

# REBUILDING

A LEGACY OF RESILIENCE



## CODE 2

DESIGN PHASE REPORT  
OCTOBER 2025

# YVONNE E. MILLINER-BOWSKY PK-8 SCHOOL

[CODE 2]

ST. THOMAS, U.S. VIRGIN ISLANDS



# BOWSKY PK-8 SCHOOL

[ CODE 2 ] AT ST. THOMAS, U.S. VIRGIN ISLANDS

|     |   |    |
|-----|---|----|
| 1.0 | INTRODUCTION .....                                | 03 |
|     | A. Purpose .....                                  | 03 |
|     | B. Goals and Objectives .....                     | 03 |
|     | C. Summary .....                                  | 03 |
| 2.0 | BACKGROUND .....                                  | 04 |
|     | A. Existing Facility .....                        | 04 |
| 3.0 | REQUIREMENT/ PROGRAM TABULATION .....             | 07 |
| 4.0 | CONCEPTUAL BUILDING DESIGN .....                  | 17 |
|     | A. Conceptual Building Design Summary .....       | 17 |
| 5.0 | CONCEPTUAL SITE PLAN .....                        | 22 |
|     | A. Site Plan Summary .....                        | 22 |
|     | B. Phasing .....                                  | 23 |
|     | C. Demolition .....                               | 23 |
|     | D. Site Plan Graphics .....                       | 24 |
| 6.0 | ENVIRONMENTAL HAZARDS .....                       | 40 |
|     | A. Environmental Assessment .....                 | 40 |
|     | B. Flood Plans .....                              | 40 |
|     | C. Cultural Resources .....                       | 40 |
|     | D. Wetlands .....                                 | 40 |
|     | E. Critical Zones/ Buffer .....                   | 40 |
|     | F. Vegetation .....                               | 41 |
|     | G. Operations Constraints .....                   | 41 |
|     | H. Hazardous Material Storage .....               | 41 |
| 7.0 | SUPPORTING INFRASTRUCTURE .....                   | 42 |
|     | A. Site Preparation and Grading .....             | 42 |
|     | B. Structural - Loads & Seismic .....             | 43 |
|     | C. Heating / Ventilation / Air Conditioning ..... | 47 |
|     | D. Plumbing .....                                 | 53 |
|     | E. Water/ Sewer/ Gas .....                        | 59 |
|     | F. Electrical .....                               | 60 |
|     | G. Communications .....                           | 74 |
|     | H. Fire Protection .....                          | 80 |
|     | I. Storm Drain and Storm Water Management .....   | 82 |
|     | J. Pavements .....                                | 82 |
|     | K. Transitional Structures and Spaces .....       | 82 |
| 8.0 | SAFETY / SECURITY .....                           | 83 |
|     | A. Safety / Security Standards .....              | 83 |
| 9.0 | SUMMARY OF SCOPE CHANGES .....                    | 86 |
| 10. | SPECIFICATIONS .....                              | 87 |
|     | APPENDICES .....                                  | 97 |

## 1.0 INTRODUCTION

### A. PURPOSE

This report provides a basis for understanding project development history, requirements tabulation, and conceptual execution strategy for the proposed replacement of the Yvonne E. Milliner-Bowsky PK-8 School in St. Thomas, U.S. Virgin Islands. Active involvement by the user during all phases of project development, design, and construction is essential to ensure the facility meets all Virgin Islands Department of Education (VIDE) criteria, functional and master plan requirements. The following design assumptions were used to establish a basis for the conceptual and schematic design. The design assumptions are not intended to be prescriptive and are included to provide confirmation of the program, site and serve as the basis for the cost estimate confirmation.

### B. GOALS AND OBJECTIVES

The goal of VIDE is to design schools to meet 21st century learning objectives to include innovation in education, curriculum delivery, use of technology, and the requirements for resiliency, sustainability and energy conservation. VIDE requires schools of the future to be flexible and adaptable, allowing adjustments to new and innovative ways to deliver instruction and meet the needs of all students. A focus on quality, resiliency and value must be maintained throughout the project including design and construction. The ultimate objectives for VIDE in partnership with the Virgin Islands Office of Disaster Recovery within the Virgin Islands Public Finance Authority, are to deliver the project on time, within available funds, and in a safe manner that satisfies the needs of students, faculty and families of the territory.

### C. SUMMARY

In the process of meeting the goals and objectives defined above and below with VIDE's mission and vision, the PDT were able to accomplish the following tasks to move this important project forward:

- ✓ Program + Scope Confirmation
- ✓ Site Horizontal Control Confirmation
- ✓ Plan Horizontal Control Confirmation
- ✓ Aesthetic Approach Confirmation



#### VIDE Mission Statement

*The Virgin Islands Department of Education (VIDE) provides a safe and nurturing environment, high quality instruction, and continuous support so ALL students succeed in college and careers as citizens in a globally diverse world.*

#### VIDE Vision

*The VIDE embraces ALL students and empowers them to achieve their fullest potential.*

## 2.0 BACKGROUND

### A. EXISTING FACILITY

Bowsky PK-8 School is currently located in existing facilities on a now shared site on St. Thomas, US Virgin Islands. The facility has been adapted within existing facilities and temporary / portable facilities to also accommodate the displaced students at the Emanuel Benjamin Oliver Elementary School. The original academic buildings were constructed in 1963 and were renovated in 2000. Additional permanent construction facilities were constructed in 2000 and temporary facilities in 2018. The existing school facilities were generally assessed with the Educational Facility Master Plan (by DLR in 2020) indicating the facilities were at an average 50% Space Curricula Alignment Indicator (SCAI) measuring the ability to be a community resource, stimulating architecture, safe and secure supervision and security, learning environments that connects, flexibility and comfortable and healthy.

#### Elementary Dashboard

|                      |  |
|----------------------|--|
| <b>CONSTRUCTION</b>  | Original Building 1963   |
| <b>CAPACITY</b>      | Grade Level K-5<br>Student Count 390<br><small>Actual student enrollment 2019/2020</small>             |
| <b>BUILDING AREA</b> | GSF 53,978 SF<br>Shuttered 29%<br>Indoor/Outdoor 61%/39%<br><small>*SF based on 2018/2019 data</small> |



#### Survey summaries at Yvonne E. Milliner-Bowsky Elementary School

Space curricula



|   |   |   |   |  |
|---|---|---|---|--|
|  Admin     |  Auditorium |  Library |  Condemned |  Modularity |
|  Classroom |  Gym        |  Special |  Cafeteria |  |

The observed condition of the school facilities concurs with the recent SCAI Analysis as they appear to be generally adequate for the existing functions; however, require modification to allow accommodation for the intended expanded school program, development of the new Educational Pre-K to 8<sup>th</sup> grade configuration and to deliver a project-based 21<sup>st</sup> Century curriculum.

As noted, the facilities are undersized for the intended student stations needed and the selected areas are not for the age groups required; several of the existing facilities are damaged with water infiltration and IAQ concerns; along with the heating, ventilation and electrical systems require rework for full operational and code compliance as well as on-site storm drainage conditions affecting the existing campus. The existing facilities appear to have been updated with selective finish repairs and infrastructure repairs to extend their useful life, however, they in general require repairs, modifications and/or renovation to facilitate the needs of VIDE's 21st Century School requirements. The findings of

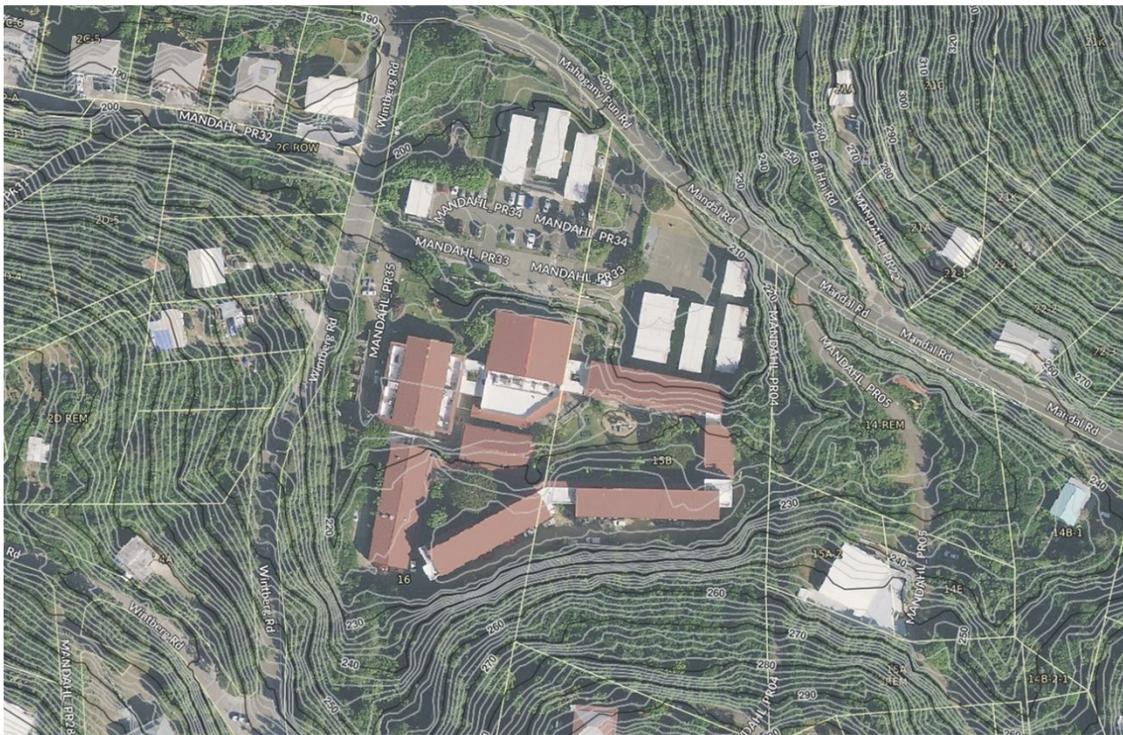
# BOWSKY PK-8 SCHOOL

the PDT (Planning Design Team) are consistent with this recommendation based on site observation. The existing educational spaces of classrooms and labs inadequately support current VIDE 21st Century School educational initiatives in terms of space quantity, functional adjacencies and required spatial relationships for the original intended use and the age groups required (elementary and primary school ages).

As outlined above, the total area of the existing permanent facilities is approximately 53,978 SF.

The total area of the existing relocatable / temporary facilities is approximately 14,600 SF. *(Note: These temporary facilities are recommended for consideration of future removal.)*

The following permanent buildings are recommended to remain: All existing facilities (53,978 SF).



