



## **FCPS Liberty Elementary School Feasibility Study Meeting #3 – Notes**

PAA Project #18-35

**Meeting Date:** January 3, 2019 – Liberty Elementary School, Guidance Office

Meeting started at 2:00 pm

Meeting ended at 3:45 pm

### **Attendees:**

#### FCPS Educational Planning Team

Holly Nelson – FCPS Facilities Planner

Kim Day – FCPS Curriculum & Instruction

Steve Raff – FCPS Elementary Director

Dawn Worrell – FCPS Construction Accountant

Patrick Little – FCPS Maintenance

Todd Shaffer – Principal, Liberty Elementary School

Matilda Pickett – Lead Custodian, Liberty Elementary School

#### Design Team

Kori Purdum Matheis – Proffitt & Associates – Principal Architect

Madalyn Burns – Proffitt & Associates – Senior Architectural Designer

## **Meeting Discussion:**

### **3.1 Project Overview**

- A. Kori briefly recapped the project scope, goals, and the intent of the project, which is to develop a range of options that explore both renovation/addition and replacement school for 705 students.
- B. The project schedule was reviewed with the expectation for a Board of Education Presentation on May 8, 2018. The design team is completing existing conditions narratives for submission within the next two weeks and the ALTA survey is being completed.
- C. Kori discussed sustainability requirements and goals as follows:

1. This project is required by the state to meet USGBC LEED v4 (U.S. Green Building Council Leadership in Energy and Environmental Design version 4) Silver Certification for Schools.
2. Kori provided a brief overview of the LEED rating system categories and point/credit system. There is a total of 110 points available and Silver Certification requires 50-59 points/credits to be achieved. Categories include: Location and Transportation, Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, Innovation, and Regional Priority
3. Kori noted that due to the site location it will be challenging to obtain credits in the Location and Transportation category (i.e. lack of public transportation opportunities, lack of development density in surrounding area). This means that greater effort will be required to obtain points in other categories.
4. The most credits are available in the Energy and Atmosphere category (31 total).
  - a. Holly reported the adjacent developers do not have plans to bring in natural gas. This leaves electric, propane, or geothermal as possibilities for MEP systems.
  - b. Pat noted that sometimes more traditional systems perform well and last a long time – i.e. cast iron boilers.
  - c. As part of the feasibility study we will suggest 3-4 different systems and the pros/cons (i.e. cost, maintenance, life cycle, new technologies), to be decided at the time of project design. The decision will also be impacted by whether the building will be renovated or replaced.
5. To meet the Water Efficiency minimum water savings prerequisite, low flow fixtures are required to be used. It was noted that from a curriculum standpoint, single user toilet rooms within classrooms are preferred, however the Ed Specs call for multi-user group toilet rooms. This is partly to save on square footage. The ability to include urinals in place of some of the water closets in multi-user restrooms helps increase water savings over just having toilets, because urinals provide a greater percentage of water savings than toilets compared to the baseline standard.
6. Kori suggested highlighting LEED features as a teaching tool for students (i.e. teaching recycling, energy savings, low flow fixtures), which would enable the project to achieve an innovation point.
7. Regional priority credits are basically like giving extra credit for achieving certain credits that are determined by the USGBC to be most critical for a particular location, determined by the project's zip code. Kori will check which regional priority credits are applicable to this site.
8. FCPS staff noted that provision of daylight and views at all classrooms is important for curriculum and health. Windows enable connections to the outdoors even when the weather is not nice enough to actually go outside – students can complete activities linking them to nature without leaving the classroom, they can grow plants, etc.

### **3.2 Additional items to note regarding the existing site**

- A. There are hydric soils (soils that are permanently or seasonally saturated by water) present in the northwestern corner of the site. Buildings cannot be located in areas of hydric soils, but site features such as fields or parking can.

- B. The current Zoning of the site limits new building height to 30' maximum.

