty apartments. One of the faculty apartments is two-bedroom and the addition portion of the building is a single bedroom faculty apartment.	600	4,450	5,050		\$210	\$1,060,500	\$1,400,000
B	Improve Parity Amongst Dorms including A/C Upgrades and finishes Upgrades		17,610	17,610	Pricing provided by CES for A/C upgrades - See 'Dorm Upgrades' TAB	\$98	\$1,719,200	\$2,149,000
B	Faculty Housing Improvements - A/C Upgrades, finishes upgrades in hallways, dorms at Steward, Camp Dorms, East, Webster		8,370	8,370	Pricing provided by CES for A/C upgrades; pricing required for remainder of upgrades	\$62	\$520,900	\$651,125
C	Upper School Classroom Renovation - Demolition of exiting partitions to create larger classroom spaces. Includes renovation of finishes and lighting to accommodate new classroom sizes.	0	3,200	3,200	5 new classrooms created from 8 existing, smaller spaces	\$185	\$592,000	\$740,000
D	Athletic Field Complex Building - Freestanding New Construction building including toilet cores, storage, training room and mechanical spaces with wrap-around porch.	3,000	0	3,000	New Construction, Located at Athletic Complex, north of Main Campus	\$475	\$1,425,000	\$1,781,250
E	Innovation Lab - Two-story addition to an existing structure, including toilet cores, elevator, renovation to hallway/connector from existing building to new wing.	5,000	0	5,000	Addition SF includes connector from Root Building to Upjohn and toilet core; Spaces are combination lab space, computer room, meeting space, office and storage.	\$500	\$2,500,000	\$3,125,000
E	Innovation Lab - Two-story addition/renovation. Lower level renovation of existing conference area to create lab space. Upper level is constructed where current patio is located.	2,200	2,500	4,700	Spaces are combination lab space, computer room, meeting space, office and storage.	\$450	\$2,115,000	\$2,643,750
F	SIDEWALK IMPROVEMENTS (provided by Fay)							\$425,000
G	School Store - Renovate current student lounge on the first level of the Camp Dining Hall building to be a School Store. The adjacent woodshop would be renovated to become a consignment shop known as 'Mooseduds' - Replace existing windows, Create new storefront entry off existing plaza (300sf glazing)	0	2,600	2,600	Structural Steel required for creation of new storefront entry. 1600 for school store, 1000 for Mooseduds program	\$225	\$585,000	\$731,250
H	Art Studio at Picardi Art Center - renovate existing school store space into Ceramics Classroom; add Kiln Room. Convert existing ceramics room into Art Studio	0	2,200	2,200		\$300	\$660,000	\$825,000
I	Student Center - Convert existing Upjohn Building school room (former gym) to a Student Center Space	0	3,300	3,300		\$150	\$495,000	\$618,750
J	Increase Seating in Camp Dining Hall - renovation of toilet core to expand dining area	400	500	900	Replace toilet core location with expanded seating area; addition of new toilet cores	\$742	\$668,200	\$835,250
K	Consolidate and Enlarge Music Department - Demolish existing CMU walls in Reinke building. Create new high volume band room and chorus room	0	5,000	5,000		\$270	\$1,350,000	\$1,687,500
L	Locker Room Renovation - Renovate existing locker room spaces	0	5,160	5,160	Heavy renovation including toilet cores and utilities.	\$335	\$1,728,600	\$2,160,750
M	Camp Dining Hall Kitchen Add/Reno	2,000	2,400	4,400	Includes renovation of existing kitchen area; some structural work may be required to remove walls and create a more open plan kitchen space; includes site/road work	\$409	\$1,800,000	\$2,250,000
N	Media Center to Learning Commons - Renovation including partition demo, wall reconfiguration, lighting and new support spaces.	0	5,000	5,000		\$175	\$875,000	\$1,093,750
O	Hockey Rink Location - New Building at Athletic Complex; rink and spectator seating - access to athletic support building	25,000		25,000	Phase 2 of New Construction - Addition to Athletic Support Building (Item 3), Located at Athletic Complex, north of Main Campus	\$350	\$8,750,000	\$10,937,500
P	Tennis Courts - Locate 8 New Courts on Main Campus				8 New Courts; Requires Adjustment of existing Septic Overflow Zone, Include fencing		\$1,750,000	\$2,187,500
P	Tennis Courts - Locate 8 New Courts on Main Campus				8 New Courts - In Existing Field Location, Include fencing		\$1,725,000	\$2,156,250
P	Tennis Courts - Locate 8 New Courts on Main Campus				8 New Courts, Demolition of Existing Structures, Include fencing, potential retaining walls		\$1,650,000	\$2,062,500
P	Tennis Courts - Locate 4 New Courts on Main Campus				4 New Courts, Demolition of Existing Structure, Blasting Required, Include fencing, potential retaining walls		\$975,000	\$1,218,750
Q	Admissions Entrance to Fay House - Vestibule, Ramp and New Stair Construction; renovation of interior kitchen to work room; lower waiting area convert to conference room (AV setup required)	100	1,600	1,700		\$380	\$646,000	\$807,500
NOT IN PROPOSED SEQUENCING	Squash Court Renovation - Demolition of Reinke interior partitions (CMU) and create four squash courts with support spaces, including toilet facilities	0	10,000	10,000	4 Squash Courts (4,500sf) inside of 10,000sf building	\$215	\$2,150,000	\$2,687,500

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
1	70 Main Street Reno/ Addition	Conversion of Residential Home to Dormitory spaces for 15 students and (2) faculty apartments. One of the faculty apartments is two-bedroom and the addition portion of the building is a single bedroom faculty apartment.	600	4,450	5,050	\$210

Total Project Cost **\$1,400,000**

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
1	Renovate Dorms	Improve Parity Amongst Dorms including A/C Upgrades and finishes Upgrades (Includes Common Areas and Hallways)		17,610	17,610	\$98
14	Renovate Faculty Apts	Faculty Housing Improvements - A/C Upgrades, finishes upgrades in hallways, dorms at Steward, Camp Dorms, East, Webster		8,370	8,370	\$62

Total Project Cost **\$2,800,125**

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Dorm Breakdown

DRA Project # 16009.00

ITEM	PROGRAM DESCRIPTION	TOTAL SF	REMARKS	COST/ SF	TOTAL COST	TOTAL PROJECT COST
1	Steward Dorm - Hallway & Community Space Renovation	3,020	Includes new carpet, base, furring and paint on existing cmu walls (8' ceiling height), new lighting, new doors/hardware	\$98	\$295,960	
1	Steward Dorm - Dorms	3,620	Includes new carpet, repaint existing cmu walls (8' ceiling height), new lighting, new window shades (new furniture priced separately by	\$98	\$354,760	
14	Steward Dorm - 4 Family and 2 Single Apartments	4,500	4 Family and 2 Single Apartments	\$62	\$279,000	
					\$929,720	\$1,160,000
1	Camp Dining - Hallway Renovation	1,320	Includes new carpet, base, furring and paint on existing cmu walls (8' ceiling height), new lighting; new doors/hardware	\$98	\$129,360	
1	Camp Dining - Dorms	4,740	Includes new carpet, repaint existing cmu walls (8' ceiling height), new lighting, new window shades (new furniture priced separately by	\$98	\$464,520	
14	Camp Dining - 3 Single Apartments	1,980	3 Single Apartments	\$62	\$122,760	
					\$716,640	\$895,000
1	East House - Residential Finishes Upgrade	2,230	Light Renovation of Residential Building with 5 Dorms; Bathroom finish and fixture upgrades (3,130-900faculty)	\$98	\$218,540	
14	East House - Residential Finishes Upgrade	900	1 Family Apartment	\$62	\$55,800	
					\$274,340	\$340,125
1	Webster - Residential Finishes Upgrade	2,680	Light Renovation of Residential Building with 5 Dorms; Bathroom finish and fixture upgrades	\$98	\$262,640	
14	Webster - Residential Finishes Upgrade	990	1 Family Apartment	\$62	\$61,380	
					\$324,020	\$405,000
25,980					\$324,020	\$405,000
<i>Construction Subtotal</i>					<u>\$2,244,720</u>	

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8%

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Total Project Cost \$2,800,125

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	Classroom Renovations			3,200	3,200	\$185

Total Project Cost \$740,000

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	Shelter Building		3,000	0	3,000	\$475

Total Project Cost \$1,781,250

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	iLab Upjohn Expansion	Innovation Lab - Two-story addition to an existing structure, including toilet cores, elevator, renovation to hallway/connector from existing building to new wing.	5,000	0	5,000	\$500
	iLab Root Patio Expansion	Innovation Lab - Two-story addition/renovation. Lower level renovation of existing conference area to create lab space. Upper level is constructed where current patio is located.	2,200	2,500	4,700	\$450

Upjohn Expansion Total Project Cost \$3,125,000

Root Patio Expansion Total Project Cost \$2,643,750

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	SIDEWALK IMPROVEMENTS					

Total Project Cost \$425,000

Assumptions & Qualifications

- Material and labor escalation - recommended 6% - 8% per year*
- Hazardous soils and /or the replacement of unsuitable soils is not included*
- Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY*
- Special dewatering procedures beyond conventional open pit dewatering are not included*
- Labor overtime associated with possible 'summer slammer' work - to be evaluated later*
- Construction phasing - pending student activity and campus schedule*
- Winter conditions - pending schedule of work*

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	SCHOOL STORE			2,600	2,600	\$225
Total Project Cost					\$731,250	

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	ADD ART STUDIO			2,200	2,200	\$300

Total Project Cost \$825,000

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	STUDENT CENTER			3,300	3,300	\$150

Total Project Cost \$618,750

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	CAMP - Dining Hall Seating Expansion		400	500	900	\$280

Total Project Cost \$835,250

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	REINKE - Band and Choir			5,000	5,000	\$270

Total Project Cost \$1,687,500

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	Harlow Gym - Locker Room Renovation			5,160	5,160	\$335

Total Project Cost \$2,160,750

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	CAMP - Kitchen Add/Reno		2,000	2,400	4,400	\$365

Total Project Cost \$2,250,000

Add \$250k for additional elevator stops & envelope work.

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	Learning Commons			5,000	5,000	\$175

Total Project Cost \$1,093,750

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	Future Indoor Athletic Field		25,000		25,000	\$350

Total Project Cost \$10,937,500

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	New Tennis Courts	8 New Courts; Requires Adjustment of existing Septic Overflow Zone, Include fencing				
Total Project Cost Range					\$2,000,000	\$2,800,000

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
	Fay House - Entry Ramp and Stair		100	1,600	1,700	\$380

Total Project Cost \$807,500

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

DRA Project # 16009.00

ITEM	OPTION	PROGRAM DESCRIPTION	ADDITION SF	RENO SF	TOTAL SF	Construct Cost/SF - REMARKS
2	Connect Root & Upjohn		2,000	2,000	4,000	\$500

Total Project Cost \$2,500,000

Assumptions & Qualifications

Material and labor escalation - recommended 6% - 8% per year

Hazardous soils and /or the replacement of unsuitable soils is not included

Ledge removal (hammering or blasting) not included - Potentially \$75 - \$125 / CY

Special dewatering procedures beyond conventional open pit dewatering are not included

Labor overtime associated with possible 'summer slammer' work - to be evaluated later

Construction phasing - pending student activity and campus schedule

Mold/mildew remediation - to be evaluated

Moisture Mitigation to existing slabs - if required carry an additional \$4 - \$5 per SF

Winter conditions - pending schedule of work

Fay School Master Plan

SF Cost Model

January 5, 2017



ITEM 'A'

		#1.2- CONVERT RESIDENTIAL HOME TO DORMITORY										
WBS	DESCRIPTION	Addition 600 SF		Renovation 4,450 SF		TOTAL 5,050 SF	\$ / SF	% of Total				
SITE / FOUNDATION		64.00	\$	39,000	12.00	\$	53,000	\$	92,000	18.22	8.79%	
02.02	Demolition / Abatement	10.00	\$	6,000	12.00	\$	53,000	\$	59,000	11.68	5.63%	
03.01	Concrete	30.00	\$	18,000		\$	-	\$	18,000	3.56	1.72%	
31.01	Site Work	16.00	\$	10,000		\$	-	\$	10,000	1.98	0.95%	
31.02	Ground Improvements / Piles		\$	-		\$	-	\$	-	0.00	0.00%	
32.03	Site Improvements	8.00	\$	5,000		\$	-	\$	5,000	0.99	0.48%	
33.01	Utilities		\$	-		\$	-	\$	-	0.00	0.00%	
STRUCTURE		30.00	\$	18,000	3.00	\$	13,000	\$	31,000	6.14	2.96%	
04.01	Masonry		\$	-		\$	-	\$	-	0.00	0.00%	
03.01	Concrete		\$	-		\$	-	\$	-	0.00	0.00%	
05.01	Structural Steel		\$	-		\$	-	\$	-	0.00	0.00%	
05.02	Miscellaneous Metals		\$	-		\$	-	\$	-	0.00	0.00%	
06.01	Rough Carpentry / Framing	30.00	\$	18,000	3.00	\$	13,000	\$	31,000	6.14	2.96%	
07.07	Fireproofing		\$	-		\$	-	\$	-	0.00	0.00%	
ENVELOPE		31.00	\$	18,000	-	\$	-	\$	18,000	3.56	1.72%	
04.01	Masonry		\$	-		\$	-	\$	-	0.00	0.00%	
05.02	Miscellaneous Metals		\$	-		\$	-	\$	-	0.00	0.00%	
07.01	Waterproofing		\$	-		\$	-	\$	-	0.00	0.00%	
07.02	Exterior Wall Cladding	12.00	\$	7,000		\$	-	\$	7,000	1.39	0.67%	
07.05	Roofing & Sheet Metal	10.00	\$	6,000		\$	-	\$	6,000	1.19	0.57%	
08.01	Doors, Frames, Hardware	5.00	\$	3,000		\$	-	\$	3,000	0.59	0.29%	
08.02	Curtain Wall, Windows, Storefront	4.00	\$	2,000		\$	-	\$	2,000	0.40	0.19%	
09.01	Drywall		\$	-		\$	-	\$	-	0.00	0.00%	
INTERIORS		54.50	\$	33,000	40.50	\$	181,000	\$	214,000	42.38	20.44%	
02.01	Selective Demolition		\$	-		\$	-	\$	-	0.00	0.00%	
05.02	Miscellaneous Metals		\$	-		\$	-	\$	-	0.00	0.00%	
06.02	Architectural Millwork/Casework	5.00	\$	3,000	4.00	\$	18,000	\$	21,000	4.16	2.01%	
08.01	Doors, Frames, Hardware	7.00	\$	4,000	4.00	\$	18,000	\$	22,000	4.36	2.10%	
08.03	Interior Aluminum, Glass & Glazing		\$	-		\$	-	\$	-	0.00	0.00%	
09.01	Drywall	20.00	\$	12,000	15.00	\$	67,000	\$	79,000	15.64	7.54%	
09.02	Tile	6.00	\$	4,000	3.00	\$	13,000	\$	17,000	3.37	1.62%	
09.03	Acoustical Ceilings		\$	-		\$	-	\$	-	0.00	0.00%	
09.06	Floors	7.00	\$	4,000	7.00	\$	31,000	\$	35,000	6.93	3.34%	
09.07	Floor Prep / Moisture Mitigation		\$	-		\$	-	\$	-	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments		\$	-		\$	-	\$	-	0.00	0.00%	
09.09	Painting	4.50	\$	3,000	3.50	\$	16,000	\$	19,000	3.76	1.81%	
10.06	Miscellaneous Specialties	3.00	\$	2,000	2.00	\$	9,000	\$	11,000	2.18	1.05%	
11.01	Equipment		\$	-		\$	-	\$	-	0.00	0.00%	
12.01	Window Treatments	2.00	\$	1,000	2.00	\$	9,000	\$	10,000	1.98	0.95%	
12.02	Casework		\$	-		\$	-	\$	-	0.00	0.00%	
14.01	Conveying Systems		\$	-		\$	-	\$	-	0.00	0.00%	
MEP		90.00	\$	55,000	82.25	\$	366,000	\$	421,000	83.37	40.20%	
21.01	Fire Protection	6.00	\$	4,000	6.00	\$	27,000	\$	31,000	6.14	2.96%	
22.01	Plumbing	30.00	\$	18,000	22.25	\$	99,000	\$	117,000	23.17	11.17%	
23.01	HVAC & Controls	25.00	\$	15,000	25.00	\$	111,000	\$	126,000	24.95	12.03%	
26.01	Electrical	26.00	\$	16,000	26.00	\$	116,000	\$	132,000	26.14	12.61%	
27.01	Tel-Data (incl cabling & devices)	3.00	\$	2,000	3.00	\$	13,000	\$	15,000	2.97	1.43%	
27.02	Security (excluded)		\$	-		\$	-	\$	-	0.00	0.00%	
27.03	Audio-Visual (excluded)		\$	-		\$	-	\$	-	0.00	0.00%	
SUBTOTAL		269.50	\$	163,000	137.75	\$	613,000	\$	776,000	153.66	74.10%	
	Cost Model Contingency	10.00%	27.17	\$	16,300	13.78	\$	61,300	\$	77,600	15.37	7.41%
	SDI / Subcontractor Bonds	1.40%	3.83	\$	2,300	1.93	\$	8,600	\$	10,900	2.16	1.04%
	Construction Contingency	4.00%	10.83	\$	6,500	5.51	\$	24,500	\$	31,000	6.14	2.96%
	General Conditions	8.00%	21.67	\$	13,000	11.01	\$	49,000	\$	62,000	12.28	5.92%
	General Requirements	5.00%	13.67	\$	8,200	6.90	\$	30,700	\$	38,900	7.70	3.71%
	Building Permit	1.00%	3.50	\$	2,100	1.78	\$	7,900	\$	10,000	1.98	0.95%
	Insurance	1.40%	1.17	\$	700	0.56	\$	2,500	\$	3,200	0.63	0.31%
	GC Performance & Payment Bond	0.70%	2.50	\$	1,500	1.26	\$	5,600	\$	7,100	1.41	0.68%
	SUBTOTAL		356.00	\$	213,600	180.47	\$	803,100	\$	1,016,700	201.33	97.09%
	Fee	3.00%	10.67	\$	6,400	5.42	\$	24,100	\$	30,500	6.04	2.91%
	Escalation - excluded	0.00%	-	\$	-	-	\$	-	\$	-	0.00	0.00%
TOTAL COST		367	\$	220,000	186	\$	827,200	\$	1,047,200	207	100.00%	