Existing School Site Aerial



Responses

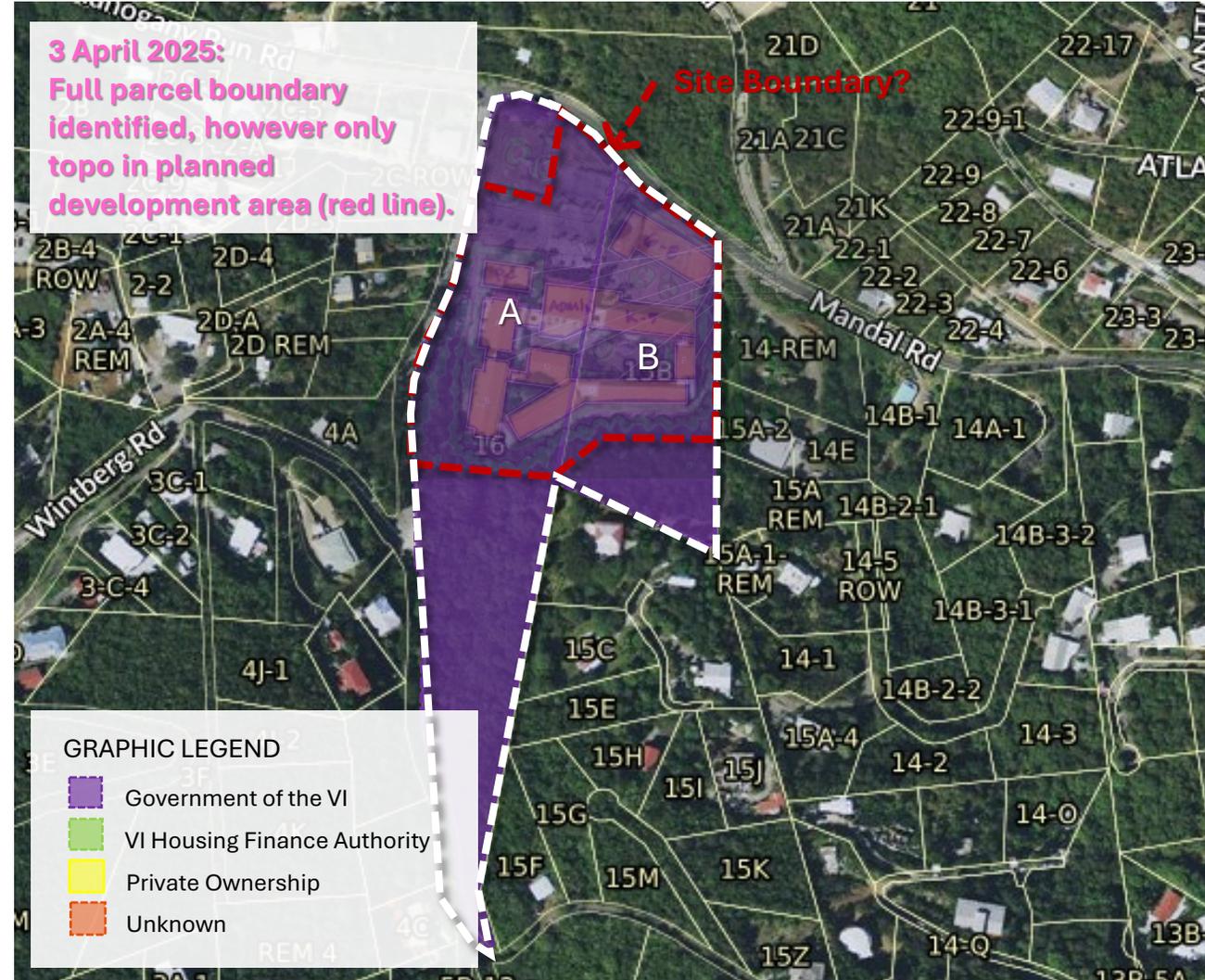
Erika Gulick  
April 1, 2025 at 7:46 PM

The general area identified by Suffolk within Parcel A and Parcel B is intended to be redeveloped as part of this project. Surveys should be conducted and any easement information, deeds, project boundaries, legal descriptions and ownership should be confirmed by a registered land surveyor through Suffolk-CBNA with the Government of the Virgin Islands, including the Department of Property and Procurement, as soon as possible as part of its pre-construction services.

Attachments

PARCEL LEGEND

- A** Property ID 103103020100  
Address MANDAHL 16 GREAT NORTHSIDE QTR  
Owner GOVERNMENT OF THE V.I.  
Address 8100 Lindbergh Bay 61  
St Thomas VI 00802
- B** Property ID 103103020200  
Address MANDAHL 15B 1 GR NORTHSIDE QTR  
Owner GOVERNMENT OF THE V.I.  
Address 8100 Lindbergh Bay 61  
St Thomas VI 00802



3 April 2025:  
Full parcel boundary  
identified, however only  
topo in planned  
development area (red line).

**GRAPHIC LEGEND**

- Government of the VI
- VI Housing Finance Authority
- Private Ownership
- Unknown



### 3.0 REQUIREMENT / PROGRAM TABULATION

#### A. REQUIREMENT / AUTHORIZATIONS TABULATION

The proposed renovation and expansion of the Bowsky PK-8 School has a projected population of 624 students and will meet the standards outlined in the VIDE Facilities Education Master Plan and Specifications for the spaces planned for both renovation and expansion. The school is authorized to include a range from 75,600 to 81,700 gross square feet (GSF) with exterior covered areas. *(Note: The existing facility has built in efficiencies with exterior circulation resulting in 54,000 SF of existing construction and a planned new gymnasium expansion of 17,400 SF, totaling 71,400 SF. Exterior covered areas will be included as appropriate to the existing campus.)* The intent for the re-programming of the facility is to: 1) accommodate the change to a PK-8 educational model; and 2) bring the facilities in alignment with VIDE’s curriculum delivery requirements for 21<sup>st</sup> Century project-based learning and teaching pedagogy.

For the purposes of evaluating programming requirements, a model PK-8 program (1,070 Student Stations) was developed and provided by VIDE for determining the standards by which the programming shall be based for the planned curriculum delivery. This model was adapted, as demonstrated below to be specific to the school facilities’ capabilities and determine a new final capacity. All modifications are denoted for clarity in developing the final approved program. Please see detailed program included herein.

| US VIRGIN ISLANDS  |                    | 1,070 Target Capacity |                  | PROGRAM FROM RFP DRAWINGS |        |                      |
|--|--------------------|-----------------------|------------------|---------------------------|--------|----------------------|
| BOWSKY PK-8 PROGRAM ANALYSIS   |                    |                       |                  | Revised 5/29/2025         |        |                      |
| U.S. Virgin Islands PK-8 Planning Program                            |                    | Revised 10/25/2023    |                  |                           |        |                      |
| DESIGN PARAMETERS  |                    |                       |                  |                           |        |                      |
| <b>Program Area Summary</b>  |                    |                       |                  |                           |        |                      |
| 1.0  | Administration     | 6,650                 | 0                | 4,048                     | 4,048  |                      |
| 2.0  | Core Academic      | 64,925                | 1,086            | 25,512                    | 25,512 |                      |
| 3.0  | Elective Spaces    | 6,825                 | 155              | 5,094                     | 5,094  |                      |
| 4.0  | Media Center       | 5,250                 | 0                | 4,905                     | 4,905  |                      |
| 5.0  | SPED Services      |                       |                  |                           | 0      |                      |
| 6.0  | Food Service       | 12,125                | 0                | 5,534                     | 5,534  |                      |
| 7.0  | Physical Education | 18,100                | 30               | 13,290                    | 13,290 |                      |
| 8.0  | Building Support   | 1,775                 | 0                | 1,500                     | 1,500  |                      |
| Total Usable Area (Net Square Feet- NSF):                            |                    | 115,650               | 1,271            | (600)                     | 59,883 | 59,883               |
| General Building Area: Walls, Partitions, Mech. Elec., Circ          |                    | 25% of Net SF         | 28,913           |                           | 14,971 | 14,971               |
| <i>*Based on industry standards that include outdoor circulation</i> |                    |                       |                  |                           |        |                      |
| Total Building Area (Gross Square Feet- GSF):                        |                    | 144,563               |                  | (750)                     | 74,854 | 74,854               |
| *Additional Covered Outdoor Learning Spaces                          |                    | 10% of Net SF         | 11,565           | 6.8%                      | 5,060  | (SF Above 69,794 SF) |
| TOTAL BUILDING AREA WITH OUTDOOR LEARNING                            |                    | 156,128               | STUDENT STATIONS | 10%                       | 5,988  | 80,842               |
|  |                    |                       | 1,271            |                           |        |                      |

Note: Final facility area will be per the facility design. (\*See note above.)

The base program area varies from the selected option due to the existing conditions of the facility to be renovated. The final program area will be developed with the next phase of design development.

US VIRGIN ISLANDS  
**BOWSKY PK-8 PROGRAM ANALYSIS**

U.S. Virgin Islands PK-8 Planning Program Revised 10/25/2023

1,070 Target Capacity

| DESIGN PARAMETERS  |               |                |                               |
|--|---------------|----------------|-------------------------------|
| Program Area Summary   |               |                |                               |
| 1.0 Administration   |               | 6,650          | 0                             |
| 2.0 Core Academic  |               | 64,925         | 1,086                         |
| 3.0 Elective Spaces  |               | 6,825          | 155                           |
| 4.0 Media Center   |               | 5,250          | 0                             |
| 5.0 SPED Services  |               |                |                               |
| 6.0 Food Service   |               | 12,125         | 0                             |
| 7.0 Physical Education   |               | 18,100         | 30                            |
| 8.0 Building Support   |               | 1,775          | 0                             |
| <b>Total Useable Area (Net Square Feet- NSF):</b>                            |               | <b>115,650</b> | <b>1,271</b>                  |
| <b>General Building Area: Walls, Partitions, Mech. Elec., Circu</b>          | 25% of Net SF | <b>28,913</b>  |                               |
| <small>*Based on Industry standards that include outdoor circulation</small> |               |                |                               |
| <b>Total Building Area (Gross Square Feet- GSF):</b>                         |               | <b>144,563</b> |                               |
| <small>*Additional Covered Outdoor Learning Spaces</small>                   | 10% of Net SF | 11,565         | 10%                           |
| <b>TOTAL BUILDING AREA WITH OUTDOOR LEARNING</b>                             |               | <b>156,128</b> | <b>STUDENT STATIONS 1,271</b> |

Revised 5/29/2025

**PROGRAM FROM RFP DRAWINGS**

469 Target Capacity

|               |     |  |                |                |                             |             |  |
|---------------|-----|--|----------------|----------------|-----------------------------|-------------|--|
| 4,048         |     |  | -2,602         | -39.13%        | 0                           | 0           |  |
| 25,512        |     |  | -39,413        | -60.71%        | 439                         | 439         |  |
| 5,094         |     |  | -1,731         | -25.36%        | 114                         | 114         |  |
| 4,905         |     |  | -345           | -6.57%         | 0                           | 0           |  |
| 5,534         |     |  | 0              | #DIV/0!        | 0                           | 0           |  |
| 13,890        |     |  | -6,591         | -54.36%        | 0                           | 0           |  |
| 1,500         |     |  | -4,210         | -23.26%        | 30                          | 30          |  |
| 60,483        |     |  | -275           | -15.49%        | 0                           | 0           |  |
| 15,121        |     |  | -55,167        | -47.70%        | 583                         | 583         |  |
| 75,604        |     |  | -13,792        | -47.70%        |                             |             |  |
| 6,048         | 10% |  | -68,959        | -47.70%        |                             |             |  |
| <b>81,652</b> |     |  | <b>-74,475</b> | <b>-47.70%</b> | <b>STUDENT STATIONS 583</b> | <b>-688</b> |  |

**BASE PROGRAM**

| Description of Program, Department, or Unit | RFP - Planning Program |                 |                              | Functional Capacity   |                                    |  |
|---|------------------------|-----------------|------------------------------|-----------------------|------------------------------------|--|
|   | # of Units             | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |

**1.0 Administration** 6,650 5.8%

| 1.1 Administration Offices   |   |     |              |  |  |          |
|------------------------------|---|-----|--------------|--|--|----------|
| Main School Lobby            | 1 | 350 | 350          |  |  |          |
| Toilet                       | 1 | 75  | 75           |  |  |          |
| Secure Vestibule             |   |     |              |  |  |          |
| Reception/Office             | 1 | 750 | 750          |  |  |          |
| Secretary/Bookkeeper Office  |   |     |              |  |  |          |
| Principal Office             | 1 | 175 | 175          |  |  |          |
| Toilet                       | 1 | 75  | 75           |  |  |          |
| Assistant Principal Office   | 2 | 150 | 300          |  |  |          |
| Conference Room              | 1 | 200 | 200          |  |  |          |
| Staff Work/Mail              | 1 | 375 | 375          |  |  |          |
| Faculty Lounge               | 1 | 375 | 375          |  |  |          |
| SRO Office                   | 1 | 150 | 150          |  |  |          |
| Monitors' Office             | 1 | 150 | 150          |  |  |          |
| Staff Toilet                 | 1 | 75  | 75           |  |  |          |
| Mother's Room                | 1 | 75  | 75           |  |  |          |
| Office Supply Storage        | 1 | 75  | 75           |  |  |          |
| Parent Center (Phone Rooms?) | 1 | 325 | 325          |  |  |          |
| IT/AV                        | 1 | 50  | 50           |  |  |          |
| Storage                      | 1 | 50  | 50           |  |  |          |
| Mechanical                   | 1 | 275 | 275          |  |  |          |
| Subtotal                     |   |     | <b>3,900</b> |  |  | <b>0</b> |