### 3.3 Initial conceptual design options were reviewed

#### A. Discussion of general organizational principles

1. Kori reviewed the proposed blocking diagram and the general layout of spaces. All spaces that are used by all grade levels need to be on the first floor. Spaces used solely by older students (grades 3 and above) can be on the second floor. There was discussion and feedback as follows:
  - a. The main public entrance should provide access to a secured vestibule that leads to the administration and health suite.
  - b. Kindergarten and Pre-K wing is typically located near administration/front of building and includes a separate adjacent outdoor play area.
  - c. Public spaces i.e., physical education, cafeteria, and stage are located near each other and should have their own separate entrance for secure after hours use. Physical education generally located in proximity to the outdoor fields. Cafeteria located near play areas for recess.
    - i. Discussed that stage should be located off the Cafeteria – it has better acoustics than the Gymnasium, can be dual-purposed and used for band/music, also its more practical for scheduling (i.e. the Gymnasium is typically used all day, which limits ability to use the Stage concurrently, whereas the Cafeteria is used for limited hours during middle of the day and would allow use of the Stage at other times).
    - ii. It is preferred to have an operable partition between the Gymnasium and Cafeteria to allow flexibility for larger group activities. FCPS likes the Twin Ridge and Centerville layouts.
  - d. Food service and building services are located off of the cafeteria. Include truck access and a loading dock.
  - e. The Media Center, Art, and Music spaces should be located in a central location for use by all grades. Art should have connection to the outdoors. Music should be located near the stage. The Educational Specifications include two Art and two Music rooms – one for vocal and one for instrumental.
  - f. First and Second Grade wings should be located on the first floor and near the Kindergarten wing.
  - g. It was noted that the building code requires spaces used by students in first grade or below to be located at grade and spaces used by second graders to be located no more than one story above grade unless a separate, dedicated stair is provided for these younger students.
  - h. For best efficiency of space, Third, Fourth, and Fifth grade wings should be on the second floor and stack on-top of Kindergarten, First, and Second grade wings.
2. Reviewed classroom organizational concepts – see conceptual options in attached presentation slides. Concept #2 was preferred because classrooms clustered and doors aligned across the corridor allow for the best collaboration and supervision.

3. Curriculum staff feels that Intervention services are optimally centered within in the building as a whole, rather than scattered within the classroom wings. Often times, Intervention teachers work with students in different grade levels so may need to bring students from different areas of the building. Shorter time traveling means more instructional time.
  4. The Educational Specifications include ten small breakout rooms that are flexible for use. These could be for intervention, special education, small group activities, etc.
- B. Option 1 - Renovations and Additions with partial demolition
1. An option for Renovations and Additions was presented. The goal in developing this layout was to add onto an existing circulation path and retain daylight to all classrooms.
  2. In this option:
    - a. The main entry is relocated closer to Route 26 and portions of the 1960 and 1980 building are retained and renovated to include classroom and support spaces.
    - b. The entire 1950s addition, including the existing gymnasium, cafeteria, classrooms, and mechanical room are proposed to be demolished. In addition, a portion of the 1982 construction including the media center and two classrooms directly across from the media center that are at the higher floor elevation will also be demolished. This will simplify the number of different floor levels in the renovated and expanded building.
    - c. An addition to the south of the remaining spaces includes the new entry, media center, kindergarten classrooms, art classrooms and support spaces.
    - d. An addition to the north includes a public entrance, Gymnasium, Cafeteria, Food services, building services, music classrooms and a classroom cluster.
    - e. An enclosed courtyard is included to retain daylight to the classrooms kept within the existing building.
    - f. A second floor serving third, fourth, and fifth grades would be included over the back/eastern side of both additions and would connect to the existing building's upper level classrooms.
    - g. Car rider drop off loop and main parking would be accessed from Route 26. The driveway entrance is relocated to the crest of the hill at Route 26 for better visibility.
    - h. Bus loop, additional parking and loading/building services would be accessed from Daysville Road.
  3. Pros of this layout include:
    - a. Like clustering of classrooms by grade level.
    - b. Like Admin area moved out to the front, closer to Route 26.
    - c. Daylight provided to all classrooms (required). Daylight can be provided to the Media Center with clerestory windows. Low-level windows at the Media Center are not a necessity.
  4. Cons/action items for this layout include:
    - a. Play areas should be located and laid out.
    - b. With the current layout, the queuing provided in the drop-off loop off of Route 26 does not appear to change. We need to provide an increase in stacking for car

riders. This school has a relatively large car rider population due to the size of its feeder area in the county. Many parents drive their students because they feel that the bus travel time is too long. Currently, only regular car riders who have signed up with the office are allowed to pick-up in the lower car rider loop in order to limit congestion on Route 26. Occasional or infrequent car riders get picked up in the bus loop. It is anticipated that the new neighborhood will have a cross walk with a crossing guard at Daysville Road, which will mean more walkers. Many of these students may end up being car riders as well, especially on bad weather days when people don't want to walk.