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ITEM 'B'

		#1.2- Dorm Parity					
WBS	DESCRIPTION	Addition 0 SF	Renovation 17,610 SF	TOTAL 17,610 SF	\$ / SF	% of Total	
SITE / FOUNDATION		- \$	- \$	- \$	0.00	0.00%	
02.02	Demolition / Abatement	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
31.01	Site Work	\$ -	\$ -	\$ -	0.00	0.00%	
31.02	Ground Improvements / Piles	\$ -	\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	\$ -	\$ -	\$ -	0.00	0.00%	
33.01	Utilities	\$ -	\$ -	\$ -	0.00	0.00%	
STRUCTURE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
05.01	Structural Steel	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing	\$ -	\$ -	\$ -	0.00	0.00%	
07.07	Fireproofing	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	\$ -	\$ -	\$ -	0.00	0.00%	
07.05	Roofing & Sheet Metal	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	\$ -	\$ -	\$ -	0.00	0.00%	
INTERIORS		- \$	36.00 \$	633,000 \$	580,000 \$	32.94	33.74%
02.01	Selective Demolition	\$ -	3.00 \$	53,000 \$	- \$	0.00	0.00%
05.02	Miscellaneous Metals	\$ -	\$ -	- \$	- \$	0.00	0.00%
06.02	Architectural Millwork/Casework	\$ -	2.00 \$	35,000 \$	35,000 \$	1.99	2.04%
08.01	Doors, Frames, Hardware	\$ -	4.00 \$	70,000 \$	70,000 \$	3.98	4.07%
08.03	Interior Aluminum, Glass & Glazing	\$ -	\$ -	- \$	- \$	0.00	0.00%
09.01	Drywall	\$ -	15.00 \$	264,000 \$	264,000 \$	14.99	15.36%
09.02	Tile	\$ -	\$ -	- \$	- \$	0.00	0.00%
09.03	Acoustical Ceilings	\$ -	\$ -	- \$	- \$	0.00	0.00%
09.06	Floors	\$ -	7.00 \$	123,000 \$	123,000 \$	6.98	7.15%
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	- \$	- \$	0.00	0.00%
09.08	Acoustical Walls / Ceiling Treatments	\$ -	\$ -	- \$	- \$	0.00	0.00%
09.09	Painting	\$ -	3.00 \$	53,000 \$	53,000 \$	3.01	3.08%
10.06	Miscellaneous Specialties	\$ -	\$ -	- \$	- \$	0.00	0.00%
11.01	Equipment	\$ -	\$ -	- \$	- \$	0.00	0.00%
12.01	Window Treatments	\$ -	2.00 \$	35,000 \$	35,000 \$	1.99	2.04%
12.02	Casework	\$ -	\$ -	- \$	- \$	0.00	0.00%
14.01	Conveying Systems	\$ -	\$ -	- \$	- \$	0.00	0.00%
MEP		- \$	36.41 \$	641,000 \$	641,000 \$	36.40	37.28%
21.01	Fire Protection	\$ -	\$ -	- \$	- \$	0.00	0.00%
22.01	Plumbing	\$ -	\$ -	- \$	- \$	0.00	0.00%
23.01	HVAC & Controls	\$ -	26.41 \$	465,000 \$	465,000 \$	26.41	27.05%
26.01	Electrical	\$ -	10.00 \$	176,000 \$	176,000 \$	9.99	10.24%
27.01	Tel-Data (incl cabling & devices)	\$ -	\$ -	- \$	- \$	0.00	0.00%
27.02	Security (excluded)	\$ -	\$ -	- \$	- \$	0.00	0.00%
27.03	Audio-Visual (excluded)	\$ -	\$ -	- \$	- \$	0.00	0.00%
SUBTOTAL		- \$	72.41 \$	1,274,000 \$	1,274,000 \$	72.35	74.10%
	Cost Model Contingency	10.00%	7.23 \$	127,400 \$	127,400 \$	7.23	7.41%
	SDI / Subcontractor Bonds	1.40%	1.01 \$	17,800 \$	17,800 \$	1.01	1.04%
	Construction Contingency	4.00%	2.90 \$	51,000 \$	51,000 \$	2.90	2.97%
	General Conditions	8.00%	5.79 \$	101,900 \$	101,900 \$	5.79	5.93%
	General Requirements	5.00%	3.62 \$	63,700 \$	63,700 \$	3.62	3.71%
	Building Permit	1.00%	0.93 \$	16,400 \$	16,400 \$	0.93	0.95%
	Insurance	1.40%	0.30 \$	5,300 \$	5,300 \$	0.30	0.31%
	GC Performance & Payment Bond	0.70%	0.66 \$	11,600 \$	11,600 \$	0.66	0.67%
	SUBTOTAL	- \$	94.78 \$	1,669,100 \$	1,669,100 \$	94.78	97.09%
	Fee	3.00%	2.84 \$	50,100 \$	50,100 \$	2.84	2.91%
	Escalation - excluded	0.00%	- \$	- \$	- \$	0.00	0.00%
TOTAL COST		- \$	98 \$	1,719,200 \$	1,719,200 \$	98	100.00%

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ITEM 'B'

		#14.1 - Faculty Housing Improvements					
WBS	DESCRIPTION	Addition 0 SF	Renovation 8,370 SF	TOTAL 8,370 SF	\$ / SF	% of Total	
SITE / FOUNDATION		- \$	- \$	- \$	0.00	0.00%	
02.02	Demolition / Abatement	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
31.01	Site Work	\$ -	\$ -	\$ -	0.00	0.00%	
31.02	Ground Improvements / Piles	\$ -	\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	\$ -	\$ -	\$ -	0.00	0.00%	
33.01	Utilities	\$ -	\$ -	\$ -	0.00	0.00%	
STRUCTURE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
05.01	Structural Steel	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing	\$ -	\$ -	\$ -	0.00	0.00%	
07.07	Fireproofing	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	\$ -	\$ -	\$ -	0.00	0.00%	
07.05	Roofing & Sheet Metal	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	\$ -	\$ -	\$ -	0.00	0.00%	
INTERIORS		- \$	36.00 \$	302,000 \$	277,000 \$	33.09	53.18%
02.01	Selective Demolition	\$ -	3.00 \$	25,000 \$	- \$	0.00	0.00%
05.02	Miscellaneous Metals	\$ -	\$ -	- \$	- \$	0.00	0.00%
06.02	Architectural Millwork/Casework	\$ -	2.00 \$	17,000 \$	17,000 \$	2.03	3.26%
08.01	Doors, Frames, Hardware	\$ -	4.00 \$	33,000 \$	33,000 \$	3.94	6.34%
08.03	Interior Aluminum, Glass & Glazing	\$ -	\$ -	- \$	- \$	0.00	0.00%
09.01	Drywall	\$ -	15.00 \$	126,000 \$	126,000 \$	15.05	24.19%
09.02	Tile	\$ -	\$ -	- \$	- \$	0.00	0.00%
09.03	Acoustical Ceilings	\$ -	\$ -	- \$	- \$	0.00	0.00%
09.06	Floors	\$ -	7.00 \$	59,000 \$	59,000 \$	7.05	11.33%
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	- \$	- \$	0.00	0.00%
09.08	Acoustical Walls / Ceiling Treatments	\$ -	\$ -	- \$	- \$	0.00	0.00%
09.09	Painting	\$ -	3.00 \$	25,000 \$	25,000 \$	2.99	4.80%
10.06	Miscellaneous Specialties	\$ -	\$ -	- \$	- \$	0.00	0.00%
11.01	Equipment	\$ -	\$ -	- \$	- \$	0.00	0.00%
12.01	Window Treatments	\$ -	2.00 \$	17,000 \$	17,000 \$	2.03	3.26%
12.02	Casework	\$ -	\$ -	- \$	- \$	0.00	0.00%
14.01	Conveying Systems	\$ -	\$ -	- \$	- \$	0.00	0.00%
MEP		- \$	10.00 \$	84,000 \$	84,000 \$	10.04	16.13%
21.01	Fire Protection	\$ -	\$ -	- \$	- \$	0.00	0.00%
22.01	Plumbing	\$ -	\$ -	- \$	- \$	0.00	0.00%
23.01	HVAC & Controls	\$ -	\$ -	- \$	- \$	0.00	0.00%
26.01	Electrical	\$ -	10.00 \$	84,000 \$	84,000 \$	10.04	16.13%
27.01	Tel-Data (incl cabling & devices)	\$ -	\$ -	- \$	- \$	0.00	0.00%
27.02	Security (excluded)	\$ -	\$ -	- \$	- \$	0.00	0.00%
27.03	Audio-Visual (excluded)	\$ -	\$ -	- \$	- \$	0.00	0.00%
SUBTOTAL		- \$	46.00 \$	386,000 \$	386,000 \$	46.12	74.10%
	Cost Model Contingency	10.00%	4.61 \$	38,600 \$	38,600 \$	4.61	7.41%
	SDI / Subcontractor Bonds	1.40%	0.65 \$	5,400 \$	5,400 \$	0.65	1.04%
	Construction Contingency	4.00%	1.84 \$	15,400 \$	15,400 \$	1.84	2.96%
	General Conditions	8.00%	3.69 \$	30,900 \$	30,900 \$	3.69	5.93%
	General Requirements	5.00%	2.31 \$	19,300 \$	19,300 \$	2.31	3.71%
	Building Permit	1.00%	0.60 \$	5,000 \$	5,000 \$	0.60	0.96%
	Insurance	1.40%	0.19 \$	1,600 \$	1,600 \$	0.19	0.31%
	GC Performance & Payment Bond	0.70%	0.42 \$	3,500 \$	3,500 \$	0.42	0.67%
	SUBTOTAL	- \$	60.42 \$	505,700 \$	505,700 \$	60.42	97.08%
	Fee	3.00%	1.82 \$	15,200 \$	15,200 \$	1.82	2.92%
	Escalation - excluded	0.00%	- \$	- \$	- \$	0.00	0.00%
TOTAL COST		- \$	62 \$	520,900 \$	520,900 \$	62	100.00%

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ITEM 'C'

		#5.1 - Upper School Classroom Renovation					
WBS	DESCRIPTION	Addition 0 SF	Renovation 3,200 SF	TOTAL 3,200 SF	\$ / SF	% of Total	
SITE / FOUNDATION		- \$	- \$	- \$	0.00	0.00%	
02.02	Demolition / Abatement	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
31.01	Site Work	\$ -	\$ -	\$ -	0.00	0.00%	
31.02	Ground Improvements / Piles	\$ -	\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	\$ -	\$ -	\$ -	0.00	0.00%	
33.01	Utilities	\$ -	\$ -	\$ -	0.00	0.00%	
STRUCTURE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
05.01	Structural Steel	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing	\$ -	\$ -	\$ -	0.00	0.00%	
07.07	Fireproofing	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	\$ -	\$ -	\$ -	0.00	0.00%	
07.05	Roofing & Sheet Metal	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	\$ -	\$ -	\$ -	0.00	0.00%	
INTERIORS		- \$	77.50 \$	249,000 \$	77.81	42.22%	
02.01	Selective Demolition	\$ -	10.00 \$	32,000 \$	10.00	5.43%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
06.02	Architectural Millwork/Casework	\$ -	8.00 \$	26,000 \$	8.12	4.41%	
08.01	Doors, Frames, Hardware	\$ -	7.00 \$	22,000 \$	6.87	3.73%	
08.03	Interior Aluminum, Glass & Glazing	\$ -	3.00 \$	10,000 \$	3.12	1.70%	
09.01	Drywall	\$ -	18.00 \$	58,000 \$	18.12	9.83%	
09.02	Tile	\$ -	\$ -	\$ -	0.00	0.00%	
09.03	Acoustical Ceilings	\$ -	6.00 \$	19,000 \$	5.94	3.22%	
09.06	Floors	\$ -	8.00 \$	26,000 \$	8.12	4.41%	
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	\$ -	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments	\$ -	\$ -	\$ -	0.00	0.00%	
09.09	Painting	\$ -	3.50 \$	11,000 \$	3.44	1.87%	
10.06	Miscellaneous Specialties	\$ -	5.00 \$	16,000 \$	5.00	2.71%	
11.01	Equipment	\$ -	\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments	\$ -	3.00 \$	10,000 \$	3.12	1.70%	
12.02	Casework	\$ -	6.00 \$	19,000 \$	5.94	3.22%	
14.01	Conveying Systems	\$ -	\$ -	\$ -	0.00	0.00%	
MEP		- \$	58.50 \$	188,000 \$	58.75	31.88%	
21.01	Fire Protection	\$ -	3.00 \$	10,000 \$	3.12	1.70%	
22.01	Plumbing	\$ -	2.50 \$	8,000 \$	2.50	1.36%	
23.01	HVAC & Controls	\$ -	30.00 \$	96,000 \$	30.00	16.28%	
26.01	Electrical	\$ -	20.00 \$	64,000 \$	20.00	10.85%	
27.01	Tel-Data (incl cabling & devices)	\$ -	3.00 \$	10,000 \$	3.12	1.70%	
27.02	Security (excluded)	\$ -	\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)	\$ -	\$ -	\$ -	0.00	0.00%	
SUBTOTAL		- \$	136.00 \$	437,000 \$	136.56	74.09%	
	Cost Model Contingency	10.00%	13.66 \$	43,700 \$	13.66	7.41%	
	SDI / Subcontractor Bonds	1.40%	1.91 \$	6,100 \$	1.91	1.03%	
	Construction Contingency	4.00%	5.47 \$	17,500 \$	5.47	2.97%	
	General Conditions	8.00%	10.94 \$	35,000 \$	10.94	5.93%	
	General Requirements	5.00%	6.84 \$	21,900 \$	6.84	3.71%	
	Building Permit	1.00%	1.75 \$	5,600 \$	1.75	0.95%	
	Insurance	1.40%	0.56 \$	1,800 \$	0.56	0.31%	
	GC Performance & Payment Bond	0.70%	1.25 \$	4,000 \$	1.25	0.68%	
	SUBTOTAL	- \$	178.94 \$	572,600 \$	178.94	97.08%	
	Fee	3.00%	5.38 \$	17,200 \$	5.37	2.92%	
	Escalation - excluded	0.00%	\$ -	\$ -	0.00	0.00%	
TOTAL COST		- \$	184 \$	589,800 \$	184	100.00%	