**1.2 Student Services**

|                          |   |     |              |  |  |          |
|--------------------------|---|-----|--------------|--|--|----------|
| Reception/Guidance Clerk | 1 | 200 | 200          |  |  |          |
| Counselor's Office       | 2 | 150 | 300          |  |  |          |
| Registrar's Office       | 1 | 150 | 150          |  |  |          |
| Time-Out/Tardy Room      | 2 | 375 | 750          |  |  |          |
| Speech Therapy           | 1 | 250 | 250          |  |  |          |
| Records Room             | 1 | 125 | 125          |  |  |          |
| Conference Room          | 1 | 200 | 200          |  |  |          |
| Staff Toilet             | 1 | 75  | 75           |  |  |          |
| Subtotal                 |   |     | <b>2,050</b> |  |  | <b>0</b> |

**1.3 Health Clinic**

|           |   |     |            |  |  |          |
|-----------|---|-----|------------|--|--|----------|
| Exam/Cot  | 1 | 300 | 300        |  |  |          |
| Office    | 1 | 125 | 125        |  |  |          |
| Infirmiry | 1 | 175 | 175        |  |  |          |
| Toilet    | 1 | 100 | 100        |  |  |          |
| Subtotal  |   |     | <b>700</b> |  |  | <b>0</b> |

**EXISTING FACILITY (30% DESIGN + Gym)**

| Drawings   |                 |                              |       | Actual Capacity       |                                    |  |       |
|------------|-----------------|------------------------------|-------|-----------------------|------------------------------------|--|-------|
| # of Units | Unit Area (nsf) | Total Area (nsf) Requirement | Delta | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity | Delta |

**4,048** 6.7% -2,602 #DIV/0! **0** **0**

|   |     |              |             |                |  |  |          |  |
|---|-----|--------------|-------------|----------------|--|--|----------|--|
| 1 | 400 | 400          | 50          | 14.29%         |  |  | 0        |  |
| 2 | 56  | 112          | 37          | 49.33%         |  |  | 0        | This includes safe & secure vestibule. - Reduction accepted. |
| 1 | 0   | 0            | 0           | #DIV/0!        |  |  | 0        | This includes safe & secure vestibule                        |
| 1 | 278 | 278          | -472        | -62.93%        |  |  | 0        | Reduction accepted.  |
| 1 | 279 | 279          | 279         | #DIV/0!        |  |  | 0        |  |
| 1 | 248 | 248          | 73          | 41.71%         |  |  | 0        |  |
| 1 | 48  | 48           | -27         | -36.00%        |  |  | 0        | This includes safe & secure vestibule                        |
| 1 | 200 | 200          | -100        | -33.33%        |  |  | 0        | Reduction not accepted.                                      |
| 1 | 378 | 378          | 178         | 89.00%         |  |  | 0        |  |
| 1 | 250 | 250          | -125        | -33.33%        |  |  | 0        |  |
| 1 | 285 | 285          | -90         | -24.00%        |  |  | 0        |  |
| 1 | 58  | 58           | -92         | -61.33%        |  |  | 0        |  |
| 1 | 0   | 0            | -150        | #####          |  |  | 0        |  |
| 1 | 0   | 0            | -75         | #####          |  |  | 0        |  |
| 1 | 0   | 0            | -75         | #####          |  |  | 0        |  |
| 1 | 60  | 60           | -15         | -20.00%        |  |  | 0        |  |
| 1 | 150 | 150          | -175        | -53.85%        |  |  | 0        | Reduction accepted.  |
| 1 | 0   | 0            | -50         | #####          |  |  | 0        |  |
| 1 | 156 | 156          | 106         | 212.00%        |  |  | 0        |  |
| 1 | 0   | 0            | -275        | #####          |  |  | 0        |  |
|   |     | <b>2,902</b> | <b>-998</b> | <b>-25.59%</b> |  |  | <b>0</b> |  |

**1.2 Student Services**

|   |     |            |               |                |  |  |          |                     |
|---|-----|------------|---------------|----------------|--|--|----------|---------------------|
| 1 | 150 | 150        | -50           | -25.00%        |  |  | 0        | Reduction accepted. |
| 2 | 130 | 272        | -28           | -9.33%         |  |  | 0        | Reduction accepted. |
| 1 | 0   | 0          | -150          | #####          |  |  | 0        |                     |
| 1 | 60  | 60         | -690          | -92.00%        |  |  | 0        | Reduction accepted. |
| 1 | 0   | 0          | -250          | #####          |  |  | 0        |                     |
| 1 | 110 | 110        | -15           | -12.00%        |  |  | 0        |                     |
| 1 | 150 | 150        | -50           | -25.00%        |  |  | 0        | Reduction accepted. |
| 1 | 0   | 0          | -75           | #####          |  |  | 0        |                     |
|   |     | <b>742</b> | <b>-1,308</b> | <b>-63.80%</b> |  |  | <b>0</b> |                     |

**1.3 Health Clinic**

|   |     |            |             |                |  |  |          |                     |
|---|-----|------------|-------------|----------------|--|--|----------|---------------------|
| 1 | 100 | 100        | -200        | -66.67%        |  |  | 0        | Reduction accepted. |
| 1 | 68  | 68         | -57         | -45.60%        |  |  | 0        |                     |
| 1 | 156 | 156        | -19         | -10.86%        |  |  | 0        |                     |
| 1 | 80  | 80         | -20         | -20.00%        |  |  | 0        |                     |
|   |     | <b>404</b> | <b>-296</b> | <b>-42.29%</b> |  |  | <b>0</b> |                     |

U.S. Virgin Islands PK-8 Program of Spaces

**BASE PROGRAM**

| Description of Program, Department, or Unit | RFP - Planning Program |                 |                              | Functional Capacity   |                                    |  |
|---|------------------------|-----------------|------------------------------|-----------------------|------------------------------------|--|
|   | # of Units             | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |

**2.0 Core Academic 64,925**

**2.1 Pre-K Core Academic**

| SMALL LEARNING COMMUNITY | Description of Program, Department, or Unit | # of Units | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |
|--------------------------|---|------------|-----------------|------------------------------|-----------------------|------------------------------------|--|
|                          | Pre-K Learning Suite-Classroom w/RR         | 2          | 1,200           | 2,400                        | 2                     | 17                                 | 34                                     |
|                          | Multipurpose/Gross Motor                    | 1          | 1,700           | 1,700                        |                       |                                    |  |
|                          | Toilet                                      | 1          | 50              | 50                           |                       |                                    |  |
|                          | Teacher Planning                            | 1          | 350             | 350                          |                       |                                    |  |
|                          | Toilet                                      | 1          | 50              | 50                           |                       |                                    |  |
|                          | Storage                                     | 1          | 75              | 75                           |                       |                                    |  |
|                          | IT/AV                                       | 1          | 75              | 75                           |                       |                                    |  |
|                          | Mechanical                                  | 1          | 275             | 275                          |                       |                                    |  |
|                          | Outdoor Learning Space                      |            |                 |                              |                       |                                    |  |
|                          | Subtotal                                    |            |                 | 4,975                        |                       |                                    | 34                                     |

**2.2 Elementary Core Academic**

| SMALL LEARNING COMMUNITY         | Description of Program, Department, or Unit | # of Units | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |
|----------------------------------|---|------------|-----------------|------------------------------|-----------------------|------------------------------------|--|
| SMALL LEARNING COMMUNITY         | Learning Suite 1- Classroom w/RR (Kinder)   | 1          | 1,200           | 1,200                        | 1                     | 25                                 | 25                                     |
|                                  | Learning Suite 1- Classroom (1st-5th)       | 5          | 850             | 4,250                        | 5                     | 30                                 | 150                                    |
|                                  | Open Collaboration Space                    | 2          | 1,200           | 2,400                        |                       |                                    |  |
|                                  | Small Group Instruction                     | 2          | 125             | 250                          |                       |                                    |  |
|                                  | Distance Learning                           | 1          | 125             | 125                          |                       |                                    |  |
|                                  | Teacher Planning                            | 1          | 500             | 500                          |                       |                                    |  |
|                                  | Toilet                                      | 1          | 50              | 50                           |                       |                                    |  |
|                                  | Office                                      | 1          | 75              | 75                           |                       |                                    |  |
|                                  | Student Restrooms                           | 2          | 250             | 500                          |                       |                                    |  |
|                                  | Toilet                                      | 1          | 75              | 75                           |                       |                                    |  |
|                                  | Custodial                                   | 1          | 75              | 75                           |                       |                                    |  |
|                                  | Storage                                     | 1          | 325             | 325                          |                       |                                    |  |
|                                  | MEP/IT                                      | 1          | 325             | 325                          |                       |                                    |  |
|                                  | Shared Outdoor Learning Space #1            |            |                 |                              |                       |                                    |  |
| SMALL LEARNING COMMUNITY         | Learning Suite 2- Classroom w/RR (SPED)     | 1          | 1,200           | 1,200                        | 1                     | 25                                 | 25                                     |
|                                  | Storage                                     | 1          | 125             | 125                          |                       |                                    |  |
|                                  | Learning Suite 2- Classroom (1st-5th)       | 5          | 850             | 4,250                        | 5                     | 30                                 | 150                                    |
|                                  | Open Collaboration Space                    | 2          | 1,200           | 2,400                        |                       |                                    |  |
|                                  | Small Group Instruction                     | 2          | 125             | 250                          |                       |                                    |  |
|                                  | Teacher Planning                            | 1          | 500             | 500                          |                       |                                    |  |
|                                  | Toilet                                      | 1          | 50              | 50                           |                       |                                    |  |
|                                  | Office                                      | 1          | 75              | 75                           |                       |                                    |  |
|                                  | Student Restrooms                           | 2          | 250             | 500                          |                       |                                    |  |
|                                  | Toilet                                      | 1          | 75              | 75                           |                       |                                    |  |
|                                  | Custodial                                   | 1          | 75              | 75                           |                       |                                    |  |
|                                  | Storage                                     | 1          | 325             | 325                          |                       |                                    |  |
|                                  | MEP/Water Heater                            | 1          | 325             | 325                          |                       |                                    |  |
|                                  | Shared Outdoor Learning Space #2            |            |                 |                              |                       |                                    |  |
| SMALL LEARNING COMMUNITY         | Learning Suite 3- Classroom w/RR (Kinder)   | 1          | 1,200           | 1,200                        | 1                     | 25                                 | 25                                     |
|                                  | Learning Suite 3- Classroom (1st-5th)       | 5          | 850             | 4,250                        | 5                     | 30                                 | 150                                    |
|                                  | Open Collaboration Space                    | 2          | 1,200           | 2,400                        |                       |                                    |  |
|                                  | Small Group Instruction                     | 2          | 125             | 250                          |                       |                                    |  |
|                                  | Distance Learning                           | 1          | 125             | 125                          |                       |                                    |  |
|                                  | Teacher Planning                            | 1          | 500             | 500                          |                       |                                    |  |
|                                  | Toilet                                      | 1          | 50              | 50                           |                       |                                    |  |
|                                  | Office                                      | 1          | 75              | 75                           |                       |                                    |  |
|                                  | Student Restrooms                           | 2          | 250             | 500                          |                       |                                    |  |
|                                  | Toilet                                      | 1          | 75              | 75                           |                       |                                    |  |
|                                  | Custodial                                   | 1          | 75              | 75                           |                       |                                    |  |
|                                  | Storage                                     | 1          | 325             | 325                          |                       |                                    |  |
|                                  | MEP/IT                                      | 1          | 325             | 325                          |                       |                                    |  |
|                                  | Shared Outdoor Learning Space #3            |            |                 |                              |                       |                                    |  |
| SMALL LEARNING COMMUNITY         | Learning Suite 4- Classroom w/RR (SPED)     | 1          | 1,200           | 1,200                        | 1                     | 25                                 | 25                                     |
|                                  | Storage                                     | 1          | 125             | 125                          |                       |                                    |  |
|                                  | Learning Suite 24- Classroom (1st-5th)      | 5          | 850             | 4,250                        | 5                     | 30                                 | 150                                    |
|                                  | Open Collaboration Space                    | 2          | 1,200           | 2,400                        |                       |                                    |  |
|                                  | Small Group Instruction                     | 2          | 125             | 250                          |                       |                                    |  |
|                                  | Distance Learning                           | 1          | 125             | 125                          |                       |                                    |  |
|                                  | Teacher Planning                            | 1          | 500             | 500                          |                       |                                    |  |
|                                  | Toilet                                      | 1          | 50              | 50                           |                       |                                    |  |
|                                  | Office                                      | 1          | 75              | 75                           |                       |                                    |  |
|                                  | Student Restrooms                           | 2          | 250             | 500                          |                       |                                    |  |
|                                  | Toilet                                      | 1          | 75              | 75                           |                       |                                    |  |
|                                  | Custodial                                   | 1          | 75              | 75                           |                       |                                    |  |
|                                  | Storage                                     | 1          | 325             | 325                          |                       |                                    |  |
|                                  | MEP/IT                                      | 1          | 325             | 325                          |                       |                                    |  |
| Shared Outdoor Learning Space #4 |   |            |                 |                              |                       |                                    |  |
| Subtotal                         |   |            | 40,600          |                              |                       | 700                                |  |