- c. Approximately 12 buses are anticipated for a school of this size. Stacking in the bus loop should be provided accordingly.
- d. The building seems spread out, with long corridors and separation of spaces, which means long travel distance within the school. This is partly due to the configuration of the existing classrooms to remain and the desire to maintain daylight to those spaces, which requires creation of a courtyard.
- e. Revise the sketch to provide a direct corridor access from the building exterior into the proposed courtyard

C. Option 2 - New construction

1. An option for Replacement was presented.
2. In this option:
  - a. The proposed school matches the footprint of the recent elementary school prototype (Urbana/Sugarloaf Elementary). Holly will obtain the future prototype design which is in development.
  - b. The new facility is sited so that it can be constructed while the existing building remains operational, then once it opens, the existing building can be demolished.
  - c. The main entry faces Route 26. The two two-story classroom wings are located to the east. The public spaces including, art, music, cafeteria and gymnasium are located to the west.
  - d. Car rider drop off loop, main parking, and loading/building services would be accessed from Route 26. The driveway entrance is relocated to the crest of the hill along Route 26 for better visibility.
  - e. Bus loop and additional parking would be accessed from Daysville Road.
  - f. Play areas are located near the gymnasium and classroom wings.
  - g. There was some discussion regarding making the most efficient use of space and ability to make the second floor layout feel more efficient and cohesive. In the current prototype the two classroom wings feel somewhat remote and circulation seems inefficient. Kori pointed out that this is partially due to desired adjacencies and the limited types of spaces that can be placed on the second floor. FCPS wants to keep core spaces on the first floor, along with Admin, Kindergarten, First, and Second grades.
  - h. It was noted that the Gymnasium does not need low windows to the exterior – could just have clerestory windows and be a central space. Any windows provided should address glare control.

3. Pros of this layout include:
    - a. New school can be constructed without demolition of the existing building.
    - b. Daylight provided to all classrooms (required).
    - c. Like the longer drop-off stacking and additional parking provided at the front of the building toward 26.
  4. Cons/action items for this layout include:
    - a. “Main Street” floor plan layout with bus entrance at one side and car entrance at the other may not work well for this facility due to available land configuration.
    - b. Pull play areas closer to cafeteria and provide a separate Kindergarten play – long travel time from lunch to play areas and back to classrooms is an issue and cuts into instructional time.
    - c. Work on better efficiency and shorter corridors for second floor plan.
- D. Holly will verify whether FCPS has a specific target in terms of parking spaces to be provided, or whether we should just design to the zoning requirements. Steve estimated there would be approximately 55-60 staff at full capacity.

### **3.4 Discuss planned Agenda and format for Community Meeting presentation**

- A. The scope of the first Community Meeting is to discuss the existing building, the feasibility study process, and get feedback from the community on the overall process and their thoughts about the existing school and proposed development. Proposed replacement and renovation/addition plans will not be shown until the next meeting.
- B. The meeting will be held in the gymnasium. The school will set up a screen, projector, and approximately fifty chairs. The PTA meeting will be held in the media center beforehand.
- C. FCPS would like to plan to provide some interactive components...post-its, handouts, survey, etc. with questions. Some potential questions include:
  1. What do you like about your school?
  2. Safety considerations in terms of community access? (Look at Waverley docs online for more)
  3. Specific to Liberty – question about importance of retaining heritage – scale and character?
- D. Could start with a large group question as part of presentation then break up into smaller groups and maybe rotate through wall poster stations with some imagery and questions for feedback.
- E. Holly will put together some slides about the future housing developments and rationale for capacity to insert into our presentation. PAA will send an agenda outline, draft presentation, and proposed community feedback questions to Holly for review early next week.

### **3.5 Two week look-ahead**

- A. Holly and the design team will prepare for the community meeting.
- B. The design team will finalize the existing building conditions narrative, ALTA survey, and continue to develop rough sketch options of the replacement, additions/renovations options to share at the next meeting.

The first community meeting is scheduled for **January 15, 2019 from 6:30-8:00 PM at Liberty Elementary School, Gymnasium.**

The next regular design team meeting is scheduled for **January 17, 2019 from 2:00-4:00 PM at Liberty Elementary School, Guidance Counselors Office.**

This summarizes the topics discussed at the meeting. Please review and address any comments and corrections to the Architect within 5 days of receipt of these minutes.