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ITEM 'D'

		#3.1 - Athletic Field Shelter Building							
WBS	DESCRIPTION	Addition 3,000 SF		Renovation 0 SF		TOTAL 3,000 SF	\$ / SF	% of Total	
SITE / FOUNDATION		102.00	\$ 306,000	-	\$ -	\$ 306,000	102.00	21.54%	
02.02	Demolition / Abatement	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	22.00	\$ 66,000	\$ -	\$ -	\$ 66,000	22.00	4.64%	
31.01	Site Work	30.00	\$ 90,000	\$ -	\$ -	\$ 90,000	30.00	6.33%	
31.02	Ground Improvements / Piles	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	10.00	\$ 30,000	\$ -	\$ -	\$ 30,000	10.00	2.11%	
33.01	Utilities	40.00	\$ 120,000	\$ -	\$ -	\$ 120,000	40.00	8.45%	
STRUCTURE		47.00	\$ 141,000	-	\$ -	\$ 141,000	47.00	9.92%	
04.01	Masonry	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	10.00	\$ 30,000	\$ -	\$ -	\$ 30,000	10.00	2.11%	
05.01	Structural Steel	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	2.00	\$ 6,000	\$ -	\$ -	\$ 6,000	2.00	0.42%	
06.01	Rough Carpentry / Framing	35.00	\$ 105,000	\$ -	\$ -	\$ 105,000	35.00	7.39%	
07.07	Fireproofing	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		65.20	\$ 196,000	-	\$ -	\$ 196,000	65.33	13.79%	
04.01	Masonry	23.33	\$ 70,000	\$ -	\$ -	\$ 70,000	23.33	4.93%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	24.27	\$ 73,000	\$ -	\$ -	\$ 73,000	24.33	5.14%	
07.05	Roofing & Sheet Metal	15.60	\$ 47,000	\$ -	\$ -	\$ 47,000	15.67	3.31%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	2.00	\$ 6,000	\$ -	\$ -	\$ 6,000	2.00	0.42%	
09.01	Drywall	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
INTERIORS		53.50	\$ 161,000	-	\$ -	\$ 161,000	53.67	11.33%	
02.01	Selective Demolition	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	2.00	\$ 6,000	\$ -	\$ -	\$ 6,000	2.00	0.42%	
06.02	Architectural Millwork/Casework	2.00	\$ 6,000	\$ -	\$ -	\$ 6,000	2.00	0.42%	
08.01	Doors, Frames, Hardware	5.00	\$ 15,000	\$ -	\$ -	\$ 15,000	5.00	1.06%	
08.03	Interior Aluminum, Glass & Glazing	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	8.00	\$ 24,000	\$ -	\$ -	\$ 24,000	8.00	1.69%	
09.02	Tile	15.00	\$ 45,000	\$ -	\$ -	\$ 45,000	15.00	3.17%	
09.03	Acoustical Ceilings	3.00	\$ 9,000	\$ -	\$ -	\$ 9,000	3.00	0.63%	
09.06	Floors	2.50	\$ 8,000	\$ -	\$ -	\$ 8,000	2.67	0.56%	
09.07	Floor Prep / Moisture Mitigation	2.00	\$ 6,000	\$ -	\$ -	\$ 6,000	2.00	0.42%	
09.08	Acoustical Walls / Ceiling Treatments	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.09	Painting	6.00	\$ 18,000	\$ -	\$ -	\$ 18,000	6.00	1.27%	
10.06	Miscellaneous Specialties	8.00	\$ 24,000	\$ -	\$ -	\$ 24,000	8.00	1.69%	
11.01	Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
12.02	Casework	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
14.01	Conveying Systems	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
MEP		83.00	\$ 249,000	-	\$ -	\$ 249,000	83.00	17.52%	
21.01	Fire Protection	8.00	\$ 24,000	\$ -	\$ -	\$ 24,000	8.00	1.69%	
22.01	Plumbing	30.00	\$ 90,000	\$ -	\$ -	\$ 90,000	30.00	6.33%	
23.01	HVAC & Controls	25.00	\$ 75,000	\$ -	\$ -	\$ 75,000	25.00	5.28%	
26.01	Electrical	20.00	\$ 60,000	\$ -	\$ -	\$ 60,000	20.00	4.22%	
27.01	Tel-Data (incl cabling & devices)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.02	Security (excluded)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
SUBTOTAL		350.70	\$ 1,053,000	-	\$ -	\$ 1,053,000	351.00	74.11%	
	Cost Model Contingency	10.00%	35.10	\$ 105,300	-	\$ -	\$ 105,300	35.10	7.41%
	SDI / Subcontractor Bonds	1.40%	4.90	\$ 14,700	-	\$ -	\$ 14,700	4.90	1.03%
	Construction Contingency	4.00%	14.03	\$ 42,100	-	\$ -	\$ 42,100	14.03	2.96%
	General Conditions	8.00%	28.07	\$ 84,200	-	\$ -	\$ 84,200	28.07	5.93%
	General Requirements	5.00%	17.57	\$ 52,700	-	\$ -	\$ 52,700	17.57	3.71%
	Building Permit	1.00%	4.50	\$ 13,500	-	\$ -	\$ 13,500	4.50	0.95%
	Insurance	1.40%	1.47	\$ 4,400	-	\$ -	\$ 4,400	1.47	0.31%
	GC Performance & Payment Bond	0.70%	3.20	\$ 9,600	-	\$ -	\$ 9,600	3.20	0.68%
	SUBTOTAL		459.83	\$ 1,379,500	-	\$ 1,379,500	459.83	97.09%	
	Fee	3.00%	13.80	\$ 41,400	-	\$ -	\$ 41,400	13.80	2.91%
	Escalation - excluded	0.00%	-	\$ -	-	\$ -	\$ -	0.00	0.00%
TOTAL COST		474	\$ 1,420,900	-	\$ -	\$ 1,420,900	474	100.00%	

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ITEM 'E'

WBS	DESCRIPTION	#2.2 - Innovation Lab - Upjohn Expansion							
		Addition 6,500 SF		Renovation 2,500 SF		TOTAL 9,000 SF		\$ / SF	% of Total
SITE / FOUNDATION		74.00	\$ 482,000	12.00	\$ 30,000	\$ 512,000	56.89	11.45%	
02.02	Demolition / Abatement	4.00	\$ 26,000	12.00	\$ 30,000	\$ 56,000	6.22	1.25%	
03.01	Concrete	20.00	\$ 130,000		\$ -	\$ 130,000	14.44	2.91%	
31.01	Site Work	25.00	\$ 163,000		\$ -	\$ 163,000	18.11	3.64%	
31.02	Ground Improvements / Piles		\$ -		\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	10.00	\$ 65,000		\$ -	\$ 65,000	7.22	1.45%	
33.01	Utilities	15.00	\$ 98,000		\$ -	\$ 98,000	10.89	2.19%	
STRUCTURE		48.00	\$ 312,000	-	\$ -	\$ 312,000	34.67	6.97%	
04.01	Masonry	6.00	\$ 39,000		\$ -	\$ 39,000	4.33	0.87%	
03.01	Concrete	8.00	\$ 52,000		\$ -	\$ 52,000	5.78	1.16%	
05.01	Structural Steel	30.00	\$ 195,000		\$ -	\$ 195,000	21.67	4.36%	
05.02	Miscellaneous Metals	2.00	\$ 13,000		\$ -	\$ 13,000	1.44	0.29%	
06.01	Rough Carpentry / Framing	2.00	\$ 13,000		\$ -	\$ 13,000	1.44	0.29%	
07.07	Fireproofing		\$ -		\$ -	\$ -	0.00	0.00%	
ENVELOPE		102.87	\$ 670,000	-	\$ -	\$ 670,000	74.44	14.98%	
04.01	Masonry		\$ -		\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	1.00	\$ 7,000		\$ -	\$ 7,000	0.78	0.16%	
07.01	Waterproofing	6.00	\$ 39,000		\$ -	\$ 39,000	4.33	0.87%	
07.02	Exterior Wall Cladding	45.02	\$ 293,000		\$ -	\$ 293,000	32.56	6.55%	
07.05	Roofing & Sheet Metal	8.00	\$ 52,000		\$ -	\$ 52,000	5.78	1.16%	
08.01	Doors, Frames, Hardware	0.92	\$ 6,000		\$ -	\$ 6,000	0.67	0.13%	
08.02	Curtain Wall, Windows, Storefront	34.85	\$ 227,000		\$ -	\$ 227,000	25.22	5.07%	
09.01	Drywall	7.08	\$ 46,000		\$ -	\$ 46,000	5.11	1.03%	
INTERIORS		96.50	\$ 630,000	65.00	\$ 164,000	\$ 794,000	88.22	17.75%	
02.01	Selective Demolition		\$ -		\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	5.00	\$ 33,000	2.00	\$ 5,000	\$ 38,000	4.22	0.85%	
06.02	Architectural Millwork/Casework	4.00	\$ 26,000	4.00	\$ 10,000	\$ 36,000	4.00	0.80%	
08.01	Doors, Frames, Hardware	4.00	\$ 26,000	4.00	\$ 10,000	\$ 36,000	4.00	0.80%	
08.03	Interior Aluminum, Glass & Glazing	3.00	\$ 20,000	2.00	\$ 5,000	\$ 25,000	2.78	0.56%	
09.01	Drywall	18.00	\$ 117,000	25.00	\$ 63,000	\$ 180,000	20.00	4.02%	
09.02	Tile	3.00	\$ 20,000		\$ -	\$ 20,000	2.22	0.45%	
09.03	Acoustical Ceilings	6.00	\$ 39,000	6.00	\$ 15,000	\$ 54,000	6.00	1.21%	
09.06	Floors	10.00	\$ 65,000	15.00	\$ 38,000	\$ 103,000	11.44	2.30%	
09.07	Floor Prep / Moisture Mitigation	5.00	\$ 33,000		\$ -	\$ 33,000	3.67	0.74%	
09.08	Acoustical Walls / Ceiling Treatments		\$ -		\$ -	\$ -	0.00	0.00%	
09.09	Painting	3.50	\$ 23,000	3.00	\$ 8,000	\$ 31,000	3.44	0.69%	
10.06	Miscellaneous Specialties	2.00	\$ 13,000	2.00	\$ 5,000	\$ 18,000	2.00	0.40%	
11.01	Equipment		\$ -		\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments	2.00	\$ 13,000	2.00	\$ 5,000	\$ 18,000	2.00	0.40%	
12.02	Casework	15.00	\$ 98,000		\$ -	\$ 98,000	10.89	2.19%	
14.01	Conveying Systems	16.00	\$ 104,000		\$ -	\$ 104,000	11.56	2.32%	
MEP		128.00	\$ 834,000	77.00	\$ 193,000	\$ 1,027,000	114.11	22.96%	
21.01	Fire Protection	5.00	\$ 33,000	4.00	\$ 10,000	\$ 43,000	4.78	0.96%	
22.01	Plumbing	20.00	\$ 130,000	10.00	\$ 25,000	\$ 155,000	17.22	3.46%	
23.01	HVAC & Controls	65.00	\$ 423,000	40.00	\$ 100,000	\$ 523,000	58.11	11.69%	
26.01	Electrical	35.00	\$ 228,000	20.00	\$ 50,000	\$ 278,000	30.89	6.21%	
27.01	Tel-Data (incl cabling & devices)	3.00	\$ 20,000	3.00	\$ 8,000	\$ 28,000	3.11	0.63%	
27.02	Security (excluded)		\$ -		\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)		\$ -		\$ -	\$ -	0.00	0.00%	
SUBTOTAL		449.37	\$ 2,928,000	154.00	\$ 387,000	\$ 3,315,000	368.33	74.10%	
	Cost Model Contingency	10.00%	45.05 \$	292,800	15.48 \$	38,700	331,500	36.83	7.41%
	SDI / Subcontractor Bonds	1.40%	6.31 \$	41,000	2.16 \$	5,400	46,400	5.16	1.04%
	Construction Contingency	4.00%	18.02 \$	117,100	6.20 \$	15,500	132,600	14.73	2.96%
	General Conditions	8.00%	36.03 \$	234,200	12.40 \$	31,000	265,200	29.47	5.93%
	General Requirements	5.00%	22.52 \$	146,400	7.76 \$	19,400	165,800	18.42	3.71%
	Building Permit	1.00%	5.78 \$	37,600	2.00 \$	5,000	42,600	4.73	0.95%
	Insurance	1.40%	1.88 \$	12,200	0.64 \$	1,600	13,800	1.53	0.31%
	GC Performance & Payment Bond	0.70%	4.11 \$	26,700	1.40 \$	3,500	30,200	3.36	0.68%
SUBTOTAL		590.15	\$ 3,836,000	202.84	\$ 507,100	\$ 4,343,100	482.57	97.09%	
	Fee	3.00%	17.71 \$	115,100	6.08 \$	15,200	130,300	14.48	2.91%
	Escalation - excluded	0.00%	- \$	-	- \$	-	0.00	0.00%	
TOTAL COST		608	\$ 3,951,100	209	\$ 522,300	\$ 4,473,400	497	100.00%	

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ITEM 'E'