**EXISTING FACILITY (30% DESIGN + Gym)**

| # of Units | Unit Area (nsf) | Total Area (nsf) Requirement | Delta | Actual Capacity       |                                    |  | Delta | Notes |
|------------|-----------------|------------------------------|-------|-----------------------|------------------------------------|--|-------|-------|
|            |                 |                              |       | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |       |       |

**25,512 -39,413 439 405**

| SMALL LEARNING COMMUNITY | Description of Program, Department, or Unit | # of Units | Unit Area (nsf) | Total Area (nsf) Requirement | Delta | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity | Delta | Notes  |
|--------------------------|---|------------|-----------------|------------------------------|-------|-----------------------|------------------------------------|--|-------|--|
|                          | Pre-K Learning Suite-Classroom w/RR         | 2          | 1,032           | 2,064                        | 2,064 | 2                     | 17                                 | 34                                     | 34    | Classrooms reduced in size due to existing conditions. |
|                          | Multipurpose/Gross Motor                    | 1          | 1,032           | 1,032                        | 1,032 |                       |                                    |  | 0     | Room reduced in size due to existing conditions.       |
|                          | Toilet                                      | 2          | 50              | 100                          | 100   |                       |                                    |  | 0     | Restroom per room accepted.                            |
|                          | Teacher Planning                            | 1          | 375             | 375                          | 375   |                       |                                    |  | 0     | Space available in existing facility.                  |
|                          | Toilet                                      | 1          | 50              | 50                           | 50    |                       |                                    |  | 0     |  |
|                          | Storage                                     | 1          | 108             | 108                          | 108   |                       |                                    |  | 0     |  |
|                          | IT/AV                                       | 1          | 108             | 108                          | 108   |                       |                                    |  | 0     |  |
|                          | Mechanical                                  | 1          | 0               | 0                            | 0     |                       |                                    |  | 0     | To be confirmed in design.                             |
|                          | Outdoor Learning Space                      | 1          | 0               | 0                            | 0     |                       |                                    |  | 0     |  |
|                          | Subtotal                                    |            |                 | 3,837                        | 3,837 |                       |                                    | 34                                     | 0     |  |

**2.2 Elementary Core Academic**

| SMALL LEARNING COMMUNITY         | Description of Program, Department, or Unit | # of Units | Unit Area (nsf) | Total Area (nsf) Requirement | Delta   | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity | Delta  | Notes  |
|----------------------------------|---|------------|-----------------|------------------------------|---------|-----------------------|------------------------------------|--|--|--|
| SMALL LEARNING COMMUNITY         | Learning Suite 1- Classroom w/RR (Kinder)   | 2          | 1,020           | 2,040                        | 2,040   | 2                     | 25                                 | 50                                     | 50   | Classrooms reduced in size due to existing conditions. |
|                                  | Learning Suite 1- Classroom (1st-5th)       | 2          | 835             | 1,670                        | 1,670   | 2                     | 30                                 | 60                                     | 60   | Classrooms reduced in size due to existing conditions. |
|                                  | Open Collaboration Space                    | 1          | 1,020           | 1,020                        | 1,020   |                       |                                    |  | 0  | Room reduced in size due to existing conditions.       |
|                                  | Small Group Instruction                     | 1          | 0               | 0                            | 0       |                       |                                    |  | 0  | Space to be added to design.                           |
|                                  | Distance Learning                           | 1          | 0               | 0                            | 0       |                       |                                    |  | 0  |  |
|                                  | Teacher Planning                            | 1          | 354             | 354                          | 354     |                       |                                    |  | 0  | Room reduced in size due to existing conditions.       |
|                                  | Toilet                                      | 1          | 50              | 50                           | 50      |                       |                                    |  | 0  |  |
|                                  | Office                                      | 1          | 75              | 75                           | 75      |                       |                                    |  | 0  |  |
|                                  | Student Restrooms                           | 2          | 100             | 200                          | 100     |                       |                                    |  | 0  | Reduction accepted.                                    |
|                                  | Toilet                                      | 1          | 150             | 150                          | 150     |                       |                                    |  | 0  |  |
|                                  | Custodial                                   | 1          | 0               | 0                            | 0       |                       |                                    |  | 0  |  |
|                                  | Storage                                     | 1          | 150             | 150                          | 150     |                       |                                    |  | 0  | Reduction accepted.                                    |
|                                  | MEP/IT                                      | 1          | 350             | 350                          | 350     |                       |                                    |  | 0  | Reduction accepted.                                    |
|                                  | Shared Outdoor Learning Space #1            | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  |  |
| SMALL LEARNING COMMUNITY         | Learning Suite 2- Classroom w/RR (SPED)     | 0          | 995             | 0                            | 0       | 0                     | 25                                 | 0                                      | 0  | Classrooms reduced in size due to existing conditions. |
|                                  | Storage                                     | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Reduction accepted.                                    |
|                                  | Learning Suite 2- Classroom (1st-5th)       | 6          | 904             | 5,424                        | 5,424   | 6                     | 30                                 | 180                                    | 180  | Classrooms reduced in size due to existing conditions. |
|                                  | Open Collaboration Space                    | 1          | 1,190           | 1,190                        | 1,190   |                       |                                    |  | 0  | Room reduced in size due to existing conditions.       |
|                                  | Small Group Instruction                     | 1          | 0               | 0                            | 0       |                       |                                    |  | 0  | Space to be added to design.                           |
|                                  | Teacher Planning                            | 1          | 350             | 350                          | 350     |                       |                                    |  | 0  | Room reduced in size due to existing conditions.       |
|                                  | Toilet                                      | 1          | 50              | 50                           | 50      |                       |                                    |  | 0  |  |
|                                  | Office                                      | 1          | 192             | 192                          | 192     |                       |                                    |  | 0  |  |
|                                  | Student Restrooms                           | 2          | 150             | 300                          | 150     |                       |                                    |  | 0  | Reduction accepted.                                    |
|                                  | Toilet                                      | 1          | 0               | 0                            | 0       |                       |                                    |  | 0  |  |
|                                  | Custodial                                   | 1          | 0               | 0                            | 0       |                       |                                    |  | 0  |  |
|                                  | Storage                                     | 1          | 500             | 500                          | 500     |                       |                                    |  | 0  | Reduction accepted.                                    |
|                                  | MEP/Water Heater                            | 1          | 200             | 200                          | 200     |                       |                                    |  | 0  | Reduction accepted.                                    |
|                                  | Shared Outdoor Learning Space #2            | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  |  |
| SMALL LEARNING COMMUNITY         | Learning Suite 3- Classroom w/RR (Kinder)   | 0          | 995             | 0                            | #VALUE! | 0                     | 25                                 | 0                                      | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Learning Suite 3- Classroom (1st-5th)       | 0          | 835             | 0                            | 0       | 0                     | 30                                 | 0                                      | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Open Collaboration Space                    | 0          | 1,000           | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Small Group Instruction                     | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Distance Learning                           | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Teacher Planning                            | 0          | 350             | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Toilet                                      | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Office                                      | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Student Restrooms                           | 0          | 150             | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Toilet                                      | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Custodial                                   | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Storage                                     | 0          | 150             | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | MEP/IT                                      | 0          | 200             | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Shared Outdoor Learning Space #3            | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
| SMALL LEARNING COMMUNITY         | Learning Suite 4- Classroom w/RR (SPED)     | 0          | 995             | 0                            | 0       | 0                     | 25                                 | 0                                      | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Storage                                     | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Learning Suite 24- Classroom (1st-5th)      | 0          | 835             | 0                            | 0       | 0                     | 30                                 | 0                                      | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Open Collaboration Space                    | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Small Group Instruction                     | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Distance Learning                           | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Teacher Planning                            | 0          | 350             | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Toilet                                      | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Office                                      | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Student Restrooms                           | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Toilet                                      | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Custodial                                   | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Storage                                     | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | MEP/IT                                      | 0          | 0               | 0                            | 0       |                       |                                    |  | 0  | Removed with Student Station Reduction - Accepted.     |
| Shared Outdoor Learning Space #4 | 0   | 0          | 0               | 0                            |         |                       |                                    | 0                                      | Removed with Student Station Reduction - Accepted. |  |
| Subtotal                         |   |            | 14,240          | #VALUE!                      | #VALUE! |                       |                                    | 290                                    | 290  |  |

U.S. Virgin Islands PK-8 Program of Spaces

**BASE PROGRAM**

| Base Program                                |            | RFP - Planning Program |                              | Functional Capacity   |                                    |  |
|---|------------|------------------------|------------------------------|-----------------------|------------------------------------|--|
| Description of Program, Department, or Unit | # of Units | Unit Area (nsf)        | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |

| 2.3 Middle School Core Academic |                                    |   |        |       |   |     |     |
|---------------------------------|------------------------------------|---|--------|-------|---|-----|-----|
| SMALL LEARNING COMMUNITY        | Learning Suite- Studio (6th-8th)   | 8 | 850    | 6,800 | 8 | 30  | 240 |
|                                 | Learning Suite- Studio w/RR (SPED) | 1 | 1,200  | 1,200 | 1 | 25  | 25  |
|                                 | Learning Suite- Science Colab      | 1 | 2,000  | 2,000 | 1 | 27  | 27  |
|                                 | Learning Suite- Science Lab        | 1 | 1,000  | 1,000 | 1 | 30  | 30  |
|                                 | Learning Suite- Science Maker      | 1 | 300    | 300   |   |     |     |
|                                 | Learning Suite- Fabrication Lab    | 1 | 750    | 750   | 1 | 30  | 30  |
|                                 | Learning Suite- Prep               | 1 | 175    | 175   |   |     |     |
|                                 | Open Collaborative Space           | 2 | 1,400  | 2,800 |   |     |     |
|                                 | Small Group Instruction            | 4 | 200    | 800   |   |     |     |
|                                 | Distance Learning                  | 2 | 200    | 400   |   |     |     |
|                                 | Teacher Planning                   | 1 | 1,200  | 1,200 |   |     |     |
|                                 | Office                             | 1 | 100    | 100   |   |     |     |
|                                 | Toilet                             | 1 | 50     | 50    |   |     |     |
|                                 | IT/AV                              | 1 | 50     | 50    |   |     |     |
|                                 | Learning Suite Storage             | 1 | 550    | 550   |   |     |     |
|                                 | Student Restrooms                  | 4 | 150    | 600   |   |     |     |
|                                 | Toilet                             | 1 | 50     | 50    |   |     |     |
|                                 | Custodial                          | 2 | 75     | 150   |   |     |     |
|                                 | Mechanical                         | 1 | 375    | 375   |   |     |     |
|                                 | Elevator                           |   |        |       |   |     |     |
| Shared Outdoor Space for 6-8    |                                    |   |        |       |   |     |     |
| Subtotal                        |                                    |   | 19,350 |       |   | 352 |     |

**3.0 Elective Spaces 6,825**

| 3.1 Fine Arts |                                      |   |       |       |   |    |     |
|---------------|--------------------------------------|---|-------|-------|---|----|-----|
|               | Art/Culture Lab                      | 1 | 1,900 | 1,900 | 1 | 30 | 30  |
|               | Storage                              | 1 | 250   | 250   |   |    |     |
|               | MDF                                  | 1 | 125   | 125   |   |    |     |
|               | Choir (Make Music - General)         | 1 | 1,350 | 1,350 | 1 | 41 | 41  |
|               | Storage                              | 2 | 150   | 300   |   |    |     |
|               | IT/AV                                | 1 | 75    | 75    |   |    |     |
|               | Band/Orchestra                       | 1 | 1,200 | 1,200 | 1 | 54 | 54  |
|               | Steel Pan Drums (Make General Music) | 1 | 1,200 | 1,200 | 1 | 30 | 30  |
|               | Storage                              | 1 | 425   | 425   |   |    |     |
|               | Mech/ Elec                           |   |       |       |   |    |     |
|               | Outdoor Learning Space               |   |       |       |   |    |     |
|               | Subtotal                             |   |       | 6,825 |   |    | 155 |