*Kori Purdum Matheis, AIA, LEED AP BD+C*

Distribution via email – all attendees & design committee members

Attachments:

- Meeting #3 Presentation Slides

LIBERTY ELEMENTARY SCHOOL  
FEASIBILITY STUDY  
FREDERICK COUNTY PUBLIC SCHOOLS



Frederick County Public Schools  
*Reach. Challenge. Prepare.*





## MEETING TOPICS:

### 1. Project Overview

- a. Recap of scope, goals, and feasibility development
- b. Review Project Schedule
- c. Discuss Sustainability Goals

### 2. Review initial conceptual design options

- a. Discuss general organizational principles
- b. Renovations and Additions with partial demolition
- c. New Construction
- d. Discuss pros/cons of each – which goals are addressed and which are not?

### 3. Discuss planned Agenda and format for Community Meeting presentation



**Liberty Elementary School is located at 11820 Liberty Road, Frederick, MD 21701 and the modernized school will remain on the existing site. The school will serve students in pre-kindergarten through 5<sup>th</sup> grades. A state rated capacity of 705 is anticipated. This project may be a repeat of the prototype design developed for Waverley Elementary School, adapted for a capacity of 705 students.**

**The educational specifications reflect a construction project of approximately 89,000 gross square feet that will provide a new elementary school of 31 teaching stations (25 grade 1-5, five kindergarten, and one pre-kindergarten classroom) as well as supporting spaces to accommodate a state rated capacity of 705 elementary school students. In addition, this project will be designed to meet the requirements for at least a Silver LEED Certification from the U.S. Green Building Council.**



# PROJECT GOALS



- **Develop a range of options that explore both renovation/addition and replacement school for 705 students**
- **Acknowledge phased development of the site with respect to demolition, new construction, access, and use of existing facilities until project is complete**
- **Address connections to the surrounding community in a way that is open and welcoming yet safe and secure for students**
- **Involve the school community in the process through presentations and other means to gain relevant feedback**
- **Meet PSCP Feasibility Study requirements and support any previous initiatives or long term planning established by FCPS and the Liberty school community**
- **Look for opportunities to support 21<sup>st</sup> Century Learning**
- **Acknowledge and celebrate the history of Liberty Elementary**
- **Integrate displays for historical plaques and photos**
- **Preserve the on-site student memorial**
- **Improve accessibility in the building and on the site**
- **Provide upgraded technology**





**LEED v4 for BD+C: Schools**  
Project Checklist



Y	?	N	Credit	Integrative Process	1
<b>0 0 0 Location and Transportation 15</b>					
Y	Y	Y	Credit	LEED for Neighborhood Development Location	15
Y	Y	Y	Credit	Sensitive Land Protection	1
Y	Y	Y	Credit	High Priority Site	2
Y	Y	Y	Credit	Surrounding Density and Diverse Uses	5
Y	Y	Y	Credit	Access to Quality Transit	4
Y	Y	Y	Credit	Bicycle Facilities	1
Y	Y	Y	Credit	Reduced Parking Footprint	1
Y	Y	Y	Credit	Green Vehicles	1
<b>0 0 0 Sustainable Sites 12</b>					
Y	Y	Y	Prereq	Construction Activity Pollution Prevention	Required
Y	Y	Y	Prereq	Environmental Site Assessment	Required
Y	Y	Y	Credit	Site Assessment	1
Y	Y	Y	Credit	Site Development - Protect or Restore Habitat	2
Y	Y	Y	Credit	Open Space	1
Y	Y	Y	Credit	Rainwater Management	3
Y	Y	Y	Credit	Heat Island Reduction	2
Y	Y	Y	Credit	Light Pollution Reduction	1
Y	Y	Y	Credit	Site Master Plan	1
Y	Y	Y	Credit	Joint Use of Facilities	1
<b>0 0 0 Water Efficiency 12</b>					
Y	Y	Y	Prereq	Outdoor Water Use Reduction	Required
Y	Y	Y	Prereq	Indoor Water Use Reduction	Required
Y	Y	Y	Prereq	Building-Level Water Metering	Required
Y	Y	Y	Credit	Outdoor Water Use Reduction	2
Y	Y	Y	Credit	Indoor Water Use Reduction	7
Y	Y	Y	Credit	Cooling Tower Water Use	2
Y	Y	Y	Credit	Water Metering	1
<b>0 0 0 Energy and Atmosphere 31</b>					
Y	Y	Y	Prereq	Fundamental Commissioning and Verification	Required
Y	Y	Y	Prereq	Minimum Energy Performance	Required
Y	Y	Y	Prereq	Building-Level Energy Metering	Required
Y	Y	Y	Prereq	Fundamental Refrigerant Management	Required
Y	Y	Y	Credit	Enhanced Commissioning	6
Y	Y	Y	Credit	Optimize Energy Performance	16
Y	Y	Y	Credit	Advanced Energy Metering	1
Y	Y	Y	Credit	Demand Response	2
Y	Y	Y	Credit	Renewable Energy Production	3
Y	Y	Y	Credit	Enhanced Refrigerant Management	1
Y	Y	Y	Credit	Green Power and Carbon Offsets	2