		#2.7 - Innovation Lab - Root Patio Expansion							
WBS	DESCRIPTION	Addition 2,200 SF		Renovation 2,500 SF		TOTAL 4,700 SF	\$ / SF	% of Total	
SITE / FOUNDATION		130.00	\$ 286,000	12.00	\$ 30,000	\$ 316,000	67.23	15.07%	
02.02	Demolition / Abatement	15.00	\$ 33,000	12.00	\$ 30,000	\$ 63,000	13.40	3.00%	
03.01	Concrete	35.00	\$ 77,000		\$ -	\$ 77,000	16.38	3.67%	
31.01	Site Work	50.00	\$ 110,000		\$ -	\$ 110,000	23.40	5.25%	
31.02	Ground Improvements / Piles		\$ -		\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	30.00	\$ 66,000		\$ -	\$ 66,000	14.04	3.15%	
33.01	Utilities		\$ -		\$ -	\$ -	0.00	0.00%	
STRUCTURE		57.50	\$ 126,000	-	\$ -	\$ 126,000	26.81	6.01%	
04.01	Masonry		\$ -		\$ -	\$ -	0.00	0.00%	
03.01	Concrete	12.00	\$ 26,000		\$ -	\$ 26,000	5.53	1.24%	
05.01	Structural Steel	37.50	\$ 83,000		\$ -	\$ 83,000	17.66	3.96%	
05.02	Miscellaneous Metals	2.00	\$ 4,000		\$ -	\$ 4,000	0.85	0.19%	
06.01	Rough Carpentry / Framing	6.00	\$ 13,000		\$ -	\$ 13,000	2.77	0.62%	
07.07	Fireproofing		\$ -		\$ -	\$ -	0.00	0.00%	
ENVELOPE		109.11	\$ 240,000	-	\$ -	\$ 240,000	51.06	11.44%	
04.01	Masonry		\$ -		\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals		\$ -		\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing		\$ -		\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	47.51	\$ 105,000		\$ -	\$ 105,000	22.34	5.01%	
07.05	Roofing & Sheet Metal	20.00	\$ 44,000		\$ -	\$ 44,000	9.36	2.10%	
08.01	Doors, Frames, Hardware		\$ -		\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	34.63	\$ 76,000		\$ -	\$ 76,000	16.17	3.62%	
09.01	Drywall	6.97	\$ 15,000		\$ -	\$ 15,000	3.19	0.72%	
INTERIORS		75.00	\$ 164,000	60.00	\$ 151,000	\$ 315,000	67.02	15.02%	
02.01	Selective Demolition		\$ -		\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	4.00	\$ 9,000	2.00	\$ 5,000	\$ 14,000	2.98	0.67%	
06.02	Architectural Millwork/Casework	2.00	\$ 4,000	4.00	\$ 10,000	\$ 14,000	2.98	0.67%	
08.01	Doors, Frames, Hardware	4.00	\$ 9,000	4.00	\$ 10,000	\$ 19,000	4.04	0.91%	
08.03	Interior Aluminum, Glass & Glazing	2.00	\$ 4,000	2.00	\$ 5,000	\$ 9,000	1.91	0.43%	
09.01	Drywall	20.00	\$ 44,000	25.00	\$ 63,000	\$ 107,000	22.77	5.10%	
09.02	Tile		\$ -		\$ -	\$ -	0.00	0.00%	
09.03	Acoustical Ceilings	6.00	\$ 13,000	6.00	\$ 15,000	\$ 28,000	5.96	1.34%	
09.06	Floors	10.00	\$ 22,000	10.00	\$ 25,000	\$ 47,000	10.00	2.24%	
09.07	Floor Prep / Moisture Mitigation	5.00	\$ 11,000		\$ -	\$ 11,000	2.34	0.52%	
09.08	Acoustical Walls / Ceiling Treatments		\$ -		\$ -	\$ -	0.00	0.00%	
09.09	Painting	5.00	\$ 11,000	5.00	\$ 13,000	\$ 24,000	5.11	1.14%	
10.06	Miscellaneous Specialties	2.00	\$ 4,000	2.00	\$ 5,000	\$ 9,000	1.91	0.43%	
11.01	Equipment		\$ -		\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments		\$ -		\$ -	\$ -	0.00	0.00%	
12.02	Casework	15.00	\$ 33,000		\$ -	\$ 33,000	7.02	1.57%	
14.01	Conveying Systems		\$ -		\$ -	\$ -	0.00	0.00%	
MEP		130.00	\$ 286,000	108.00	\$ 271,000	\$ 557,000	118.51	26.56%	
21.01	Fire Protection	7.00	\$ 15,000	5.00	\$ 13,000	\$ 28,000	5.96	1.34%	
22.01	Plumbing	25.00	\$ 55,000	20.00	\$ 50,000	\$ 105,000	22.34	5.01%	
23.01	HVAC & Controls	60.00	\$ 132,000	50.00	\$ 125,000	\$ 257,000	54.68	12.26%	
26.01	Electrical	35.00	\$ 77,000	30.00	\$ 75,000	\$ 152,000	32.34	7.25%	
27.01	Tel-Data (incl cabling & devices)	3.00	\$ 7,000	3.00	\$ 8,000	\$ 15,000	3.19	0.72%	
27.02	Security (excluded)		\$ -		\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)		\$ -		\$ -	\$ -	0.00	0.00%	
SUBTOTAL		501.61	\$ 1,102,000	180.00	\$ 452,000	\$ 1,554,000	330.64	74.10%	
	Cost Model Contingency	10.00%	50.09		18.08		33.06	7.41%	
	SDI / Subcontractor Bonds	1.40%	7.00		2.52		4.62	1.03%	
	Construction Contingency	4.00%	20.05		7.24		13.23	2.97%	
	General Conditions	8.00%	40.09		14.48		26.47	5.93%	
	General Requirements	5.00%	25.05		9.04		16.53	3.71%	
	Building Permit	1.00%	6.45		2.32		4.26	0.95%	
	Insurance	1.40%	2.09		0.76		1.38	0.31%	
	GC Performance & Payment Bond	0.70%	4.55		1.64		3.00	0.67%	
	SUBTOTAL	656.27	\$ 1,443,800	236.88	\$ 592,200	\$ 2,036,000	433.19	97.09%	
	Fee	3.00%	19.68		7.12		13.00	2.91%	
	Escalation - excluded	0.00%	-		-		0.00	0.00%	
TOTAL COST		676	\$ 1,487,100	244	\$ 610,000	\$ 2,097,100	446	100.00%	

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ITEM 'G'

		#7.2 - Camp Building Student Lounge Converted to School Store					
WBS	DESCRIPTION	Addition 0 SF	Renovation 2,600 SF	TOTAL 2,600 SF	\$ / SF	% of Total	
SITE / FOUNDATION		- \$	- \$	- \$	0.00	0.00%	
02.02	Demolition / Abatement	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
31.01	Site Work	\$ -	\$ -	\$ -	0.00	0.00%	
31.02	Ground Improvements / Piles	\$ -	\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	\$ -	\$ -	\$ -	0.00	0.00%	
33.01	Utilities	\$ -	\$ -	\$ -	0.00	0.00%	
STRUCTURE		- \$	8.00 \$	21,000 \$	8.08	3.62%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
05.01	Structural Steel	\$ -	8.00 \$	21,000 \$	8.08	3.62%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing	\$ -	\$ -	\$ -	0.00	0.00%	
07.07	Fireproofing	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		- \$	17.00 \$	44,000 \$	16.92	7.58%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	\$ -	\$ -	\$ -	0.00	0.00%	
07.05	Roofing & Sheet Metal	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	\$ -	12.00 \$	31,000 \$	11.92	5.34%	
09.01	Drywall	\$ -	5.00 \$	13,000 \$	5.00	2.24%	
INTERIORS		- \$	80.50 \$	210,000 \$	80.77	36.19%	
02.01	Selective Demolition	\$ -	10.00 \$	26,000 \$	10.00	4.48%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
06.02	Architectural Millwork/Casework	\$ -	15.00 \$	39,000 \$	15.00	6.72%	
08.01	Doors, Frames, Hardware	\$ -	4.00 \$	10,000 \$	3.85	1.72%	
08.03	Interior Aluminum, Glass & Glazing	\$ -	3.00 \$	8,000 \$	3.08	1.38%	
09.01	Drywall	\$ -	20.00 \$	52,000 \$	20.00	8.96%	
09.02	Tile	\$ -	\$ -	\$ -	0.00	0.00%	
09.03	Acoustical Ceilings	\$ -	6.00 \$	16,000 \$	6.15	2.76%	
09.06	Floors	\$ -	8.00 \$	21,000 \$	8.08	3.62%	
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	\$ -	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments	\$ -	\$ -	\$ -	0.00	0.00%	
09.09	Painting	\$ -	3.50 \$	9,000 \$	3.46	1.55%	
10.06	Miscellaneous Specialties	\$ -	2.00 \$	5,000 \$	1.92	0.86%	
11.01	Equipment	\$ -	\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments	\$ -	3.00 \$	8,000 \$	3.08	1.38%	
12.02	Casework	\$ -	6.00 \$	16,000 \$	6.15	2.76%	
14.01	Conveying Systems	\$ -	\$ -	\$ -	0.00	0.00%	
MEP		- \$	59.50 \$	155,000 \$	59.62	26.71%	
21.01	Fire Protection	\$ -	3.00 \$	8,000 \$	3.08	1.38%	
22.01	Plumbing	\$ -	3.50 \$	9,000 \$	3.46	1.55%	
23.01	HVAC & Controls	\$ -	30.00 \$	78,000 \$	30.00	13.44%	
26.01	Electrical	\$ -	20.00 \$	52,000 \$	20.00	8.96%	
27.01	Tel-Data (incl cabling & devices)	\$ -	3.00 \$	8,000 \$	3.08	1.38%	
27.02	Security (excluded)	\$ -	\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)	\$ -	\$ -	\$ -	0.00	0.00%	
SUBTOTAL		- \$	165.00 \$	430,000 \$	165.38	74.11%	
	Cost Model Contingency	10.00%	16.54 \$	43,000 \$	16.54	7.41%	
	SDI / Subcontractor Bonds	1.40%	2.31 \$	6,000 \$	2.31	1.03%	
	Construction Contingency	4.00%	6.62 \$	17,200 \$	6.62	2.96%	
	General Conditions	8.00%	13.23 \$	34,400 \$	13.23	5.93%	
	General Requirements	5.00%	8.27 \$	21,500 \$	8.27	3.71%	
	Building Permit	1.00%	2.12 \$	5,500 \$	2.12	0.95%	
	Insurance	1.40%	0.69 \$	1,800 \$	0.69	0.31%	
	GC Performance & Payment Bond	0.70%	1.50 \$	3,900 \$	1.50	0.67%	
	SUBTOTAL	- \$	216.65 \$	563,300 \$	216.65	97.09%	
	Fee	3.00%	6.50 \$	16,900 \$	6.50	2.91%	
	Escalation - excluded	0.00%	- \$	- \$	0.00	0.00%	
TOTAL COST		- \$	223 \$	580,200 \$	223	100.00%	

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ITEM 'H'

		#8.1 - Art Studio at Picardi Art Center					
WBS	DESCRIPTION	Addition 0 SF	Renovation 2,600 SF	TOTAL 2,600 SF	\$ / SF	% of Total	
SITE / FOUNDATION		- \$	- \$	- \$	0.00	0.00%	
02.02	Demolition / Abatement	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
31.01	Site Work	\$ -	\$ -	\$ -	0.00	0.00%	
31.02	Ground Improvements / Piles	\$ -	\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	\$ -	\$ -	\$ -	0.00	0.00%	
33.01	Utilities	\$ -	\$ -	\$ -	0.00	0.00%	
STRUCTURE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
05.01	Structural Steel	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing	\$ -	\$ -	\$ -	0.00	0.00%	
07.07	Fireproofing	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	\$ -	\$ -	\$ -	0.00	0.00%	
07.05	Roofing & Sheet Metal	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	\$ -	\$ -	\$ -	0.00	0.00%	
INTERIORS		- \$	91.50 \$	238,000 \$	91.54	30.46%	
02.01	Selective Demolition	\$ -	10.00 \$	26,000 \$	10.00	3.33%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
06.02	Architectural Millwork/Casework	\$ -	8.00 \$	21,000 \$	8.08	2.69%	
08.01	Doors, Frames, Hardware	\$ -	4.00 \$	10,000 \$	3.85	1.28%	
08.03	Interior Aluminum, Glass & Glazing	\$ -	2.00 \$	5,000 \$	1.92	0.64%	
09.01	Drywall	\$ -	20.00 \$	52,000 \$	20.00	6.65%	
09.02	Tile	\$ -	\$ -	\$ -	0.00	0.00%	
09.03	Acoustical Ceilings	\$ -	6.00 \$	16,000 \$	6.15	2.05%	
09.06	Floors	\$ -	10.00 \$	26,000 \$	10.00	3.33%	
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	\$ -	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments	\$ -	\$ -	\$ -	0.00	0.00%	
09.09	Painting	\$ -	3.50 \$	9,000 \$	3.46	1.15%	
10.06	Miscellaneous Specialties	\$ -	5.00 \$	13,000 \$	5.00	1.66%	
11.01	Equipment	\$ -	\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments	\$ -	3.00 \$	8,000 \$	3.08	1.02%	
12.02	Casework	\$ -	20.00 \$	52,000 \$	20.00	6.65%	
14.01	Conveying Systems	\$ -	\$ -	\$ -	0.00	0.00%	
MEP		- \$	131.00 \$	341,000 \$	131.15	43.64%	
21.01	Fire Protection	\$ -	3.00 \$	8,000 \$	3.08	1.02%	
22.01	Plumbing	\$ -	25.00 \$	65,000 \$	25.00	8.32%	
23.01	HVAC & Controls	\$ -	75.00 \$	195,000 \$	75.00	24.96%	
26.01	Electrical	\$ -	25.00 \$	65,000 \$	25.00	8.32%	
27.01	Tel-Data (incl cabling & devices)	\$ -	3.00 \$	8,000 \$	3.08	1.02%	
27.02	Security (excluded)	\$ -	\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)	\$ -	\$ -	\$ -	0.00	0.00%	
SUBTOTAL		- \$	222.50 \$	579,000 \$	222.69	74.10%	
	Cost Model Contingency	10.00%	22.27 \$	57,900 \$	22.27	7.41%	
	SDI / Subcontractor Bonds	1.40%	3.12 \$	8,100 \$	3.12	1.04%	
	Construction Contingency	4.00%	8.92 \$	23,200 \$	8.92	2.97%	
	General Conditions	8.00%	17.81 \$	46,300 \$	17.81	5.93%	
	General Requirements	5.00%	11.15 \$	29,000 \$	11.15	3.71%	
	Building Permit	1.00%	2.85 \$	7,400 \$	2.85	0.95%	
	Insurance	1.40%	0.92 \$	2,400 \$	0.92	0.31%	
	GC Performance & Payment Bond	0.70%	2.04 \$	5,300 \$	2.04	0.68%	
	SUBTOTAL	- \$	291.77 \$	758,600 \$	291.77	97.08%	
	Fee	3.00%	8.77 \$	22,800 \$	8.77	2.92%	
	Escalation - excluded	0.00%	- \$	- \$	0.00	0.00%	
TOTAL COST		- \$	301 \$	781,400 \$	301	100.00%	

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ITEM 'I'