**4.0 Media Center 5,250**

| 4.1 Media Center |                    |   |       |       |  |  |   |
|------------------|--------------------|---|-------|-------|--|--|---|
|                  | Media Center       | 1 | 4,300 | 4,300 |  |  |   |
|                  | Distance Learning  | 1 | 175   | 175   |  |  |   |
|                  | Small Group Room   | 2 | 75    | 150   |  |  |   |
|                  | Storage            | 2 | 100   | 200   |  |  |   |
|                  | Office             | 1 | 175   | 175   |  |  |   |
|                  | Workroom (w/ Sink) | 1 | 175   | 175   |  |  |   |
|                  | Toilet             | 1 | 75    | 75    |  |  |   |
|                  | MECH               |   |       |       |  |  |   |
|                  | Subtotal           |   |       | 5,250 |  |  | 0 |

**5.0 Special Education Services 0**

| 5.1 Special Education Services |  |  |  |  |  |  |
|--------------------------------|--|--|--|--|--|--|
|                                | *See Core Academic program for incorporation of SPED spaces. |  |  |  |  |  |

**6.0 Food Service 12,125**

| 6.1 Food Service |                                       |   |       |        |  |  |   |
|------------------|---------------------------------------|---|-------|--------|--|--|---|
|                  | PK-5 Dining Area                      | 1 | 4,300 | 4,300  |  |  |   |
|                  | PK-5 Outdoor Covered Dining/Play Area |   |       |        |  |  |   |
|                  | Shared Stage                          | 1 | 1,000 | 1,000  |  |  |   |
|                  | Chair Storage (300 chairs)            | 1 | 200   | 200    |  |  |   |
|                  | Boys Restroom w/ Changing Room        | 1 | 400   | 400    |  |  |   |
|                  | Girls Restroom w/ Changing Room       | 1 | 400   | 400    |  |  |   |
|                  | 6-8 Dining Area                       | 1 | 2,200 | 2,200  |  |  |   |
|                  | 6-8 Outdoor Covered Dining/Play Area  |   |       |        |  |  |   |
|                  | Kitchen/Serving Area                  | 1 | 3,100 | 3,100  |  |  |   |
|                  | Dishwashing Room                      | 1 |       |        |  |  |   |
|                  | Dry Storage                           | 1 |       |        |  |  |   |
|                  | Cooler/Freezer                        | 1 |       |        |  |  |   |
|                  | Office                                | 1 | 75    | 75     |  |  |   |
|                  | Toilet                                | 1 | 50    | 50     |  |  |   |
|                  | Changing/Lockers                      | 1 | 200   | 200    |  |  |   |
|                  | Laundry/Chemical Storage              | 1 | 125   | 125    |  |  |   |
|                  | Janitor                               | 1 | 75    | 75     |  |  |   |
|                  | Elec Vault                            |   |       |        |  |  |   |
|                  | Subtotal                              |   |       | 12,125 |  |  | 0 |

**EXISTING FACILITY (30% DESIGN + Gym)**

| Drawings   |                 |                              |       | Actual Capacity       |                                    |  |       | Delta | Notes |
|------------|-----------------|------------------------------|-------|-----------------------|------------------------------------|--|-------|-------|-------|
| # of Units | Unit Area (nsf) | Total Area (nsf) Requirement | Delta | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity | Delta |       |       |

|   |       |       |         |         |   |    |     |     |  |
|---|-------|-------|---------|---------|---|----|-----|-----|--|
| 2 | 890   | 1,780 | 1,780   | 26.18%  | 2 | 30 | 60  | 60  | Classrooms reduced in size due to existing conditions. |
| 1 | 1,185 | 1,185 | #VALUE! | #VALUE! | 1 | 25 | 25  | 25  |  |
| 0 | 0     | 0     | 0       | 0.00%   | 0 | 27 | 0   | 0   | Reduction accepted, with reduced student stations.     |
| 1 | 1,160 | 1,160 | 1,160   | 116.00% | 1 | 30 | 30  | 30  | Room reduced in size due to existing conditions.       |
| 0 | 0     | 0     | 0       | 0.00%   |   |    |     |     | Reduction accepted, with reduced student stations.     |
| 0 | 0     | 0     | 0       | 0.00%   | 0 | 30 | 0   | 0   | Reduction accepted, with reduced student stations.     |
| 1 | 190   | 190   | 190     | 108.57% |   |    |     |     |  |
| 1 | 1,180 | 1,180 | 1,180   | 42.14%  |   |    |     |     | Room reduced in size due to existing conditions.       |
| 1 | 190   | 190   | 190     | 23.75%  |   |    |     |     | Reduction accepted.                                    |
| 1 | 190   | 190   | 190     | 47.50%  |   |    |     |     | Room reduced in size due to existing conditions.       |
| 1 | 350   | 350   | 350     | 29.17%  |   |    |     |     | Reduction accepted.                                    |
| 1 | 0     | 0     | 0       | 0.00%   |   |    |     |     | Reduction accepted.                                    |
| 1 | 0     | 0     | 0       | 0.00%   |   |    |     |     | Reduction accepted.                                    |
| 1 | 190   | 190   | 190     | 34.55%  |   |    |     |     |  |
| 2 | 190   | 380   | 380     | 63.33%  |   |    |     |     | Room reduced in size due to existing conditions.       |
| 1 | 340   | 340   | 340     | 680.00% |   |    |     |     |  |
| 1 | 50    | 50    | 50      | 33.33%  |   |    |     |     | Reduction accepted.                                    |
| 1 | 250   | 250   | 250     | 66.67%  |   |    |     |     | Reduction accepted.                                    |
| 1 | 0     | 0     | 0       | #DIV/0! |   |    |     |     |  |
| 1 | 0     | 0     | 0       | #DIV/0! |   |    |     |     |  |
|   |       | 7,435 | #VALUE! | #VALUE! |   |    | 115 | 115 |  |

**5,094 -1,731 114 114**

|   |       |       |       |         |   |    |     |     |  |
|---|-------|-------|-------|---------|---|----|-----|-----|--|
| 1 | 1,682 | 1,682 | 1,682 | 88.53%  | 1 | 30 | 30  | 30  | Reduction accepted.                                |
| 1 | 210   | 210   | 210   | 84.00%  |   |    |     |     | Reduction accepted.                                |
| 0 | 172   | 172   | 172   | 137.60% |   |    |     |     | Reduction accepted.                                |
| 0 | 1,510 | 0     | 0     | 0.00%   | 0 | 41 | 0   | 0   | Reduction accepted, with reduced student stations. |
| 0 | 125   | 0     | 0     | 0.00%   |   |    |     |     | Reduction accepted.                                |
| 0 | 100   | 0     | 0     | 0.00%   |   |    |     |     |  |
| 1 | 1,510 | 1,510 | 1,510 | 125.83% | 1 | 54 | 54  | 54  | No reduction accepted.                             |
| 1 | 1,160 | 1,160 | 1,160 | 96.67%  | 1 | 30 | 30  | 30  | No reduction accepted.                             |
| 1 | 210   | 210   | 210   | 49.41%  |   |    |     |     | Reduction accepted.                                |
| 1 | 150   | 150   | 150   | #DIV/0! |   |    |     |     |  |
| 0 | 0     | 0     | 0     | #DIV/0! |   |    |     |     |  |
|   |       | 5,094 | 5,094 | 74.64%  |   |    | 114 | 114 |  |

**4,905 -345 0 0**

|   |       |       |         |         |  |  |   |   |                     |
|---|-------|-------|---------|---------|--|--|---|---|---------------------|
| 1 | 3,846 | 3,846 | #VALUE! | #VALUE! |  |  |   | 0 | Reduction accepted. |
| 0 | 0     | 0     | 0       | 0.00%   |  |  |   |   | Reduction accepted. |
| 0 | 0     | 0     | 0       | 0.00%   |  |  |   |   | Reduction accepted. |
| 3 | 230   | 690   | 690     | 345.00% |  |  |   |   |                     |
| 1 | 103   | 103   | 103     | 58.86%  |  |  |   |   | Reduction accepted. |
| 1 | 224   | 224   | 224     | 128.00% |  |  |   |   |                     |
| 1 | 42    | 42    | 42      | 56.00%  |  |  |   |   | Reduction accepted. |
| 1 | 0     | 0     | 0       | #DIV/0! |  |  |   |   |                     |
|   |       | 4,905 | #VALUE! | #VALUE! |  |  | 0 | 0 |                     |

**0 0 0 0**

|  |  |  |         |  |  |  |  |  |  |
|--|--|--|---------|--|--|--|--|--|--|
|  |  |  | #DIV/0! |  |  |  |  |  |  |
|--|--|--|---------|--|--|--|--|--|--|

**5,534 -6,591 0 0**

|   |       |       |         |         |  |  |   |   |                     |
|---|-------|-------|---------|---------|--|--|---|---|---------------------|
| 1 | 2,240 | 2,240 | #VALUE! | #VALUE! |  |  |   | 0 | Reduction accepted. |
| 1 | 0     | 0     | 0       | #DIV/0! |  |  |   |   |                     |
| 1 | 664   | 664   | #VALUE! | #VALUE! |  |  |   |   | Reduction accepted. |
| 1 | 120   | 120   | #VALUE! | #VALUE! |  |  |   |   |                     |
| 1 | 148   | 148   | 148     | 37.00%  |  |  |   |   | Reduction accepted. |
| 1 | 180   | 180   | 180     | 45.00%  |  |  |   |   | Reduction accepted. |
| 1 | 0     | 0     | #VALUE! | #VALUE! |  |  |   |   | Reduction accepted. |
| 1 | 0     | 0     | 0       | #DIV/0! |  |  |   |   |                     |
| 1 | 2,050 | 2,050 | 2,050   | 66.13%  |  |  |   |   | Reduction accepted. |
| 1 | 0     | 0     | 0       | #DIV/0! |  |  |   |   |                     |
| 1 | 0     | 0     | 0       | #DIV/0! |  |  |   |   |                     |
| 1 | 0     | 0     | 0       | 0.00%   |  |  |   |   |                     |
| 1 | 0     | 0     | 0       | 0.00%   |  |  |   |   |                     |
| 1 | 0     | 0     | 0       | 0.00%   |  |  |   |   |                     |
| 1 | 11    | 11    | 11      | 8.80%   |  |  |   |   |                     |
| 1 | 55    | 55    | 55      | 73.33%  |  |  |   |   |                     |
| 1 | 0     | 0     | 0       | #DIV/0! |  |  |   |   |                     |
|   |       | 5,534 | #VALUE! | #VALUE! |  |  | 0 | 0 |                     |



# BOWSKY PK-8 PROGRAM ANALYSIS

U.S. Virgin Islands PK-8 Planning Program

Revised 10/25/2023

1,070 Target Capacity

| Program Area Summary  |                    | DESIGN PARAMETERS |        |     |                        |
|---|--------------------|-------------------|--------|-----|------------------------|
| 1.0   | Administration     | 6,650             |        |     | 0                      |
| 2.0   | Core Academic      | 64,925            |        |     | 1,086                  |
| 3.0   | Elective Spaces    | 6,825             |        |     | 155                    |
| 4.0   | Media Center       | 5,250             |        |     | 0                      |
| 5.0   | SPED Services      |                   |        |     |                        |
| 6.0   | Food Service       | 12,125            |        |     | 0                      |
| 7.0   | Physical Education | 18,100            |        |     | 30                     |
| 8.0   | Building Support   | 1,775             |        |     | 0                      |
| Total Useable Area (Net Square Feet- NSF):                    |                    | 115,650           |        |     | 1,271                  |
| General Building Area: Walls, Partitions, Mech. Elec., Circ   |                    | 25% of Net SF     | 28,913 |     |                        |
| *Based on Industry standards that include outdoor circulation |                    |                   |        |     |                        |
| Total Building Area (Gross Square Feet- GSF):                 |                    | 144,563           |        |     |                        |
| *Additional Covered Outdoor Learning Spaces                   |                    | 10% of Net SF     | 11,565 | 10% |                        |
| TOTAL BUILDING AREA WITH OUTDOOR LEARNING                     |                    | 156,128           |        |     | STUDENT STATIONS 1,271 |