Project Name:  
Date:

<b>0 0 0 Materials and Resources 13</b>					
Y	Y	Y	Prereq	Storage and Collection of Recyclables	Required
Y	Y	Y	Prereq	Construction and Demolition Waste Management Planning	Required
Y	Y	Y	Credit	Building Life-Cycle Impact Reduction	5
Y	Y	Y	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
Y	Y	Y	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
Y	Y	Y	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
Y	Y	Y	Credit	Construction and Demolition Waste Management	2
<b>0 0 0 Indoor Environmental Quality 16</b>					
Y	Y	Y	Prereq	Minimum Indoor Air Quality Performance	Required
Y	Y	Y	Prereq	Environmental Tobacco Smoke Control	Required
Y	Y	Y	Prereq	Minimum Acoustic Performance	Required
Y	Y	Y	Credit	Enhanced Indoor Air Quality Strategies	2
Y	Y	Y	Credit	Low-Emitting Materials	3
Y	Y	Y	Credit	Construction Indoor Air Quality Management Plan	1
Y	Y	Y	Credit	Indoor Air Quality Assessment	2
Y	Y	Y	Credit	Thermal Comfort	1
Y	Y	Y	Credit	Interior Lighting	2
Y	Y	Y	Credit	Daylight	3
Y	Y	Y	Credit	Quality Views	1
Y	Y	Y	Credit	Acoustic Performance	1
<b>0 0 0 Innovation 6</b>					
Y	Y	Y	Credit	Innovation	5
Y	Y	Y	Credit	LEED Accredited Professional	1
<b>0 0 0 Regional Priority 4</b>					
Y	Y	Y	Credit	Regional Priority: Specific Credit	1
Y	Y	Y	Credit	Regional Priority: Specific Credit	1
Y	Y	Y	Credit	Regional Priority: Specific Credit	1
Y	Y	Y	Credit	Regional Priority: Specific Credit	1
<b>0 0 0 TOTALS Possible Points: 110</b>					

**Certified:** 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

## 1. Renovation and Addition – Limited demolition

- Strategic renovations to the exterior and interior with partial demolition and construction of additional space.

## 2. Renovation and Addition – Partial Demolition

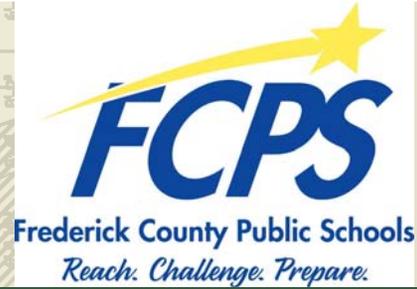
- Complete renovation of the existing facility, extensive demolition of existing partitions, and construction of additional space to meet the Educational Specification requirements.

## 3. New Construction – replacement

- Construction of an entirely new facility on the existing site to meet the Educational Specification requirements.

ED. SPEC. TO  
ACTUAL  
COMPARISON

EDUCATIONAL  
SPECIFICATIONS



SPACE	EXISTING QUANTITY	ED SPEC QUANTITY	DIFFERENCE
K. CLASSROOMS	2	5 + 1 PREK	4
1-5 CLASSROOMS	10	25	-15
SPEC. ED. CLASSROOMS	1	1	0
EL CLASSROOM	1 (PORTABLE)	1	1
MUSIC	2 (PORTABLE)	2	1
ART	1	2	1

SPACE	EX. SF	ED. SPEC.
CAFETERIA	2,570	4,000
GYMNASIUM	3,170	6,272
MEDIA CENTER	1,590	2,000
TYPICAL CLASSROOM	780	800
K. CLASSROOM	780	1,100
MUSIC	865	950
ART	865	1,000
ADMINISTRATION	1,620	2,100