		#4.1 - Student Center - Relocate to Upjohn School Room					
WBS	DESCRIPTION	Addition 0 SF	Renovation 3,300 SF	TOTAL 3,300 SF	\$ / SF	% of Total	
SITE / FOUNDATION		- \$	- \$	- \$	0.00	0.00%	
02.02	Demolition / Abatement	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
31.01	Site Work	\$ -	\$ -	\$ -	0.00	0.00%	
31.02	Ground Improvements / Piles	\$ -	\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	\$ -	\$ -	\$ -	0.00	0.00%	
33.01	Utilities	\$ -	\$ -	\$ -	0.00	0.00%	
STRUCTURE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
05.01	Structural Steel	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing	\$ -	\$ -	\$ -	0.00	0.00%	
07.07	Fireproofing	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	\$ -	\$ -	\$ -	0.00	0.00%	
07.05	Roofing & Sheet Metal	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	\$ -	\$ -	\$ -	0.00	0.00%	
INTERIORS		- \$	69.00 \$	229,000 \$	69.39	49.62%	
02.01	Selective Demolition	\$ -	8.00 \$	26,000 \$	7.88	5.63%	
05.02	Miscellaneous Metals	\$ -	1.00 \$	3,000 \$	0.91	0.65%	
06.02	Architectural Millwork/Casework	\$ -	15.00 \$	50,000 \$	15.15	10.83%	
08.01	Doors, Frames, Hardware	\$ -	5.00 \$	17,000 \$	5.15	3.68%	
08.03	Interior Aluminum, Glass & Glazing	\$ -	2.00 \$	7,000 \$	2.12	1.52%	
09.01	Drywall	\$ -	12.00 \$	40,000 \$	12.12	8.67%	
09.02	Tile	\$ -	\$ -	\$ -	0.00	0.00%	
09.03	Acoustical Ceilings	\$ -	6.00 \$	20,000 \$	6.06	4.33%	
09.06	Floors	\$ -	8.00 \$	26,000 \$	7.88	5.63%	
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	\$ -	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments	\$ -	\$ -	\$ -	0.00	0.00%	
09.09	Painting	\$ -	4.00 \$	13,000 \$	3.94	2.82%	
10.06	Miscellaneous Specialties	\$ -	5.00 \$	17,000 \$	5.15	3.68%	
11.01	Equipment	\$ -	\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments	\$ -	3.00 \$	10,000 \$	3.03	2.17%	
12.02	Casework	\$ -	\$ -	\$ -	0.00	0.00%	
14.01	Conveying Systems	\$ -	\$ -	\$ -	0.00	0.00%	
MEP		- \$	34.00 \$	113,000 \$	34.24	24.49%	
21.01	Fire Protection	\$ -	3.00 \$	10,000 \$	3.03	2.17%	
22.01	Plumbing	\$ -	3.00 \$	10,000 \$	3.03	2.17%	
23.01	HVAC & Controls	\$ -	10.00 \$	33,000 \$	10.00	7.15%	
26.01	Electrical	\$ -	15.00 \$	50,000 \$	15.15	10.83%	
27.01	Tel-Data (incl cabling & devices)	\$ -	3.00 \$	10,000 \$	3.03	2.17%	
27.02	Security (excluded)	\$ -	\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)	\$ -	\$ -	\$ -	0.00	0.00%	
SUBTOTAL		- \$	103.00 \$	342,000 \$	103.64	74.11%	
	Cost Model Contingency	10.00%	10.36 \$	34,200 \$	10.36	7.41%	
	SDI / Subcontractor Bonds	1.40%	1.45 \$	4,800 \$	1.45	1.04%	
	Construction Contingency	4.00%	4.15 \$	13,700 \$	4.15	2.97%	
	General Conditions	8.00%	8.30 \$	27,400 \$	8.30	5.94%	
	General Requirements	5.00%	5.18 \$	17,100 \$	5.18	3.71%	
	Building Permit	1.00%	1.33 \$	4,400 \$	1.33	0.95%	
	Insurance	1.40%	0.42 \$	1,400 \$	0.42	0.30%	
	GC Performance & Payment Bond	0.70%	0.94 \$	3,100 \$	0.94	0.67%	
	SUBTOTAL	- \$	135.79 \$	448,100 \$	135.79	97.10%	
	Fee	3.00%	4.06 \$	13,400 \$	4.06	2.90%	
	Escalation - excluded	0.00%	\$ -	\$ -	0.00	0.00%	
TOTAL COST		- \$	140 \$	461,500 \$	140	100.00%	

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ITEM 'J'

		#12.1 - Increase Seating at Camp Dining							
WBS	DESCRIPTION	Addition 800 SF	Renovation 1,600 SF	TOTAL 2,400 SF	\$ / SF	% of Total			
SITE / FOUNDATION		125.00	\$ 100,000	-	\$ -	\$ 100,000	41.67	14.97%	
02.02	Demolition / Abatement	10.00	\$ 8,000	\$ -	\$ 8,000	3.33	1.20%		
03.01	Concrete	25.00	\$ 20,000	\$ -	\$ 20,000	8.33	2.99%		
31.01	Site Work	20.00	\$ 16,000	\$ -	\$ 16,000	6.67	2.39%		
31.02	Ground Improvements / Piles	\$ -	\$ -	\$ -	\$ -	0.00	0.00%		
32.03	Site Improvements	20.00	\$ 16,000	\$ -	\$ 16,000	6.67	2.39%		
33.01	Utilities	50.00	\$ 40,000	\$ -	\$ 40,000	16.67	5.99%		
STRUCTURE		46.00	\$ 37,000	-	\$ -	\$ 37,000	15.42	5.54%	
04.01	Masonry	15.00	\$ 12,000	\$ -	\$ 12,000	5.00	1.80%		
03.01	Concrete	12.00	\$ 10,000	\$ -	\$ 10,000	4.17	1.50%		
05.01	Structural Steel	15.00	\$ 12,000	\$ -	\$ 12,000	5.00	1.80%		
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	\$ -	0.00	0.00%		
06.01	Rough Carpentry / Framing	4.00	\$ 3,000	\$ -	\$ 3,000	1.25	0.45%		
07.07	Fireproofing	\$ -	\$ -	\$ -	\$ -	0.00	0.00%		
ENVELOPE		42.50	\$ 34,000	-	\$ -	\$ 34,000	14.17	5.09%	
04.01	Masonry	\$ -	\$ -	\$ -	\$ -	0.00	0.00%		
05.02	Miscellaneous Metals	2.00	\$ 2,000	\$ -	\$ 2,000	0.83	0.30%		
07.01	Waterproofing	8.00	\$ 6,000	\$ -	\$ 6,000	2.50	0.90%		
07.02	Exterior Wall Cladding	12.50	\$ 10,000	\$ -	\$ 10,000	4.17	1.50%		
07.05	Roofing & Sheet Metal	20.00	\$ 16,000	\$ -	\$ 16,000	6.67	2.39%		
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	\$ -	0.00	0.00%		
08.02	Curtain Wall, Windows, Storefront	\$ -	\$ -	\$ -	\$ -	0.00	0.00%		
09.01	Drywall	\$ -	\$ -	\$ -	\$ -	0.00	0.00%		
INTERIORS		66.00	\$ 53,000	64.00	\$ 103,000	\$ 156,000	65.00	23.35%	
02.01	Selective Demolition	\$ -	\$ -	15.00	\$ 24,000	\$ 24,000	10.00	3.59%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
06.02	Architectural Millwork/Casework	5.00	\$ 4,000	5.00	\$ 8,000	\$ 12,000	5.00	1.80%	
08.01	Doors, Frames, Hardware	5.00	\$ 4,000	2.00	\$ 3,000	\$ 7,000	2.92	1.05%	
08.03	Interior Aluminum, Glass & Glazing	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	15.00	\$ 12,000	20.00	\$ 32,000	\$ 44,000	18.33	6.58%	
09.02	Tile	25.00	\$ 20,000	\$ -	\$ -	\$ 20,000	8.33	2.99%	
09.03	Acoustical Ceilings	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.06	Floors	\$ -	\$ -	10.00	\$ 16,000	\$ 16,000	6.67	2.39%	
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments	\$ -	\$ -	3.00	\$ 5,000	\$ 5,000	2.08	0.75%	
09.09	Painting	4.00	\$ 3,000	6.00	\$ 10,000	\$ 13,000	5.42	1.95%	
10.06	Miscellaneous Specialties	12.00	\$ 10,000	3.00	\$ 5,000	\$ 15,000	6.25	2.24%	
11.01	Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
12.02	Casework	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
14.01	Conveying Systems	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
MEP		126.00	\$ 101,000	42.00	\$ 67,000	\$ 168,000	70.00	25.14%	
21.01	Fire Protection	6.00	\$ 5,000	4.00	\$ 6,000	\$ 11,000	4.58	1.65%	
22.01	Plumbing	50.00	\$ 40,000	3.00	\$ 5,000	\$ 45,000	18.75	6.73%	
23.01	HVAC & Controls	40.00	\$ 32,000	20.00	\$ 32,000	\$ 64,000	26.67	9.58%	
26.01	Electrical	30.00	\$ 24,000	15.00	\$ 24,000	\$ 48,000	20.00	7.18%	
27.01	Tel-Data (incl cabling & devices)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.02	Security (excluded)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
SUBTOTAL		405.50	\$ 325,000	106.00	\$ 170,000	\$ 495,000	206.25	74.08%	
	Cost Model Contingency	10.00%	40.63	\$ 32,500	10.63	\$ 17,000	\$ 49,500	20.62	7.41%
	SDI / Subcontractor Bonds	1.40%	5.75	\$ 4,600	1.50	\$ 2,400	\$ 7,000	2.92	1.05%
	Construction Contingency	4.00%	16.25	\$ 13,000	4.25	\$ 6,800	\$ 19,800	8.25	2.96%
	General Conditions	8.00%	32.50	\$ 26,000	8.50	\$ 13,600	\$ 39,600	16.50	5.93%
	General Requirements	5.00%	20.38	\$ 16,300	5.31	\$ 8,500	\$ 24,800	10.33	3.71%
	Building Permit	1.00%	5.25	\$ 4,200	1.38	\$ 2,200	\$ 6,400	2.67	0.96%
	Insurance	1.40%	1.75	\$ 1,400	0.44	\$ 700	\$ 2,100	0.87	0.31%
	GC Performance & Payment Bond	0.70%	3.75	\$ 3,000	0.94	\$ 1,500	\$ 4,500	1.87	0.67%
	SUBTOTAL		532.50	\$ 426,000	139.19	\$ 222,700	\$ 648,700	270.29	97.08%
	Fee	3.00%	16.00	\$ 12,800	4.19	\$ 6,700	\$ 19,500	8.12	2.92%
	Escalation - excluded	0.00%	-	\$ -	-	\$ -	\$ -	0.00	0.00%
TOTAL COST		549	\$ 438,800	143	\$ 229,400	\$ 668,200	278	100.00%	

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ITEM 'K'

		#9.1 - Consolidate and Enlarge Music Department in Reinke					
WBS	DESCRIPTION	Addition 0 SF	Renovation 5,000 SF	TOTAL 5,000 SF	\$ / SF	% of Total	
SITE / FOUNDATION		- \$	- \$	- \$	0.00	0.00%	
02.02	Demolition / Abatement	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
31.01	Site Work	\$ -	\$ -	\$ -	0.00	0.00%	
31.02	Ground Improvements / Piles	\$ -	\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	\$ -	\$ -	\$ -	0.00	0.00%	
33.01	Utilities	\$ -	\$ -	\$ -	0.00	0.00%	
STRUCTURE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
05.01	Structural Steel	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing	\$ -	\$ -	\$ -	0.00	0.00%	
07.07	Fireproofing	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	\$ -	\$ -	\$ -	0.00	0.00%	
07.05	Roofing & Sheet Metal	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	\$ -	\$ -	\$ -	0.00	0.00%	
INTERIORS		- \$	106.50 \$	533,000 \$	106.60	39.86%	
02.01	Selective Demolition	\$ -	15.00 \$	75,000 \$	15.00	5.61%	
05.02	Miscellaneous Metals	\$ -	3.00 \$	15,000 \$	3.00	1.12%	
06.02	Architectural Millwork/Casework	\$ -	5.00 \$	25,000 \$	5.00	1.87%	
08.01	Doors, Frames, Hardware	\$ -	4.00 \$	20,000 \$	4.00	1.50%	
08.03	Interior Aluminum, Glass & Glazing	\$ -	2.00 \$	10,000 \$	2.00	0.75%	
09.01	Drywall	\$ -	20.00 \$	100,000 \$	20.00	7.48%	
09.02	Tile	\$ -	\$ -	\$ -	0.00	0.00%	
09.03	Acoustical Ceilings	\$ -	6.00 \$	30,000 \$	6.00	2.24%	
09.06	Floors	\$ -	10.00 \$	50,000 \$	10.00	3.74%	
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	\$ -	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments	\$ -	10.00 \$	50,000 \$	10.00	3.74%	
09.09	Painting	\$ -	3.50 \$	18,000 \$	3.60	1.35%	
10.06	Miscellaneous Specialties	\$ -	5.00 \$	25,000 \$	5.00	1.87%	
11.01	Equipment	\$ -	\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments	\$ -	3.00 \$	15,000 \$	3.00	1.12%	
12.02	Casework	\$ -	20.00 \$	100,000 \$	20.00	7.48%	
14.01	Conveying Systems	\$ -	\$ -	\$ -	0.00	0.00%	
MEP		- \$	91.60 \$	458,000 \$	91.60	34.25%	
21.01	Fire Protection	\$ -	6.00 \$	30,000 \$	6.00	2.24%	
22.01	Plumbing	\$ -	12.60 \$	63,000 \$	12.60	4.71%	
23.01	HVAC & Controls	\$ -	45.00 \$	225,000 \$	45.00	16.83%	
26.01	Electrical	\$ -	25.00 \$	125,000 \$	25.00	9.35%	
27.01	Tel-Data (incl cabling & devices)	\$ -	3.00 \$	15,000 \$	3.00	1.12%	
27.02	Security (excluded)	\$ -	\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)	\$ -	\$ -	\$ -	0.00	0.00%	
SUBTOTAL		- \$	198.10 \$	991,000 \$	198.20	74.11%	
	Cost Model Contingency	10.00%	19.82 \$	99,100 \$	19.82	7.41%	
	SDI / Subcontractor Bonds	1.40%	2.78 \$	13,900 \$	2.78	1.04%	
	Construction Contingency	4.00%	7.92 \$	39,600 \$	7.92	2.96%	
	General Conditions	8.00%	15.86 \$	79,300 \$	15.86	5.93%	
	General Requirements	5.00%	9.92 \$	49,600 \$	9.92	3.71%	
	Building Permit	1.00%	2.54 \$	12,700 \$	2.54	0.95%	
	Insurance	1.40%	0.82 \$	4,100 \$	0.82	0.31%	
	GC Performance & Payment Bond	0.70%	1.80 \$	9,000 \$	1.80	0.67%	
	SUBTOTAL	- \$	259.66 \$	1,298,300 \$	259.66	97.09%	
	Fee	3.00%	7.78 \$	38,900 \$	7.78	2.91%	
	Escalation - excluded	0.00%	\$ -	\$ -	0.00	0.00%	
TOTAL COST		- \$	267 \$	1,337,200 \$	267	100.00%	

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ITEM 'L'