## Revised 5/29/2025 PROGRAM FROM RFP DRAWINGS

469 Target Capacity

|       |        |                      |        |         |  |                      |  |     |
|-------|--------|----------------------|--------|---------|--|----------------------|--|-----|
|       | 4,048  |                      | 4,048  | #DIV/0! |  | 0                    |  | 0   |
|       | 25,512 |                      | 25,512 | #DIV/0! |  | 439                  |  | 439 |
|       | 5,094  |                      | 5,094  | #DIV/0! |  | 114                  |  | 114 |
|       | 4,905  |                      | 4,905  | #DIV/0! |  | 0                    |  | 0   |
|       |        |                      | 0      | #DIV/0! |  | 0                    |  | 0   |
|       | 5,534  |                      | 5,534  | #DIV/0! |  | 0                    |  | 0   |
|       | 13,290 |                      | 13,290 | #DIV/0! |  | 30                   |  | 30  |
|       | 1,500  |                      | 1,500  | #DIV/0! |  | 0                    |  | 0   |
| (600) | 59,883 |                      | 59,883 | #DIV/0! |  | 583                  |  | 583 |
|       | 14,971 |                      | 14,971 | #DIV/0! |  |                      |  |     |
| (750) | 74,854 |                      | 74,854 | #DIV/0! |  |                      |  |     |
| 6.8%  | 5,060  | (SF Above 69,794 SF) |        |         |  |                      |  |     |
| 10%   | 5,988  |                      |        |         |  |                      |  |     |
|       | 80,842 |                      | 80,842 | #DIV/0! |  | STUDENT STATIONS 583 |  | 583 |

## BASE PROGRAM

| Description of Program, Department, or Unit | RFP - Planning Program |                 |                              | Functional Capacity   |                                    |  |
|---|------------------------|-----------------|------------------------------|-----------------------|------------------------------------|--|
|   | # of Units             | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |

### 1.0 Administration 6,650 5.8%

| 1.1 Administration Offices   |   |     |       |  |  |   |
|------------------------------|---|-----|-------|--|--|---|
| Main School Lobby            | 1 | 350 | 350   |  |  |   |
| Toilet                       | 1 | 75  | 75    |  |  |   |
| Secure Vestibule             |   |     |       |  |  |   |
| Reception/Office             | 1 | 750 | 750   |  |  |   |
| Secretary/Bookkeeper Office  |   |     |       |  |  |   |
| Principal Office             | 1 | 175 | 175   |  |  |   |
| Toilet                       | 1 | 75  | 75    |  |  |   |
| Assistant Principal Office   | 2 | 150 | 300   |  |  |   |
| Conference Room              | 1 | 200 | 200   |  |  |   |
| Staff Work/Mail              | 1 | 375 | 375   |  |  |   |
| Faculty Lounge               | 1 | 375 | 375   |  |  |   |
| SRO Office                   | 1 | 150 | 150   |  |  |   |
| Monitors' Office             | 1 | 150 | 150   |  |  |   |
| Staff Toilet                 | 1 | 75  | 75    |  |  |   |
| Mother's Room                | 1 | 75  | 75    |  |  |   |
| Office Supply Storage        | 1 | 75  | 75    |  |  |   |
| Parent Center (Phone Rooms?) | 1 | 325 | 325   |  |  |   |
| IT/AV                        | 1 | 50  | 50    |  |  |   |
| Storage                      | 1 | 50  | 50    |  |  |   |
| Mechanical                   | 1 | 275 | 275   |  |  |   |
| Subtotal                     |   |     | 3,900 |  |  | 0 |

### 1.2 Student Services

|                          |   |     |       |  |  |   |
|--------------------------|---|-----|-------|--|--|---|
| Reception/Guidance Clerk | 1 | 200 | 200   |  |  |   |
| Counselor's Office       | 2 | 150 | 300   |  |  |   |
| Registrar's Office       | 1 | 150 | 150   |  |  |   |
| Time-Out/Tardy Room      | 2 | 375 | 750   |  |  |   |
| Speech Therapy           | 1 | 250 | 250   |  |  |   |
| Records Room             | 1 | 125 | 125   |  |  |   |
| Conference Room          | 1 | 200 | 200   |  |  |   |
| Staff Toilet             | 1 | 75  | 75    |  |  |   |
| Subtotal                 |   |     | 2,050 |  |  | 0 |

### 1.3 Health Clinic

|           |   |     |     |  |  |   |
|-----------|---|-----|-----|--|--|---|
| Exam/Cot  | 1 | 300 | 300 |  |  |   |
| Office    | 1 | 125 | 125 |  |  |   |
| Infirmery | 1 | 175 | 175 |  |  |   |
| Toilet    | 1 | 100 | 100 |  |  |   |
| Subtotal  |   |     | 700 |  |  | 0 |

## EXISTING FACILITY (30% DESIGN + Gym) (VIDE REDUCED PROGRAM)

| Drawings   |                 |                              |       | Actual Capacity       |                                    |  |       | Delta | Notes |
|------------|-----------------|------------------------------|-------|-----------------------|------------------------------------|--|-------|-------|-------|
| # of Units | Unit Area (nsf) | Total Area (nsf) Requirement | Delta | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity | Delta |       |       |

### 4,048 6.8% -2,602 #DIV/0! 0 0

|   |     |       |       |         |  |  |   |  |
|---|-----|-------|-------|---------|--|--|---|--|
| 1 | 400 | 400   | 400   | #DIV/0! |  |  | 0 | This includes safe & secure vestibule. - Reduction accepted. |
| 2 | 56  | 112   | 112   | #DIV/0! |  |  | 0 | This includes safe & secure vestibule                        |
| 1 | 0   | 0     | 0     | #DIV/0! |  |  | 0 |  |
| 1 | 278 | 278   | 278   | #DIV/0! |  |  | 0 | Reduction accepted.  |
| 1 | 279 | 279   | 279   | #DIV/0! |  |  | 0 |  |
| 1 | 248 | 248   | 248   | #DIV/0! |  |  | 0 |  |
| 1 | 48  | 48    | 48    | #DIV/0! |  |  | 0 | This includes safe & secure vestibule                        |
| 1 | 200 | 200   | 200   | #DIV/0! |  |  | 0 | Reduction not accepted.                                      |
| 1 | 378 | 378   | 378   | #DIV/0! |  |  | 0 |  |
| 1 | 250 | 250   | 250   | #DIV/0! |  |  | 0 |  |
| 1 | 285 | 285   | 285   | #DIV/0! |  |  | 0 |  |
| 1 | 58  | 58    | 58    | #DIV/0! |  |  | 0 |  |
| 1 | 0   | 0     | 0     | #DIV/0! |  |  | 0 |  |
| 1 | 0   | 0     | 0     | #DIV/0! |  |  | 0 |  |
| 1 | 0   | 0     | 0     | #DIV/0! |  |  | 0 |  |
| 1 | 60  | 60    | 60    | #DIV/0! |  |  | 0 |  |
| 1 | 150 | 150   | 150   | #DIV/0! |  |  | 0 | Reduction accepted.  |
| 1 | 0   | 0     | 0     | #DIV/0! |  |  | 0 |  |
| 1 | 156 | 156   | 156   | #DIV/0! |  |  | 0 |  |
| 1 | 0   | 0     | 0     | #DIV/0! |  |  | 0 |  |
|   |     | 2,902 | 2,902 | #DIV/0! |  |  | 0 |  |

| BASE PROGRAM                                |                        |                 |                              |                       |                                    |  |
|---|------------------------|-----------------|------------------------------|-----------------------|------------------------------------|--|
| Description of Program, Department, or Unit | RFP - Planning Program |                 |                              | Functional Capacity   |                                    |  |
|   | # of Units             | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |

**2.0 Core Academic** **64,925**

**2.1 Pre-K Core Academic**

|                          |                                     |   |       |              |   |    |           |
|--------------------------|-------------------------------------|---|-------|--------------|---|----|-----------|
| SMALL LEARNING COMMUNITY | Pre-K Learning Suite-Classroom w/RR | 2 | 1,200 | 2,400        | 2 | 17 | 34        |
|                          | Multipurpose/Gross Motor            | 1 | 1,700 | 1,700        |   |    |           |
|                          | Toilet                              | 1 | 50    | 50           |   |    |           |
|                          | Teacher Planning                    | 1 | 350   | 350          |   |    |           |
|                          | Toilet                              | 1 | 50    | 50           |   |    |           |
|                          | Storage                             | 1 | 75    | 75           |   |    |           |
|                          | IT/AV                               | 1 | 75    | 75           |   |    |           |
|                          | Mechanical                          | 1 | 275   | 275          |   |    |           |
|                          | Outdoor Learning Space              |   |       |              |   |    |           |
|                          | Subtotal                            |   |       | <b>4,975</b> |   |    | <b>34</b> |

**2.2 Elementary Core Academic**

|                                  |   |     |               |       |   |            |     |
|----------------------------------|---|-----|---------------|-------|---|------------|-----|
| SMALL LEARNING COMMUNITY         | Learning Suite 1- Classroom w/RR (Kinder) | 1   | 1,200         | 1,200 | 1 | 25         | 25  |
|                                  | Learning Suite 1- Classroom (1st-5th)     | 5   | 850           | 4,250 | 5 | 30         | 150 |
|                                  | Open Collaboration Space                  | 2   | 1,200         | 2,400 |   |            |     |
|                                  | Small Group Instruction                   | 2   | 125           | 250   |   |            |     |
|                                  | Distance Learning                         | 1   | 125           | 125   |   |            |     |
|                                  | Teacher Planning                          | 1   | 500           | 500   |   |            |     |
|                                  | Toilet                                    | 1   | 50            | 50    |   |            |     |
|                                  | Office                                    | 1   | 75            | 75    |   |            |     |
|                                  | Student Restrooms                         | 2   | 250           | 500   |   |            |     |
|                                  | Toilet                                    | 1   | 75            | 75    |   |            |     |
|                                  | Custodial                                 | 1   | 75            | 75    |   |            |     |
| Storage                          | 1   | 325 | 325           |       |   |            |     |
| MEP/IT                           | 1   | 325 | 325           |       |   |            |     |
| Shared Outdoor Learning Space #1 |   |     |               |       |   |            |     |
| SMALL LEARNING COMMUNITY         | Learning Suite 2- Classroom w/RR (SPED)   | 1   | 1,200         | 1,200 | 1 | 25         | 25  |
|                                  | Storage                                   | 1   | 125           | 125   |   |            |     |
|                                  | Learning Suite 2- Classroom (1st-5th)     | 5   | 850           | 4,250 | 5 | 30         | 150 |
|                                  | Open Collaboration Space                  | 2   | 1,200         | 2,400 |   |            |     |
|                                  | Small Group Instruction                   | 2   | 125           | 250   |   |            |     |
|                                  | Teacher Planning                          | 1   | 500           | 500   |   |            |     |
|                                  | Toilet                                    | 1   | 50            | 50    |   |            |     |
|                                  | Office                                    | 1   | 75            | 75    |   |            |     |
|                                  | Student Restrooms                         | 2   | 250           | 500   |   |            |     |
|                                  | Toilet                                    | 1   | 75            | 75    |   |            |     |
|                                  | Custodial                                 | 1   | 75            | 75    |   |            |     |
| Storage                          | 1   | 325 | 325           |       |   |            |     |
| MEP/Water Heater                 | 1   | 325 | 325           |       |   |            |     |
| Shared Outdoor Learning Space #2 |   |     |               |       |   |            |     |
| SMALL LEARNING COMMUNITY         | Learning Suite 3- Classroom w/RR (Kinder) | 1   | 1,200         | 1,200 | 1 | 25         | 25  |
|                                  | Learning Suite 3- Classroom (1st-5th)     | 5   | 850           | 4,250 | 5 | 30         | 150 |
|                                  | Open Collaboration Space                  | 2   | 1,200         | 2,400 |   |            |     |
|                                  | Small Group Instruction                   | 2   | 125           | 250   |   |            |     |
|                                  | Distance Learning                         | 1   | 125           | 125   |   |            |     |
|                                  | Teacher Planning                          | 1   | 500           | 500   |   |            |     |
|                                  | Toilet                                    | 1   | 50            | 50    |   |            |     |
|                                  | Office                                    | 1   | 75            | 75    |   |            |     |
|                                  | Student Restrooms                         | 2   | 250           | 500   |   |            |     |
|                                  | Toilet                                    | 1   | 75            | 75    |   |            |     |
|                                  | Custodial                                 | 1   | 75            | 75    |   |            |     |
| Storage                          | 1   | 325 | 325           |       |   |            |     |
| MEP/IT                           | 1   | 325 | 325           |       |   |            |     |
| Shared Outdoor Learning Space #3 |   |     |               |       |   |            |     |
| SMALL LEARNING COMMUNITY         | Learning Suite 4- Classroom w/RR (SPED)   | 1   | 1,200         | 1,200 | 1 | 25         | 25  |
|                                  | Storage                                   | 1   | 125           | 125   |   |            |     |
|                                  | Learning Suite 4- Classroom (1st-5th)     | 5   | 850           | 4,250 | 5 | 30         | 150 |
|                                  | Open Collaboration Space                  | 2   | 1,200         | 2,400 |   |            |     |
|                                  | Small Group Instruction                   | 2   | 125           | 250   |   |            |     |
|                                  | Distance Learning                         | 1   | 125           | 125   |   |            |     |
|                                  | Teacher Planning                          | 1   | 500           | 500   |   |            |     |
|                                  | Toilet                                    | 1   | 50            | 50    |   |            |     |
|                                  | Office                                    | 1   | 75            | 75    |   |            |     |
|                                  | Student Restrooms                         | 2   | 250           | 500   |   |            |     |
|                                  | Toilet                                    | 1   | 75            | 75    |   |            |     |
| Custodial                        | 1   | 75  | 75            |       |   |            |     |
| Storage                          | 1   | 325 | 325           |       |   |            |     |
| MEP/IT                           | 1   | 325 | 325           |       |   |            |     |
| Shared Outdoor Learning Space #4 |   |     |               |       |   |            |     |
| Subtotal                         |   |     | <b>40,600</b> |       |   | <b>700</b> |     |