# EXISTING FLOOR PLAN

# EXISTING CONDITIONS



Frederick County Public Schools  
*Reach. Challenge. Prepare.*

Proffitt & Assoc.  
ARCHITECTS



**MAIN LEVEL**



**UPPER LEVEL**



**LOWER LEVEL**

LEGEND	
	Media/ Computer
	General Classroom
	Support
	All Purpose/ Stage/ Food Service
	Kindergarten
	Specials
	Gymnasium
	Administration
	Corridors/ Circulation

- MAIN LEVEL IS APPROX. 28,500 GSF

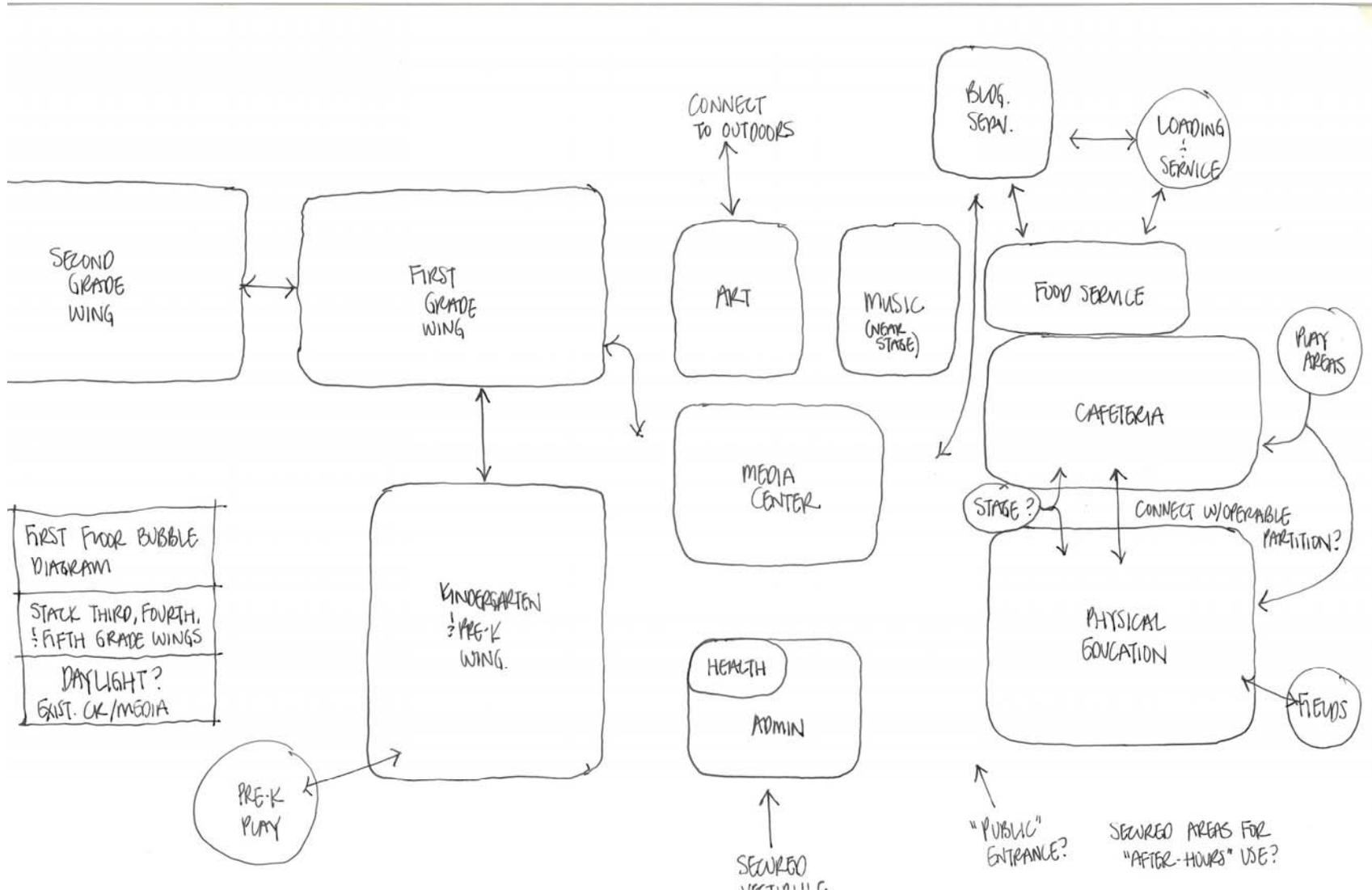


# FIRST FLOOR BLOCKING DIAGRAM

# CONCEPT FLOOR PLAN

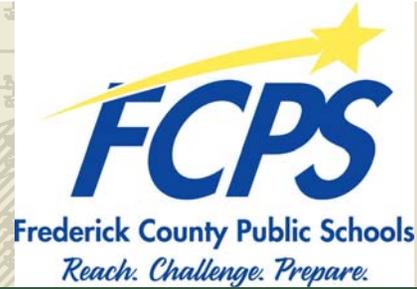


Frederick County Public Schools  
*Reach. Challenge. Prepare.*



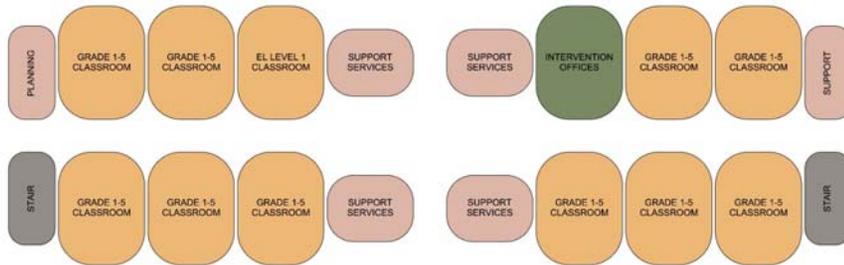
# CLASSROOM ORGANIZATIONAL CONCEPTS

# CONCEPT FLOOR PLAN

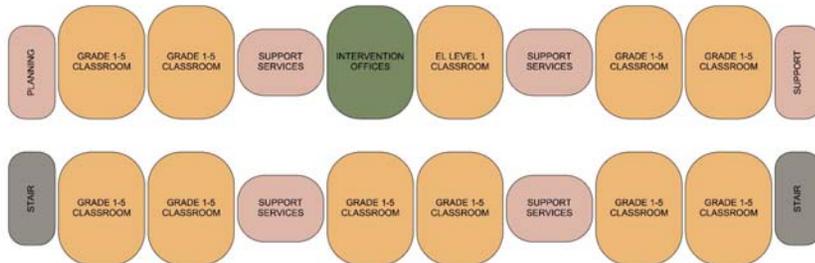