		#11.1 - Renovate Locker Rooms in Harlow Gym						
WBS	DESCRIPTION	Addition 0 SF	Renovation 6,000 SF	TOTAL 6,000 SF	\$ / SF	% of Total		
SITE / FOUNDATION		- \$	8.00 \$	48,000 \$	48,000 \$	8.00	2.39%	
02.02	Demolition / Abatement	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
31.01	Site Work	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
31.02	Ground Improvements / Piles	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
33.01	Utilities	\$ -	8.00 \$	48,000 \$	48,000 \$	8.00	2.39%	
STRUCTURE		- \$	2.50 \$	15,000 \$	15,000 \$	2.50	0.75%	
04.01	Masonry	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	2.50 \$	15,000 \$	15,000 \$	2.50	0.75%	
05.01	Structural Steel	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.07	Fireproofing	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		- \$	- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.05	Roofing & Sheet Metal	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
INTERIORS		- \$	116.00 \$	696,000 \$	696,000 \$	116.00	34.59%	
02.01	Selective Demolition	\$ -	15.00 \$	90,000 \$	90,000 \$	15.00	4.47%	
05.02	Miscellaneous Metals	\$ -	3.00 \$	18,000 \$	18,000 \$	3.00	0.89%	
06.02	Architectural Millwork/Casework	\$ -	6.00 \$	36,000 \$	36,000 \$	6.00	1.79%	
08.01	Doors, Frames, Hardware	\$ -	5.00 \$	30,000 \$	30,000 \$	5.00	1.49%	
08.03	Interior Aluminum, Glass & Glazing	\$ -	2.00 \$	12,000 \$	12,000 \$	2.00	0.60%	
09.01	Drywall	\$ -	25.00 \$	150,000 \$	150,000 \$	25.00	7.46%	
09.02	Tile	\$ -	12.00 \$	72,000 \$	72,000 \$	12.00	3.58%	
09.03	Acoustical Ceilings	\$ -	4.00 \$	24,000 \$	24,000 \$	4.00	1.19%	
09.06	Floors	\$ -	8.00 \$	48,000 \$	48,000 \$	8.00	2.39%	
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments	\$ -	4.00 \$	24,000 \$	24,000 \$	4.00	1.19%	
09.09	Painting	\$ -	4.00 \$	24,000 \$	24,000 \$	4.00	1.19%	
10.06	Miscellaneous Specialties	\$ -	28.00 \$	168,000 \$	168,000 \$	28.00	8.35%	
11.01	Equipment	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
12.02	Casework	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
14.01	Conveying Systems	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
MEP		- \$	122.00 \$	732,000 \$	732,000 \$	122.00	36.38%	
21.01	Fire Protection	\$ -	6.00 \$	36,000 \$	36,000 \$	6.00	1.79%	
22.01	Plumbing	\$ -	33.00 \$	198,000 \$	198,000 \$	33.00	9.84%	
23.01	HVAC & Controls	\$ -	55.00 \$	330,000 \$	330,000 \$	55.00	16.40%	
26.01	Electrical	\$ -	25.00 \$	150,000 \$	150,000 \$	25.00	7.46%	
27.01	Tel-Data (incl cabling & devices)	\$ -	3.00 \$	18,000 \$	18,000 \$	3.00	0.89%	
27.02	Security (excluded)	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
SUBTOTAL		- \$	248.50 \$	1,491,000 \$	1,491,000 \$	248.50	74.11%	
	Cost Model Contingency	10.00%	24.85 \$	149,100 \$	149,100 \$	24.85	7.41%	
	SDI / Subcontractor Bonds	1.40%	3.48 \$	20,900 \$	20,900 \$	3.48	1.04%	
	Construction Contingency	4.00%	9.93 \$	59,600 \$	59,600 \$	9.93	2.96%	
	General Conditions	8.00%	19.88 \$	119,300 \$	119,300 \$	19.88	5.93%	
	General Requirements	5.00%	12.43 \$	74,600 \$	74,600 \$	12.43	3.71%	
	Building Permit	1.00%	3.18 \$	19,100 \$	19,100 \$	3.18	0.95%	
	Insurance	1.40%	1.03 \$	6,200 \$	6,200 \$	1.03	0.31%	
	GC Performance & Payment Bond	0.70%	2.27 \$	13,600 \$	13,600 \$	2.27	0.68%	
	SUBTOTAL	- \$	325.57 \$	1,953,400 \$	1,953,400 \$	325.57	97.09%	
	Fee	3.00%	9.77 \$	58,600 \$	58,600 \$	9.77	2.91%	
	Escalation - excluded	0.00%	- \$	- \$	- \$	0.00	0.00%	
TOTAL COST		- \$	335 \$	2,012,000 \$	2,012,000 \$	335	100.00%	

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ITEM 'M'

		#13.1 - Camp Dining Kitchen Addition/Renovation							
WBS	DESCRIPTION	Addition 2,000 SF		Renovation 2,400 SF		TOTAL 4,400 SF	\$/ SF	% of Total	
SITE / FOUNDATION		142.00	\$ 284,000	-	\$ -	\$ 284,000	64.55	17.70%	
02.02	Demolition / Abatement	12.00	\$ 24,000		\$ -	\$ 24,000	5.45	1.50%	
03.01	Concrete	30.00	\$ 60,000		\$ -	\$ 60,000	13.64	3.74%	
31.01	Site Work	50.00	\$ 100,000		\$ -	\$ 100,000	22.73	6.23%	
31.02	Ground Improvements / Piles		\$ -		\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	20.00	\$ 40,000		\$ -	\$ 40,000	9.09	2.49%	
33.01	Utilities	30.00	\$ 60,000		\$ -	\$ 60,000	13.64	3.74%	
STRUCTURE		10.00	\$ 20,000	25.00	\$ 60,000	\$ 80,000	18.18	4.99%	
04.01	Masonry		\$ -		\$ -	\$ -	0.00	0.00%	
03.01	Concrete	10.00	\$ 20,000		\$ -	\$ 20,000	4.55	1.25%	
05.01	Structural Steel		\$ -		\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals		\$ -		\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing		\$ -	25.00	\$ 60,000	\$ 60,000	13.64	3.74%	
07.07	Fireproofing		\$ -		\$ -	\$ -	0.00	0.00%	
ENVELOPE		45.00	\$ 90,000	-	\$ -	\$ 90,000	20.45	5.61%	
04.01	Masonry		\$ -		\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals		\$ -		\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing		\$ -		\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	25.00	\$ 50,000		\$ -	\$ 50,000	11.36	3.12%	
07.05	Roofing & Sheet Metal		\$ -		\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware		\$ -		\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	10.00	\$ 20,000		\$ -	\$ 20,000	4.55	1.25%	
09.01	Drywall	10.00	\$ 20,000		\$ -	\$ 20,000	4.55	1.25%	
INTERIORS		72.00	\$ 144,000	64.00	\$ 153,000	\$ 297,000	67.50	18.51%	
02.01	Selective Demolition		\$ -	10.00	\$ 24,000	\$ 24,000	5.45	1.50%	
05.02	Miscellaneous Metals	2.00	\$ 4,000		\$ -	\$ 4,000	0.91	0.25%	
06.02	Architectural Millwork/Casework	2.00	\$ 4,000	5.00	\$ 12,000	\$ 16,000	3.64	1.00%	
08.01	Doors, Frames, Hardware	3.00	\$ 6,000	3.00	\$ 7,000	\$ 13,000	2.95	0.81%	
08.03	Interior Aluminum, Glass & Glazing		\$ -		\$ -	\$ -	0.00	0.00%	
09.01	Drywall	8.00	\$ 16,000	20.00	\$ 48,000	\$ 64,000	14.55	3.99%	
09.02	Tile		\$ -		\$ -	\$ -	0.00	0.00%	
09.03	Acoustical Ceilings	7.00	\$ 14,000	6.00	\$ 14,000	\$ 28,000	6.36	1.75%	
09.06	Floors	15.00	\$ 30,000	10.00	\$ 24,000	\$ 54,000	12.27	3.37%	
09.07	Floor Prep / Moisture Mitigation		\$ -		\$ -	\$ -	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments		\$ -		\$ -	\$ -	0.00	0.00%	
09.09	Painting	3.00	\$ 6,000	3.00	\$ 7,000	\$ 13,000	2.95	0.81%	
10.06	Miscellaneous Specialties	5.00	\$ 10,000	5.00	\$ 12,000	\$ 22,000	5.00	1.37%	
11.01	Equipment	25.00	\$ 50,000		\$ -	\$ 50,000	11.36	3.12%	
12.01	Window Treatments	2.00	\$ 4,000	2.00	\$ 5,000	\$ 9,000	2.05	0.56%	
12.02	Casework		\$ -		\$ -	\$ -	0.00	0.00%	
14.01	Conveying Systems		\$ -		\$ -	\$ -	0.00	0.00%	
MEP		117.00	\$ 234,000	85.00	\$ 204,000	\$ 438,000	99.55	27.30%	
21.01	Fire Protection	7.00	\$ 14,000	3.00	\$ 7,000	\$ 21,000	4.77	1.31%	
22.01	Plumbing	20.00	\$ 40,000	10.00	\$ 24,000	\$ 64,000	14.55	3.99%	
23.01	HVAC & Controls	60.00	\$ 120,000	45.00	\$ 108,000	\$ 228,000	51.82	14.21%	
26.01	Electrical	30.00	\$ 60,000	25.00	\$ 60,000	\$ 120,000	27.27	7.48%	
27.01	Tel-Data (incl cabling & devices)		\$ -	2.00	\$ 5,000	\$ 5,000	1.14	0.31%	
27.02	Security (excluded)		\$ -		\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)		\$ -		\$ -	\$ -	0.00	0.00%	
SUBTOTAL		386.00	\$ 772,000	174.00	\$ 417,000	\$ 1,189,000	270.23	74.10%	
	Cost Model Contingency	10.00%	38.60	17.38	41,700	118,900	27.02	7.41%	
	SDI / Subcontractor Bonds	1.40%	5.40	2.42	5,800	16,600	3.77	1.03%	
	Construction Contingency	4.00%	15.45	6.96	16,700	47,600	10.82	2.97%	
	General Conditions	8.00%	30.90	13.92	33,400	95,200	21.64	5.93%	
	General Requirements	5.00%	19.30	8.71	20,900	59,500	13.52	3.71%	
	Building Permit	1.00%	4.95	2.25	5,400	15,300	3.48	0.95%	
	Insurance	1.40%	1.60	0.71	1,700	4,900	1.11	0.31%	
	GC Performance & Payment Bond	0.70%	3.50	1.58	3,800	10,800	2.45	0.67%	
	SUBTOTAL		505.70	227.67	546,400	1,557,800	354.05	97.09%	
	Fee	3.00%	15.15	6.83	16,400	46,700	10.61	2.91%	
	Escalation - excluded	0.00%	-	-	-	-	0.00	0.00%	
TOTAL COST		521	\$ 1,041,700	235	\$ 562,800	\$ 1,604,500	365	100.00%	

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ITEM 'N'

		#6.1 - Library Renovation					
WBS	DESCRIPTION	Addition 0 SF	Renovation 5,000 SF	TOTAL 5,000 SF	\$ / SF	% of Total	
SITE / FOUNDATION		- \$	- \$	- \$	0.00	0.00%	
02.02	Demolition / Abatement	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
31.01	Site Work	\$ -	\$ -	\$ -	0.00	0.00%	
31.02	Ground Improvements / Piles	\$ -	\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	\$ -	\$ -	\$ -	0.00	0.00%	
33.01	Utilities	\$ -	\$ -	\$ -	0.00	0.00%	
STRUCTURE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	0.00	0.00%	
05.01	Structural Steel	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing	\$ -	\$ -	\$ -	0.00	0.00%	
07.07	Fireproofing	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		- \$	- \$	- \$	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	\$ -	\$ -	\$ -	0.00	0.00%	
07.05	Roofing & Sheet Metal	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	\$ -	\$ -	\$ -	0.00	0.00%	
INTERIORS		- \$	65.50 \$	328,000 \$	65.60	37.80%	
02.01	Selective Demolition	\$ -	8.00 \$	40,000 \$	8.00	4.61%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%	
06.02	Architectural Millwork/Casework	\$ -	15.00 \$	75,000 \$	15.00	8.64%	
08.01	Doors, Frames, Hardware	\$ -	3.00 \$	15,000 \$	3.00	1.73%	
08.03	Interior Aluminum, Glass & Glazing	\$ -	2.00 \$	10,000 \$	2.00	1.15%	
09.01	Drywall	\$ -	15.00 \$	75,000 \$	15.00	8.64%	
09.02	Tile	\$ -	\$ -	\$ -	0.00	0.00%	
09.03	Acoustical Ceilings	\$ -	6.00 \$	30,000 \$	6.00	3.46%	
09.06	Floors	\$ -	8.00 \$	40,000 \$	8.00	4.61%	
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	\$ -	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments	\$ -	\$ -	\$ -	0.00	0.00%	
09.09	Painting	\$ -	3.50 \$	18,000 \$	3.60	2.07%	
10.06	Miscellaneous Specialties	\$ -	3.00 \$	15,000 \$	3.00	1.73%	
11.01	Equipment	\$ -	\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments	\$ -	2.00 \$	10,000 \$	2.00	1.15%	
12.02	Casework	\$ -	\$ -	\$ -	0.00	0.00%	
14.01	Conveying Systems	\$ -	\$ -	\$ -	0.00	0.00%	
MEP		- \$	63.00 \$	315,000 \$	63.00	36.30%	
21.01	Fire Protection	\$ -	4.00 \$	20,000 \$	4.00	2.30%	
22.01	Plumbing	\$ -	6.00 \$	30,000 \$	6.00	3.46%	
23.01	HVAC & Controls	\$ -	30.00 \$	150,000 \$	30.00	17.29%	
26.01	Electrical	\$ -	20.00 \$	100,000 \$	20.00	11.52%	
27.01	Tel-Data (incl cabling & devices)	\$ -	3.00 \$	15,000 \$	3.00	1.73%	
27.02	Security (excluded)	\$ -	\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)	\$ -	\$ -	\$ -	0.00	0.00%	
SUBTOTAL		- \$	128.50 \$	643,000 \$	128.60	74.10%	
	Cost Model Contingency	10.00%	12.86 \$	64,300 \$	12.86	7.41%	
	SDI / Subcontractor Bonds	1.40%	1.80 \$	9,000 \$	1.80	1.04%	
	Construction Contingency	4.00%	5.14 \$	25,700 \$	5.14	2.96%	
	General Conditions	8.00%	10.28 \$	51,400 \$	10.28	5.92%	
	General Requirements	5.00%	6.44 \$	32,200 \$	6.44	3.71%	
	Building Permit	1.00%	1.66 \$	8,300 \$	1.66	0.96%	
	Insurance	1.40%	0.54 \$	2,700 \$	0.54	0.31%	
	GC Performance & Payment Bond	0.70%	1.18 \$	5,900 \$	1.18	0.68%	
	SUBTOTAL	- \$	168.50 \$	842,500 \$	168.50	97.08%	
	Fee	3.00%	5.06 \$	25,300 \$	5.06	2.92%	
	Escalation - excluded	0.00%	\$ -	\$ -	0.00	0.00%	
TOTAL COST		- \$	174 \$	867,800 \$	174	100.00%	

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ITEM 'O'