| EXISTING FACILITY (30% DESIGN + Gym) (VIDE REDUCED PROGRAM) |            |                 |                              |       |                       |                                    |  |       |       |
|---|------------|-----------------|------------------------------|-------|-----------------------|------------------------------------|--|-------|-------|
| Description of Program, Department, or Unit                 | Drawings   |                 |                              | Delta | Actual Capacity       |                                    |  | Delta | Notes |
|   | # of Units | Unit Area (nsf) | Total Area (nsf) Requirement |       | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |       |       |

**25,512** **-39,413** **439** **405**

|                          |                                     |   |       |              |              |         |   |    |    |           |  |  |
|--------------------------|-------------------------------------|---|-------|--------------|--------------|---------|---|----|----|-----------|--|--|
| SMALL LEARNING COMMUNITY | Pre-K Learning Suite-Classroom w/RR | 2 | 1,032 | 2,064        | 2,062        | #####   | 2 | 17 | 34 | 34        | Classrooms reduced in size due to existing conditions. |  |
|                          | Multipurpose/Gross Motor            | 1 | 1,032 | 1,032        | 1,032        | #DIV/0! |   |    |    | 0         | Room reduced in size due to existing conditions.       |  |
|                          | Toilet                              | 1 | 50    | 100          | 100          | #DIV/0! |   |    |    | 0         | Restroom per room accepted.                            |  |
|                          | Teacher Planning                    | 1 | 375   | 375          | 375          | #DIV/0! |   |    |    | 0         | Space available in existing facility.                  |  |
|                          | Toilet                              | 1 | 50    | 50           | 50           | #DIV/0! |   |    |    | 0         |  |  |
|                          | Storage                             | 1 | 108   | 108          | 108          | #DIV/0! |   |    |    | 0         |  |  |
|                          | IT/AV                               | 1 | 108   | 108          | 108          | #DIV/0! |   |    |    | 0         |  |  |
|                          | Mechanical                          | 1 | 0     | 0            | 0            | #DIV/0! |   |    |    | 0         | To be confirmed in design.                             |  |
|                          | Outdoor Learning Space              |   |       |              |              | #DIV/0! |   |    |    | 0         |  |  |
|                          | Subtotal                            |   |       | <b>3,837</b> | <b>3,835</b> |         |   |    |    | <b>34</b> | <b>0</b>   |  |

|                                  |   |     |               |               |         |         |   |    |            |  |  |
|----------------------------------|---|-----|---------------|---------------|---------|---------|---|----|------------|--|--|
| SMALL LEARNING COMMUNITY         | Learning Suite 1- Classroom w/RR (Kinder) | 2   | 1,020         | 2,040         | 2,038   | #####   | 2 | 25 | 50         | 50   | Classrooms reduced in size due to existing conditions. |
|                                  | Learning Suite 1- Classroom (1st-5th)     | 2   | 835           | 1,670         | 1,668   | #####   | 2 | 30 | 60         | 60   | Classrooms reduced in size due to existing conditions. |
|                                  | Open Collaboration Space                  | 1   | 1,020         | 1,020         | 1,020   | #DIV/0! |   |    |            | 0  | Room reduced in size due to existing conditions.       |
|                                  | Small Group Instruction                   | 1   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Space to be added to design.                           |
|                                  | Distance Learning                         | 1   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  |  |
|                                  | Teacher Planning                          | 1   | 354           | 354           | 354     | #DIV/0! |   |    |            | 0  | Room reduced in size due to existing conditions.       |
|                                  | Toilet                                    | 1   | 50            | 50            | 50      | #DIV/0! |   |    |            | 0  |  |
|                                  | Office                                    | 1   | 100           | 100           | 100     | #DIV/0! |   |    |            | 0  |  |
|                                  | Student Restrooms                         | 2   | 150           | 300           | 300     | #DIV/0! |   |    |            | 0  | Reduction accepted.                                    |
|                                  | Toilet                                    | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  |  |
|                                  | Custodial                                 | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  |  |
| Storage                          | 1   | 150 | 150           | 150           | #DIV/0! |         |   |    | 0          | Reduction accepted.                                |  |
| MEP/IT                           | 1   | 350 | 350           | 350           | #DIV/0! |         |   |    | 0          | Reduction accepted.                                |  |
| Shared Outdoor Learning Space #1 | 0   | 0   | 0             | 0             | #DIV/0! |         |   |    | 0          |  |  |
| SMALL LEARNING COMMUNITY         | Learning Suite 2- Classroom w/RR (SPED)   | 0   | 995           | 0             | 0       | 0.00%   | 0 | 25 | 0          | 0  | Classrooms reduced in size due to existing conditions. |
|                                  | Storage                                   | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Reduction accepted.                                    |
|                                  | Learning Suite 2- Classroom (1st-5th)     | 6   | 904           | 5,424         | 5,418   | #####   | 6 | 30 | 180        | 180  | Classrooms reduced in size due to existing conditions. |
|                                  | Open Collaboration Space                  | 1   | 1,190         | 1,190         | 1,190   | #DIV/0! |   |    |            | 0  | Room reduced in size due to existing conditions.       |
|                                  | Small Group Instruction                   | 1   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Space to be added to design.                           |
|                                  | Teacher Planning                          | 1   | 350           | 350           | 350     | #DIV/0! |   |    |            | 0  | Room reduced in size due to existing conditions.       |
|                                  | Toilet                                    | 1   | 50            | 50            | 50      | #DIV/0! |   |    |            | 0  |  |
|                                  | Office                                    | 1   | 192           | 192           | 192     | #DIV/0! |   |    |            | 0  |  |
|                                  | Student Restrooms                         | 2   | 150           | 300           | 300     | #DIV/0! |   |    |            | 0  | Reduction accepted.                                    |
|                                  | Toilet                                    | 1   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  |  |
|                                  | Custodial                                 | 1   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  |  |
| Storage                          | 1   | 500 | 500           | 500           | #DIV/0! |         |   |    | 0          | Reduction accepted.                                |  |
| MEP/Water Heater                 | 1   | 200 | 200           | 200           | #DIV/0! |         |   |    | 0          | Reduction accepted.                                |  |
| Shared Outdoor Learning Space #2 | 1   | 0   | 0             | 0             | #DIV/0! |         |   |    | 0          |  |  |
| SMALL LEARNING COMMUNITY         | Learning Suite 3- Classroom w/RR (Kinder) | 0   | 995           | 0             | 0       | 0.00%   | 0 | 25 | 0          | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Learning Suite 3- Classroom (1st-5th)     | 0   | 835           | 0             | 0       | 0.00%   | 0 | 30 | 0          | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Open Collaboration Space                  | 0   | 1,000         | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Small Group Instruction                   | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Distance Learning                         | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Teacher Planning                          | 0   | 350           | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Toilet                                    | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Office                                    | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Student Restrooms                         | 0   | 150           | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Toilet                                    | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Custodial                                 | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
| Storage                          | 0   | 150 | 0             | 0             | #DIV/0! |         |   |    | 0          | Removed with Student Station Reduction - Accepted. |  |
| MEP/IT                           | 0   | 200 | 0             | 0             | #DIV/0! |         |   |    | 0          | Removed with Student Station Reduction - Accepted. |  |
| Shared Outdoor Learning Space #3 | 0   | 0   | 0             | 0             | #DIV/0! |         |   |    | 0          | Removed with Student Station Reduction - Accepted. |  |
| SMALL LEARNING COMMUNITY         | Learning Suite 4- Classroom w/RR (SPED)   | 0   | 995           | 0             | 0       | 0.00%   | 0 | 25 | 0          | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Storage                                   | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Learning Suite 4- Classroom (1st-5th)     | 0   | 835           | 0             | 0       | 0.00%   | 0 | 30 | 0          | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Open Collaboration Space                  | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Small Group Instruction                   | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Distance Learning                         | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Teacher Planning                          | 0   | 350           | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Toilet                                    | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Office                                    | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Student Restrooms                         | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
|                                  | Toilet                                    | 0   | 0             | 0             | 0       | #DIV/0! |   |    |            | 0  | Removed with Student Station Reduction - Accepted.     |
| Custodial                        | 0   | 0   | 0             | 0             | #DIV/0! |         |   |    | 0          | Removed with Student Station Reduction - Accepted. |  |
| Storage                          | 0   | 0   | 0             | 0             | #DIV/0! |         |   |    | 0          | Removed with Student Station Reduction - Accepted. |  |
| MEP/IT                           | 0   | 0   | 0             | 0             | #DIV/0! |         |   |    | 0          | Removed with Student Station Reduction - Accepted. |  |
| Shared Outdoor Learning Space #4 | 0   | 0   | 0             | 0             | #DIV/0! |         |   |    | 0          | Removed with Student Station Reduction - Accepted. |  |
| Subtotal                         |   |     | <b>14,240</b> | <b>14,230</b> |         |         |   |    | <b>290</b> | <b>290</b>   |  |







# YVONNE MILLINER BOWSKY PREK-8

program (consider keeping same program of studies as Oliver for PreK-8)