CLASSROOM WING ORGANIZATIONAL CONCEPT #1

LEGEND	
	Media/ Computer
	General Classroom
	Support
	All Purpose/ Stage/ Food Service
	Kindergarten
	Specials
	Gymnasium
	Administration
	Corridors/ Circulation



CLASSROOM WING ORGANIZATIONAL CONCEPT #2



CLASSROOM WING ORGANIZATIONAL CONCEPT #3

ADDITION /  
RENOVATION  
OPTION #1  
FIRST FLOOR

CONCEPT  
FLOOR PLAN



Frederick County Public Schools  
*Reach. Challenge. Prepare.*

Proffitt & Assoc.  
ARCHITECTS

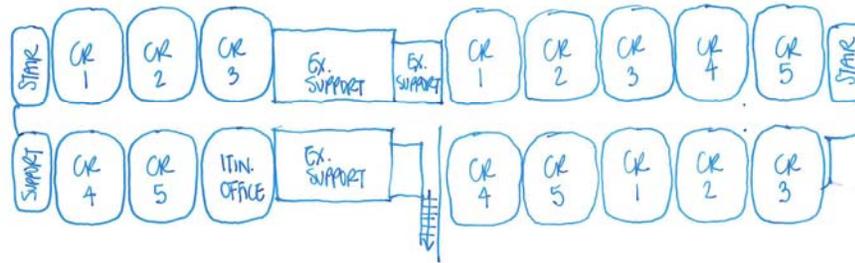


ADDITION /  
RENOVATION  
OPTION #1  
SECOND FLOOR

CONCEPT  
FLOOR PLAN



Frederick County Public Schools  
*Reach. Challenge. Prepare.*



18-35 LIBERTY ES  
FEASIBILITY

ADDITION/RENOVATION  
OPTION #1  
JAN 3, 2019  
SECOND FLOOR

1"=30'-0"