		#17.1 - Ice Rink						
WBS	DESCRIPTION	Addition 25,000 SF	Renovation 0 SF	TOTAL 25,000 SF	\$ / SF	% of Total		
SITE / FOUNDATION		16.00	\$ 400,000	-	\$ -	\$ 400,000	16.00	4.57%
02.02	Demolition / Abatement	\$ -	\$ -	\$ -	0.00	0.00%		
03.01	Concrete	16.00	\$ 400,000	\$ -	\$ 400,000	16.00	4.57%	
31.01	Site Work	\$ -	\$ -	\$ -	0.00	0.00%		
31.02	Ground Improvements / Piles	\$ -	\$ -	\$ -	0.00	0.00%		
32.03	Site Improvements	\$ -	\$ -	\$ -	0.00	0.00%		
33.01	Utilities	\$ -	\$ -	\$ -	0.00	0.00%		
STRUCTURE		35.50	\$ 888,000	-	\$ -	\$ 888,000	35.52	10.16%
04.01	Masonry	\$ -	\$ -	\$ -	0.00	0.00%		
03.01	Concrete	7.50	\$ 188,000	\$ -	\$ 188,000	7.52	2.15%	
05.01	Structural Steel	25.00	\$ 625,000	\$ -	\$ 625,000	25.00	7.15%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%		
06.01	Rough Carpentry / Framing	3.00	\$ 75,000	\$ -	\$ 75,000	3.00	0.86%	
07.07	Fireproofing	\$ -	\$ -	\$ -	0.00	0.00%		
ENVELOPE		52.10	\$ 1,303,000	-	\$ -	\$ 1,303,000	52.12	14.90%
04.01	Masonry	8.00	\$ 200,000	\$ -	\$ 200,000	8.00	2.29%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%		
07.01	Insulation	\$ -	\$ -	\$ -	0.00	0.00%		
07.02	Exterior Wall Cladding	24.48	\$ 612,000	\$ -	\$ 612,000	24.48	7.00%	
07.05	Roofing & Sheet Metal	13.00	\$ 325,000	\$ -	\$ 325,000	13.00	3.72%	
08.01	Doors, Frames, Hardware	0.50	\$ 13,000	\$ -	\$ 13,000	0.52	0.15%	
08.02	Curtain Wall, Windows, Storefront	6.12	\$ 153,000	\$ -	\$ 153,000	6.12	1.75%	
09.01	Drywall	\$ -	\$ -	\$ -	0.00	0.00%		
INTERIORS		67.50	\$ 1,689,000	-	\$ -	\$ 1,689,000	67.56	19.32%
02.01	Selective Demolition	\$ -	\$ -	\$ -	0.00	0.00%		
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	0.00	0.00%		
06.02	Architectural Millwork/Casework	0.50	\$ 13,000	\$ -	\$ 13,000	0.52	0.15%	
08.01	Doors, Frames, Hardware	1.00	\$ 25,000	\$ -	\$ 25,000	1.00	0.29%	
08.03	Interior Aluminum, Glass & Glazing	\$ -	\$ -	\$ -	0.00	0.00%		
09.01	Drywall	8.00	\$ 200,000	\$ -	\$ 200,000	8.00	2.29%	
09.02	Tile	1.50	\$ 38,000	\$ -	\$ 38,000	1.52	0.43%	
09.03	Acoustical Ceilings	1.00	\$ 25,000	\$ -	\$ 25,000	1.00	0.29%	
09.06	Floors	4.00	\$ 100,000	\$ -	\$ 100,000	4.00	1.14%	
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	\$ -	0.00	0.00%		
09.08	Acoustical Walls / Ceiling Treatments	\$ -	\$ -	\$ -	0.00	0.00%		
09.09	Painting	2.00	\$ 50,000	\$ -	\$ 50,000	2.00	0.57%	
10.06	Miscellaneous Specialties	1.50	\$ 38,000	\$ -	\$ 38,000	1.52	0.43%	
11.01	Equipment	\$ -	\$ -	\$ -	0.00	0.00%		
12.01	Window Treatments	\$ -	\$ -	\$ -	0.00	0.00%		
13.01	Ice Sheet and Amenities	48.00	\$ 1,200,000	\$ -	\$ 1,200,000	48.00	13.72%	
14.01	Conveying Systems	\$ -	\$ -	\$ -	0.00	0.00%		
MEP		88.00	\$ 2,200,000	-	\$ -	\$ 2,200,000	88.00	25.16%
21.01	Fire Protection	6.00	\$ 150,000	\$ -	\$ 150,000	6.00	1.72%	
22.01	Plumbing	12.00	\$ 300,000	\$ -	\$ 300,000	12.00	3.43%	
23.01	HVAC & Controls	45.00	\$ 1,125,000	\$ -	\$ 1,125,000	45.00	12.87%	
26.01	Electrical	25.00	\$ 625,000	\$ -	\$ 625,000	25.00	7.15%	
27.01	Tel-Data (incl cabling & devices)	\$ -	\$ -	\$ -	0.00	0.00%		
27.02	Security (excluded)	\$ -	\$ -	\$ -	0.00	0.00%		
27.03	Audio-Visual (excluded)	\$ -	\$ -	\$ -	0.00	0.00%		
SUBTOTAL		259.10	\$ 6,480,000	-	\$ -	\$ 6,480,000	259.20	74.11%
	Cost Model Contingency	10.00%	25.92	\$ 648,000	-	\$ 648,000	25.92	7.41%
	SDI / Subcontractor Bonds	1.40%	3.63	\$ 90,700	-	\$ 90,700	3.63	1.04%
	Construction Contingency	4.00%	10.37	\$ 259,200	-	\$ 259,200	10.37	2.96%
	General Conditions	8.00%	20.74	\$ 518,400	-	\$ 518,400	20.74	5.93%
	General Requirements	5.00%	12.96	\$ 324,000	-	\$ 324,000	12.96	3.71%
	Building Permit	1.00%	3.33	\$ 83,200	-	\$ 83,200	3.33	0.95%
	Insurance	1.40%	1.08	\$ 26,900	-	\$ 26,900	1.08	0.31%
	GC Performance & Payment Bond	0.70%	2.36	\$ 59,000	-	\$ 59,000	2.36	0.67%
	SUBTOTAL		339.58	\$ 8,489,400	-	\$ 8,489,400	339.58	97.09%
	Fee	3.00%	10.19	\$ 254,700	-	\$ 254,700	10.19	2.91%
	Escalation - excluded	0.00%	-	\$ -	-	\$ -	0.00	0.00%
TOTAL COST		350	\$ 8,744,100	-	\$ -	\$ 8,744,100	350	100.00%

Fay School Master Plan

SF Cost Model

January 5, 2017



ITEM 'P' (1 OF 4)

		#18.b - 8 New Tennis Courts on Main Campus							
WBS	DESCRIPTION	Tennis Courts 46,000 SF		Fields 80,000 SF		TOTAL 126,000 SF	\$ / SF	% of Total	
SITE / FOUNDATION		16.56	\$ 762,000	6.50	\$ 520,000	\$ 1,282,000	10.17	74.10%	
02.01	Demolition	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
31.01	Sitework	5.00	\$ 230,000	5.00	\$ 400,000	\$ 630,000	5.00	36.41%	
32.01	Paving	6.60	\$ 304,000	\$ -	\$ -	\$ 304,000	2.41	17.57%	
32.02	Fencing	1.96	\$ 90,000	\$ -	\$ -	\$ 90,000	0.71	5.20%	
32.03	Site Improvements	1.00	\$ 46,000	1.50	\$ 120,000	\$ 166,000	1.32	9.59%	
33.02	Utilities (including septic)	2.00	\$ 92,000	\$ -	\$ -	\$ 92,000	0.73	5.32%	
STRUCTURE		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.01	Structural Steel	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.07	Fireproofing	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Insulation	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.05	Roofing & Sheet Metal	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
INTERIORS		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
02.01	Selective Demolition	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
06.02	Architectural Millwork/Casework	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
08.03	Interior Aluminum, Glass & Glazing	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.02	Tile	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.03	Acoustical Ceilings	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.06	Floors	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.09	Painting	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
10.06	Miscellaneous Specialties	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
11.01	Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
13.01	Ice Sheet and Amenities	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
14.01	Conveying Systems	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
MEP		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
21.01	Fire Protection	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
22.01	Plumbing	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
23.01	HVAC & Controls	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
26.01	Electrical	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.01	Tel-Data (incl cabling & devices)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.02	Security (excluded)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
SUBTOTAL		16.56	\$ 762,000	6.50	\$ 520,000	\$ 1,282,000	10.17	74.10%	
	Cost Model Contingency	10.00%	1.66 \$ 76,200	0.65 \$ 52,000	\$ 128,200	1.02	7.41%		
	SDI / Subcontractor Bonds	1.40%	0.23 \$ 10,700	0.09 \$ 7,300	\$ 18,000	0.14	1.04%		
	Construction Contingency	4.00%	0.66 \$ 30,500	0.26 \$ 20,800	\$ 51,300	0.41	2.97%		
	General Conditions	8.00%	1.33 \$ 61,000	0.52 \$ 41,600	\$ 102,600	0.81	5.93%		
	General Requirements	5.00%	0.83 \$ 38,100	0.33 \$ 26,000	\$ 64,100	0.51	3.70%		
	Building Permit	1.00%	0.21 \$ 9,800	0.08 \$ 6,700	\$ 16,500	0.13	0.95%		
	Insurance	1.40%	0.07 \$ 3,200	0.03 \$ 2,200	\$ 5,400	0.04	0.31%		
	GC Performance & Payment Bond	0.70%	0.15 \$ 6,900	0.06 \$ 4,700	\$ 11,600	0.09	0.67%		
	SUBTOTAL	21.70	\$ 998,400	8.52	\$ 681,300	\$ 1,679,700	13.33	97.09%	
	Fee	3.00%	0.65 \$ 30,000	0.26 \$ 20,400	\$ 50,400	0.40	2.91%		
	Escalation - excluded	0.00%	\$ -	\$ -	\$ -	0.00	0.00%		
TOTAL COST		22	\$ 1,028,400	9	\$ 701,700	\$ 1,730,100	14	100.00%	

Fay School Master Plan

SF Cost Model

January 5, 2017



ITEM 'P' (2 OF 4)

		#18.a - 8 New Tennis Courts on Main Campus							
WBS	DESCRIPTION	Tennis Courts 50,000 SF		Fields 80,000 SF		TOTAL 130,000 SF		\$ / SF	% of Total
SITE / FOUNDATION		15.10	\$ 755,000	6.50	\$ 520,000	\$ 1,275,000	9.81	74.10%	
02.01	Demolition	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
31.01	Sitework	5.00	\$ 250,000	5.00	\$ 400,000	\$ 650,000	5.00	37.78%	
32.01	Paving	6.60	\$ 330,000	\$ -	\$ -	\$ 330,000	2.54	19.18%	
32.02	Fencing	2.50	\$ 125,000	\$ -	\$ -	\$ 125,000	0.96	7.26%	
32.03	Site Improvements	1.00	\$ 50,000	1.50	\$ 120,000	\$ 170,000	1.31	9.88%	
33.02	Utilities (including septic)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
STRUCTURE		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.01	Structural Steel	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.07	Fireproofing	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
04.01	Masonry	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Insulation	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.05	Roofing & Sheet Metal	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
INTERIORS		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
02.01	Selective Demolition	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
06.02	Architectural Millwork/Casework	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
08.01	Doors, Frames, Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
08.03	Interior Aluminum, Glass & Glazing	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.02	Tile	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.03	Acoustical Ceilings	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.06	Floors	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.07	Floor Prep / Moisture Mitigation	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.09	Painting	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
10.06	Miscellaneous Specialties	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
11.01	Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
13.01	Ice Sheet and Amenities	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
14.01	Conveying Systems	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
MEP		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
21.01	Fire Protection	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
22.01	Plumbing	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
23.01	HVAC & Controls	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
26.01	Electrical	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.01	Tel-Data (incl cabling & devices)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.02	Security (excluded)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)	\$ -	\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
SUBTOTAL		15.10	\$ 755,000	6.50	\$ 520,000	\$ 1,275,000	9.81	74.10%	
	Cost Model Contingency	10.00%	1.51 \$ 75,500	0.65 \$ 52,000	\$ 127,500	0.98	7.41%		
	SDI / Subcontractor Bonds	1.40%	0.21 \$ 10,600	0.09 \$ 7,300	\$ 17,900	0.14	1.04%		
	Construction Contingency	4.00%	0.60 \$ 30,200	0.26 \$ 20,800	\$ 51,000	0.39	2.96%		
	General Conditions	8.00%	1.21 \$ 60,400	0.52 \$ 41,600	\$ 102,000	0.78	5.93%		
	General Requirements	5.00%	0.76 \$ 37,800	0.33 \$ 26,000	\$ 63,800	0.49	3.71%		
	Building Permit	1.00%	0.19 \$ 9,700	0.08 \$ 6,700	\$ 16,400	0.13	0.95%		
	Insurance	1.40%	0.06 \$ 3,100	0.03 \$ 2,200	\$ 5,300	0.04	0.31%		
	GC Performance & Payment Bond	0.70%	0.14 \$ 6,900	0.06 \$ 4,700	\$ 11,600	0.09	0.67%		
	SUBTOTAL	19.78	\$ 989,200	8.52	\$ 681,300	\$ 1,670,500	12.85	97.09%	
	Fee	3.00%	0.59 \$ 29,700	0.26 \$ 20,400	\$ 50,100	0.39	2.91%		
	Escalation - excluded	0.00%	- \$ -	- \$ -	\$ -	0.00	0.00%		
TOTAL COST		20	\$ 1,018,900	9	\$ 701,700	\$ 1,720,600	13	100.00%	

Fay School Master Plan

SF Cost Model

January 5, 2017



ITEM 'P' (3 OF 4)

		#18.c - 8 New Tennis Courts on Main Campus							
WBS	DESCRIPTION	Tennis Courts 50,000 SF		Fields 0 SF		TOTAL 50,000 SF		\$ / SF	% of Total
SITE / FOUNDATION		24.50	\$ 1,225,000	-	\$ -	\$ 1,150,000	23.00	69.56%	
02.01	Demolition	1.50	\$ 75,000	\$ -	\$ -	75,000	1.50	4.54%	
31.01	Sitework	12.00	\$ 600,000	\$ -	\$ -	600,000	12.00	36.29%	
32.01	Paving	6.60	\$ 330,000	\$ -	\$ -	330,000	6.60	19.96%	
32.02	Fencing	2.40	\$ 120,000	\$ -	\$ -	120,000	2.40	7.26%	
32.03	Site Improvements	2.00	\$ 100,000	\$ -	\$ -	100,000	2.00	6.05%	
33.02	Utilities (including septic)		\$ -	\$ -	\$ -	-	0.00	0.00%	
STRUCTURE		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
04.01	Masonry		\$ -	\$ -	\$ -	-	0.00	0.00%	
03.01	Concrete		\$ -	\$ -	\$ -	-	0.00	0.00%	
05.01	Structural Steel		\$ -	\$ -	\$ -	-	0.00	0.00%	
05.02	Miscellaneous Metals		\$ -	\$ -	\$ -	-	0.00	0.00%	
06.01	Rough Carpentry / Framing		\$ -	\$ -	\$ -	-	0.00	0.00%	
07.07	Fireproofing		\$ -	\$ -	\$ -	-	0.00	0.00%	
ENVELOPE		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
04.01	Masonry		\$ -	\$ -	\$ -	-	0.00	0.00%	
05.02	Miscellaneous Metals		\$ -	\$ -	\$ -	-	0.00	0.00%	
07.01	Insulation		\$ -	\$ -	\$ -	-	0.00	0.00%	
07.02	Exterior Wall Cladding		\$ -	\$ -	\$ -	-	0.00	0.00%	
07.05	Roofing & Sheet Metal		\$ -	\$ -	\$ -	-	0.00	0.00%	
08.01	Doors, Frames, Hardware		\$ -	\$ -	\$ -	-	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.01	Drywall		\$ -	\$ -	\$ -	-	0.00	0.00%	
INTERIORS		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
02.01	Selective Demolition		\$ -	\$ -	\$ -	-	0.00	0.00%	
05.02	Miscellaneous Metals		\$ -	\$ -	\$ -	-	0.00	0.00%	
06.02	Architectural Millwork/Casework		\$ -	\$ -	\$ -	-	0.00	0.00%	
08.01	Doors, Frames, Hardware		\$ -	\$ -	\$ -	-	0.00	0.00%	
08.03	Interior Aluminum, Glass & Glazing		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.01	Drywall		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.02	Tile		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.03	Acoustical Ceilings		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.06	Floors		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.07	Floor Prep / Moisture Mitigation		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.09	Painting		\$ -	\$ -	\$ -	-	0.00	0.00%	
10.06	Miscellaneous Specialties		\$ -	\$ -	\$ -	-	0.00	0.00%	
11.01	Equipment		\$ -	\$ -	\$ -	-	0.00	0.00%	
12.01	Window Treatments		\$ -	\$ -	\$ -	-	0.00	0.00%	
13.01	Ice Sheet and Amenities		\$ -	\$ -	\$ -	-	0.00	0.00%	
14.01	Conveying Systems		\$ -	\$ -	\$ -	-	0.00	0.00%	
MEP		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
21.01	Fire Protection		\$ -	\$ -	\$ -	-	0.00	0.00%	
22.01	Plumbing		\$ -	\$ -	\$ -	-	0.00	0.00%	
23.01	HVAC & Controls		\$ -	\$ -	\$ -	-	0.00	0.00%	
26.01	Electrical		\$ -	\$ -	\$ -	-	0.00	0.00%	
27.01	Tel-Data (incl cabling & devices)		\$ -	\$ -	\$ -	-	0.00	0.00%	
27.02	Security (excluded)		\$ -	\$ -	\$ -	-	0.00	0.00%	
27.03	Audio-Visual (excluded)		\$ -	\$ -	\$ -	-	0.00	0.00%	
SUBTOTAL		24.50	\$ 1,225,000	-	\$ -	\$ 1,225,000	24.50	74.10%	
	Cost Model Contingency	10.00%	2.45 \$ 122,500	-	\$ -	122,500	2.45	7.41%	
	SDI / Subcontractor Bonds	1.40%	0.34 \$ 17,200	-	\$ -	17,200	0.34	1.04%	
	Construction Contingency	4.00%	0.98 \$ 49,000	-	\$ -	49,000	0.98	2.96%	
	General Conditions	8.00%	1.96 \$ 98,000	-	\$ -	98,000	1.96	5.93%	
	General Requirements	5.00%	1.23 \$ 61,300	-	\$ -	61,300	1.23	3.71%	
	Building Permit	1.00%	0.31 \$ 15,700	-	\$ -	15,700	0.31	0.95%	
	Insurance	1.40%	0.10 \$ 5,100	-	\$ -	5,100	0.10	0.31%	
	GC Performance & Payment Bond	0.70%	0.22 \$ 11,200	-	\$ -	11,200	0.22	0.68%	
	SUBTOTAL		32.10 \$ 1,605,000	-	\$ -	\$ 1,605,000	32.10	97.08%	
	Fee	3.00%	0.96 \$ 48,200	-	\$ -	48,200	0.96	2.92%	
	Escalation - excluded	0.00%	- \$ -	-	\$ -	-	0.00	0.00%	
TOTAL COST		33	\$ 1,653,200	-	\$ -	\$ 1,653,200	33	100.00%	

Fay School Master Plan

SF Cost Model

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ITEM 'P' (4 OF 4)

		#18.d - 4 New Tennis Courts on Main Campus							
WBS	DESCRIPTION	Tennis Courts 25,000 SF		Fields 0 SF		TOTAL 25,000 SF		\$ / SF	% of Total
SITE / FOUNDATION		28.80	\$ 720,000	-	\$ -	\$ 695,000	27.80	71.53%	
02.01	Demolition	1.00	\$ 25,000	\$ -	\$ -	25,000	1.00	2.57%	
31.01	Sitework	15.00	\$ 375,000	\$ -	\$ -	375,000	15.00	38.60%	
32.01	Paving	6.60	\$ 165,000	\$ -	\$ -	165,000	6.60	16.98%	
32.02	Fencing	3.20	\$ 80,000	\$ -	\$ -	80,000	3.20	8.23%	
32.03	Site Improvements	3.00	\$ 75,000	\$ -	\$ -	75,000	3.00	7.72%	
33.02	Utilities (including septic)		\$ -	\$ -	\$ -	-	0.00	0.00%	
STRUCTURE		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
04.01	Masonry		\$ -	\$ -	\$ -	-	0.00	0.00%	
03.01	Concrete		\$ -	\$ -	\$ -	-	0.00	0.00%	
05.01	Structural Steel		\$ -	\$ -	\$ -	-	0.00	0.00%	
05.02	Miscellaneous Metals		\$ -	\$ -	\$ -	-	0.00	0.00%	
06.01	Rough Carpentry / Framing		\$ -	\$ -	\$ -	-	0.00	0.00%	
07.07	Fireproofing		\$ -	\$ -	\$ -	-	0.00	0.00%	
ENVELOPE		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
04.01	Masonry		\$ -	\$ -	\$ -	-	0.00	0.00%	
05.02	Miscellaneous Metals		\$ -	\$ -	\$ -	-	0.00	0.00%	
07.01	Insulation		\$ -	\$ -	\$ -	-	0.00	0.00%	
07.02	Exterior Wall Cladding		\$ -	\$ -	\$ -	-	0.00	0.00%	
07.05	Roofing & Sheet Metal		\$ -	\$ -	\$ -	-	0.00	0.00%	
08.01	Doors, Frames, Hardware		\$ -	\$ -	\$ -	-	0.00	0.00%	
08.02	Curtain Wall, Windows, Storefront		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.01	Drywall		\$ -	\$ -	\$ -	-	0.00	0.00%	
INTERIORS		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
02.01	Selective Demolition		\$ -	\$ -	\$ -	-	0.00	0.00%	
05.02	Miscellaneous Metals		\$ -	\$ -	\$ -	-	0.00	0.00%	
06.02	Architectural Millwork/Casework		\$ -	\$ -	\$ -	-	0.00	0.00%	
08.01	Doors, Frames, Hardware		\$ -	\$ -	\$ -	-	0.00	0.00%	
08.03	Interior Aluminum, Glass & Glazing		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.01	Drywall		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.02	Tile		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.03	Acoustical Ceilings		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.06	Floors		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.07	Floor Prep / Moisture Mitigation		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments		\$ -	\$ -	\$ -	-	0.00	0.00%	
09.09	Painting		\$ -	\$ -	\$ -	-	0.00	0.00%	
10.06	Miscellaneous Specialties		\$ -	\$ -	\$ -	-	0.00	0.00%	
11.01	Equipment		\$ -	\$ -	\$ -	-	0.00	0.00%	
12.01	Window Treatments		\$ -	\$ -	\$ -	-	0.00	0.00%	
13.01	Ice Sheet and Amenities		\$ -	\$ -	\$ -	-	0.00	0.00%	
14.01	Conveying Systems		\$ -	\$ -	\$ -	-	0.00	0.00%	
MEP		-	\$ -	-	\$ -	\$ -	0.00	0.00%	
21.01	Fire Protection		\$ -	\$ -	\$ -	-	0.00	0.00%	
22.01	Plumbing		\$ -	\$ -	\$ -	-	0.00	0.00%	
23.01	HVAC & Controls		\$ -	\$ -	\$ -	-	0.00	0.00%	
26.01	Electrical		\$ -	\$ -	\$ -	-	0.00	0.00%	
27.01	Tel-Data (incl cabling & devices)		\$ -	\$ -	\$ -	-	0.00	0.00%	
27.02	Security (excluded)		\$ -	\$ -	\$ -	-	0.00	0.00%	
27.03	Audio-Visual (excluded)		\$ -	\$ -	\$ -	-	0.00	0.00%	
SUBTOTAL		28.80	\$ 720,000	-	\$ -	\$ 720,000	28.80	74.10%	
	Cost Model Contingency	10.00%	2.88 \$ 72,000	-	\$ -	72,000	2.88	7.41%	
	SDI / Subcontractor Bonds	1.40%	0.40 \$ 10,100	-	\$ -	10,100	0.40	1.04%	
	Construction Contingency	4.00%	1.15 \$ 28,800	-	\$ -	28,800	1.15	2.96%	
	General Conditions	8.00%	2.30 \$ 57,600	-	\$ -	57,600	2.30	5.93%	
	General Requirements	5.00%	1.44 \$ 36,000	-	\$ -	36,000	1.44	3.71%	
	Building Permit	1.00%	0.37 \$ 9,200	-	\$ -	9,200	0.37	0.95%	
	Insurance	1.40%	0.12 \$ 3,000	-	\$ -	3,000	0.12	0.31%	
	GC Performance & Payment Bond	0.70%	0.26 \$ 6,600	-	\$ -	6,600	0.26	0.68%	
	SUBTOTAL		37.73 \$ 943,300	-	\$ -	\$ 943,300	37.73	97.09%	
	Fee	3.00%	1.13 \$ 28,300	-	\$ -	28,300	1.13	2.91%	
	Escalation - excluded	0.00%	- \$ -	-	\$ -	-	0.00	0.00%	
TOTAL COST		39	\$ 971,600	-	\$ -	\$ 971,600	39	100.00%	

Fay School Master Plan

SF Cost Model

January 5, 2017



ITEM 'Q'

		#15.1 - Admissions Entrance at Fay House							
WBS	DESCRIPTION	Addition 100 SF		Renovation 1,600 SF		TOTAL 1,700 SF	\$ / SF	% of Total	
SITE / FOUNDATION		1,575.00	\$ 158,000	-	\$ -	\$ 158,000	92.94	24.59%	
02.02	Demolition / Abatement	75.00	\$ 8,000	\$ -	\$ -	\$ 8,000	4.71	1.25%	
03.01	Concrete	800.00	\$ 80,000	\$ -	\$ -	\$ 80,000	47.06	12.45%	
31.01	Site Work	300.00	\$ 30,000	\$ -	\$ -	\$ 30,000	17.65	4.67%	
31.02	Ground Improvements / Piles		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
32.03	Site Improvements	300.00	\$ 30,000	\$ -	\$ -	\$ 30,000	17.65	4.67%	
33.01	Utilities	100.00	\$ 10,000	\$ -	\$ -	\$ 10,000	5.88	1.56%	
STRUCTURE		300.00	\$ 30,000	-	\$ -	\$ 30,000	17.65	4.67%	
04.01	Masonry		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
03.01	Concrete		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.01	Structural Steel		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
06.01	Rough Carpentry / Framing	300.00	\$ 30,000	\$ -	\$ -	\$ 30,000	17.65	4.67%	
07.07	Fireproofing		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
ENVELOPE		500.00	\$ 51,000	-	\$ -	\$ 51,000	30.00	7.94%	
04.01	Masonry		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
05.02	Miscellaneous Metals		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.01	Waterproofing		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
07.02	Exterior Wall Cladding	300.00	\$ 30,000	\$ -	\$ -	\$ 30,000	17.65	4.67%	
07.05	Roofing & Sheet Metal	75.00	\$ 8,000	\$ -	\$ -	\$ 8,000	4.71	1.25%	
08.01	Doors, Frames, Hardware	50.00	\$ 5,000	\$ -	\$ -	\$ 5,000	2.94	0.78%	
08.02	Curtain Wall, Windows, Storefront	75.00	\$ 8,000	\$ -	\$ -	\$ 8,000	4.71	1.25%	
09.01	Drywall		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
INTERIORS		290.00	\$ 30,000	83.00	\$ 133,000	\$ 163,000	95.88	25.37%	
02.01	Selective Demolition		\$ -	15.00	\$ 24,000	\$ 24,000	14.12	3.74%	
05.02	Miscellaneous Metals		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
06.02	Architectural Millwork/Casework	75.00	\$ 8,000	15.00	\$ 24,000	\$ 32,000	18.82	4.98%	
08.01	Doors, Frames, Hardware	30.00	\$ 3,000	7.00	\$ 11,000	\$ 14,000	8.24	2.18%	
08.03	Interior Aluminum, Glass & Glazing		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.01	Drywall	150.00	\$ 15,000	18.00	\$ 29,000	\$ 44,000	25.88	6.85%	
09.02	Tile		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.03	Acoustical Ceilings		\$ -	6.00	\$ 10,000	\$ 10,000	5.88	1.56%	
09.06	Floors	15.00	\$ 2,000	10.00	\$ 16,000	\$ 18,000	10.59	2.80%	
09.07	Floor Prep / Moisture Mitigation		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
09.08	Acoustical Walls / Ceiling Treatments		\$ -	3.00	\$ 5,000	\$ 5,000	2.94	0.78%	
09.09	Painting	20.00	\$ 2,000	4.00	\$ 6,000	\$ 8,000	4.71	1.25%	
10.06	Miscellaneous Specialties		\$ -	2.00	\$ 3,000	\$ 3,000	1.76	0.47%	
11.01	Equipment		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
12.01	Window Treatments		\$ -	3.00	\$ 5,000	\$ 5,000	2.94	0.78%	
12.02	Casework		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
14.01	Conveying Systems		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
MEP		100.00	\$ 10,000	40.00	\$ 64,000	\$ 74,000	43.53	11.52%	
21.01	Fire Protection		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
22.01	Plumbing		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
23.01	HVAC & Controls	50.00	\$ 5,000	20.00	\$ 32,000	\$ 37,000	21.76	5.76%	
26.01	Electrical	50.00	\$ 5,000	20.00	\$ 32,000	\$ 37,000	21.76	5.76%	
27.01	Tel-Data (incl cabling & devices)		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.02	Security (excluded)		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
27.03	Audio-Visual (excluded)		\$ -	\$ -	\$ -	\$ -	0.00	0.00%	
SUBTOTAL		2,765.00	\$ 279,000	123.00	\$ 197,000	\$ 476,000	280.00	74.09%	
	Cost Model Contingency	10.00%	279.00	12.31	\$ 19,700	\$ 47,600	28.00	7.41%	
	SDI / Subcontractor Bonds	1.40%	39.00	1.75	\$ 2,800	\$ 6,700	3.94	1.04%	
	Construction Contingency	4.00%	112.00	4.94	\$ 7,900	\$ 19,100	11.24	2.97%	
	General Conditions	8.00%	223.00	9.88	\$ 15,800	\$ 38,100	22.41	5.93%	
	General Requirements	5.00%	140.00	6.19	\$ 9,900	\$ 23,900	14.06	3.72%	
	Building Permit	1.00%	36.00	1.56	\$ 2,500	\$ 6,100	3.59	0.95%	
	Insurance	1.40%	12.00	0.50	\$ 800	\$ 2,000	1.18	0.31%	
	GC Performance & Payment Bond	0.70%	25.00	1.13	\$ 1,800	\$ 4,300	2.53	0.67%	
	SUBTOTAL	3,656.00	\$ 365,600	161.38	\$ 258,200	\$ 623,800	366.94	97.09%	
	Fee	3.00%	110.00	4.81	\$ 7,700	\$ 18,700	11.00	2.91%	
	Escalation - excluded	0.00%	-	-	\$ -	\$ -	0.00	0.00%	
TOTAL COST		3,766	\$ 376,600	166	\$ 265,900	\$ 642,500	378	100.00%	