U.S. Virgin Islands PK-8 Planning Program

Revised 9/17/2020

Program Area

## BOWSKY PK-8 PROGRAM ANALYSIS

| U.S. Virgin Islands PK-8 Planning Program                                    |                    | Revised 10/25/2023    |                        | 1,070 Target Capacity |  |
|--|--------------------|-----------------------|------------------------|-----------------------|--|
| DESIGN PARAMETERS  |                    |                       |                        |                       |  |
| Program Area Summary   |                    |                       |                        |                       |  |
| 1.0  | Administration     | 6,650                 | 0                      |                       |  |
| 2.0  | Core Academic      | 64,325                | 1,086                  |                       |  |
| 3.0  | Elective Spaces    | 6,025                 | 155                    |                       |  |
| 4.0  | Media Center       | 5,250                 | 0                      |                       |  |
| 5.0  | SPED Services      |                       | 0                      |                       |  |
| 6.0  | Food Service       | 12,125                | 0                      |                       |  |
| 7.0  | Physical Education | 10,100                | 30                     |                       |  |
| 8.0  | Building Support   | 1,175                 | 0                      |                       |  |
| <b>Total Usable Area (Net Square Feet- NSI)</b>                              |                    | <b>118,650</b>        | <b>1,271</b>           |                       |  |
| <b>General Building Area: Walls, Partitions, I</b>                           |                    | <b>28,513</b>         |                        |                       |  |
| <small>*Based on industry standards that include outdoor circulation</small> |                    |                       |                        |                       |  |
| <b>Total Building Area (Gross Square Feet- I)</b>                            |                    | <b>144,563</b>        |                        |                       |  |
| <small>Additional Covered Outdoor Learning Spaces</small>                    |                    | <small>11,565</small> | <small>10%</small>     |                       |  |
| <b>TOTAL BUILDING AREA WITH OUTDOOR LEARNING</b>                             |                    | <b>156,128</b>        | <b>STUDENT STATION</b> | <b>1,271</b>          |  |

| Revised 5/29/2025 |               | PROGRAM FROM RFP DRAWINGS |             | 469 Target Capacity     |             |
|-------------------|---------------|---------------------------|-------------|-------------------------|-------------|
|                   | 4,048         | -2,602                    | ####        | 0                       | 0           |
|                   | 25,512        | -33,233                   | -60.11%     | 439                     | 439         |
|                   | 5,094         | -1,731                    | ####        | 114                     | 114         |
|                   | 4,905         | -345                      | -6.57%      | 0                       | 0           |
|                   | 0             | 0                         | ####        | 0                       | 0           |
|                   | 5,534         | -6,531                    | ####        | 0                       | 0           |
|                   | 13,890        | -4,210                    | ####        | 30                      | 30          |
|                   | 1,500         | -275                      | -15.43%     | 0                       | 0           |
|                   | <b>60,483</b> | <b>-55,167</b>            | <b>####</b> | <b>583</b>              | <b>583</b>  |
|                   | <b>15,121</b> | <b>-13,792</b>            | <b>####</b> |                         |             |
|                   | <b>75,604</b> | <b>-60,359</b>            | <b>####</b> |                         |             |
|                   | <b>6,048</b>  |                           |             | <b>583</b>              | <b>-688</b> |
|                   | <b>81,652</b> | <b>-74,475</b>            | <b>####</b> | <b>STUDENT STATIONS</b> |             |

| Revised 7/15/2025 |               | PROGRAM FROM RFP DRAWINGS |             | 469 Target Capacity     |             |
|-------------------|---------------|---------------------------|-------------|-------------------------|-------------|
|                   | 4,048         | 4,048                     | ####        | 0                       | 0           |
|                   | 25,512        | 25,512                    | ####        | 439                     | 439         |
|                   | 5,094         | 5,094                     | ####        | 114                     | 114         |
|                   | 4,905         | 4,905                     | ####        | 0                       | 0           |
|                   | 0             | 0                         | ####        | 0                       | 0           |
|                   | 5,534         | 5,534                     | ####        | 0                       | 0           |
|                   | 13,290        | 13,290                    | ####        | 30                      | 30          |
|                   | 1,500         | 1,500                     | ####        | 0                       | 0           |
|                   | <b>59,883</b> | <b>59,883</b>             | <b>####</b> | <b>583</b>              | <b>583</b>  |
|                   | <b>14,571</b> | <b>14,971</b>             | <b>####</b> |                         |             |
|                   | <b>74,854</b> | <b>74,854</b>             | <b>####</b> |                         |             |
|                   | <b>5,060</b>  | <b>5,060</b>              | <b>####</b> | <b>583</b>              | <b>-688</b> |
|                   | <b>80,842</b> | <b>80,842</b>             | <b>####</b> | <b>STUDENT STATIONS</b> |             |

3. Delete "other electives spaces" for 2400sf.
4. Reduce commons by 3,000sf. Support areas by 1575sf.
5. Add wastewater treatment plant.
6. Add "safe room/gym. Existing gym becomes dining commons.



U.S. VIRGIN ISLANDS  
SCHEMATIC DESIGN

**PROGRAM CONFIRMED**

**STUDENT STATIONS:**  
Functional Capacity: 583  
Program SF: 80,842 GSF  
SF/SS: 138 SF



## 4.0 CONCEPTUAL BUILDING DESIGN

### A. CONCEPT BUILDING PLAN SUMMARY

Based on site constraints, adjacency requirements, and building area limitation, the concept design for the Bowsky PreK-8 School includes selective renovation and expansion facilities utilizing the existing buildings in total along with one (1) significant building additions, following the amended programming to include a new Gymnasium (Hurricane Safe Room). We have evolved the design provided as outlined below.

It is proposed for the expansion area of the Gymnasium be placed at the front side of the site due to site availability and public afterhours access, as well as required adjacencies and phasing considerations. The existing Learning Forts, Administration, Dining and Media Center facilities have been optimized in the existing building shell areas as confirmed with VIDE. Following similar programming review with the other PK-8 sites, the Gymnasium program has been amended to reduce overall size (and spectator seating) as well as has reduced the locker room areas in lieu of accommodating changing areas and restrooms.

As the expanded maintenance / service and support functions remain at the north / east side of the campus adjacent to the existing service area and food service entrance. The area of the expansion is on a fairly sloped area of the site with challenging connections to the existing service drive; due to the consideration of the service yard expansion careful consideration to the topography will need to be employed during the next phases of the design development of the project. Delivery / service yard and maintenance drives are required to provide service access for school supply area and food service receiving area.

The entry area for the campus has been re-imagined incorporating the new security and safety campus standards. This has allowed for the development of the exterior architecture, canopies, administration areas and entry sequence. The alternate design strategy in this area has been generally accepted and approved.



Conceptual Rendering

# BOWSKY PK-8 SCHOOL

The design and cost estimate is based on the Renovation / Expansion of the Bowsky PreK-8 School being designed and constructed minimizing the amount of impact to the exterior building shell and architectural style. As such the investigations of the existing shell structure are ongoing and incomplete at the time of this report. The planned expansion will be designed in alignment with the existing construction utilizing reinforced concrete walls with selective rainscreen and conventional building skin elements exterior veneer over a protective membrane and exterior insulation construction for the exterior envelope per the provided bridging documents. The roof systems is planned to be sloped standing seam to match the existing construction of adjacent buildings. The materials will be consistent on all facades of the facility.

The entire facility is planned to be handicap accessible and comply with requirements of the Uniform Federal Accessibility Standard and ABA Accessibility Guidelines. All interior finishes will comply with the bridging documents Master Plan materials standards / specifications, and in coordination with the existing facility construction as appropriate.



Conceptual Rendered Floor Plans



**LEGEND**

- ADMINISTRATION
- DINING
- MEDIA CENTER
- GYMNASIUM / PHYSICAL ED
- SPECIALS
- SPECIAL ED
- PK
- K-5
- 6-8
- SUPPORT

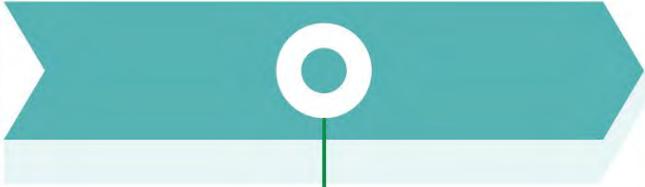
**CONCEPT FLOOR PLAN CONFIRMED**



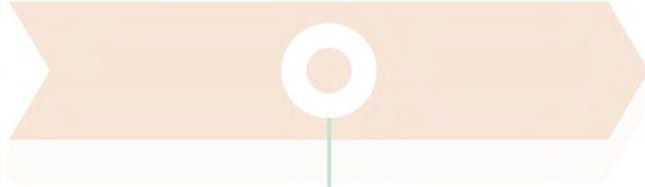


# CAMPUS ARCHITECTURE

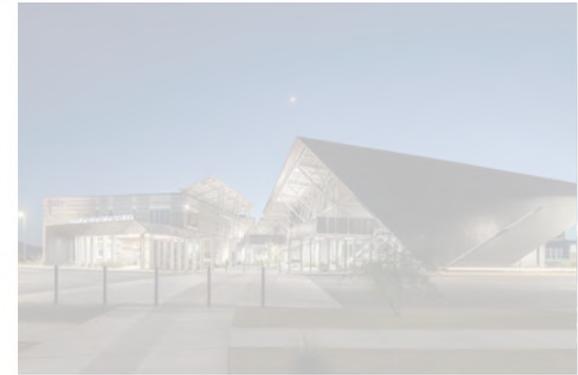
Interpretive / Revival



Transitional



Contemporary



# CONCEPT REVIEW



## 5.0 CONCEPTUAL SITE PLAN

### A. SITE PLAN SUMMARY

The intent of this design effort is to develop a path for expanding the current capacity of the existing facilities to accommodate the expanded new PK-8 educational program model and accommodate the displaced students collocated from the Emanuel Benjamin Oliver Elementary School campus (until such time that the EBO PK-8 school is constructed). Currently the expanded enrollment has been accommodated through the temporary portable facilities on the north side of the campus. Additionally, any campus expansion is to be planned in a way that avoids interfering with the planned phases for efficiency of project funds and expediting the final site development.

In review of the existing conditions and preliminary master planning by VIDE, the team confirmed the planned expansion is appropriately programmed and planned on the current school campus. The base program will provide a new addition gymnasium (FEMA Safe Room) facility as the reprogrammed existing facility has the capacity to handle the expanded enrollment needs. The new gymnasium and support facility has been placed at the northwest corner of the site to allow for reconfiguration of the drop off areas and parking lot, while also reinforcing the clear sense of entry, respect the existing architectural character of the historic school. The existing administration suite will be fully renovated and reconfigured to create a new sense of entry to the campus. All current academic areas will be remodeled and configured to support the 21<sup>st</sup> Century educational model.

The revitalized entry to the facility and campus is to remain facing north sharing a main bus drop-off, parking lot and pedestrian entrance area. The existing campus partial loop road service road will remain. Newly developed faculty parking areas are planned for the front side of the site. These areas will be designed to also address on-site storm drainage concerns affecting the existing campus.

The proposed expansion is generally in compliance with the VIDE's Educational Facility Master Plan and is appropriately sited. All environmental documentation in process and preliminary applicable environmental clearances for the project will be secured, including the replacement of the existing Wastewater Treatment Plant now planned for the north side of the site. The new facility will be incorporated into the architecture of the new addition to minimize view and impact on the site. The Cultural Resources Survey indicates no conflict for the currently developed site and final determination is in process and will be completed with the required final environmental documentation.

## BOWSKY PK-8 SCHOOL

A topographic, boundary survey including ground penetrating Radar GPR, underground utilities' locations, and environmental and Hazmat survey, and seismic evaluation will be finalized soon and will be incorporated with the next phase of the design development. Site contamination is not present per our understanding. Building asbestos and hazardous material are not anticipated, however will be confirmed as the appropriate remediation will be required.

Parking for the school is to be planned at a ratio of one parking space per member of staff, including food service, custodial, maintenance and IT staffing, as well as one visitor space per one hundred students. Five percent of the total spaces are required to be Americans with Disabilities Act (ADA) accessible.

### **B. PHASING**

The phasing strategy is currently a work in progress. Following VIDE's direction to avoid the use of temporary facilities, the Design-Build Team (DBT) is actively exploring alternative options. These options will be presented under separate cover for further review, discussion, and approval. One of the options will be for the existing elementary / primary school educational facilities to remain in operation through the development of the new expansion facility and subsequent renovation areas can be occupied. Existing underutilized facilities will serve as the needed "swing space" to maintain educational operations at all times. The new waste-water treatment plant will be required with the siting of the gymnasium (and the failure of the existing system). In coordination with the phased improvements, the gymnasium construction and site re-development will be completed.

### **C. DEMOLITION**

The existing temporary facilities will serve as needed swing space supporting operations while existing facility renovations and repairs are completed. At the completion of the phased new construction, renovation and repair work through the campus (and if enrollment permits) the temporary facilities are planned to be removed / demolished.



Responses

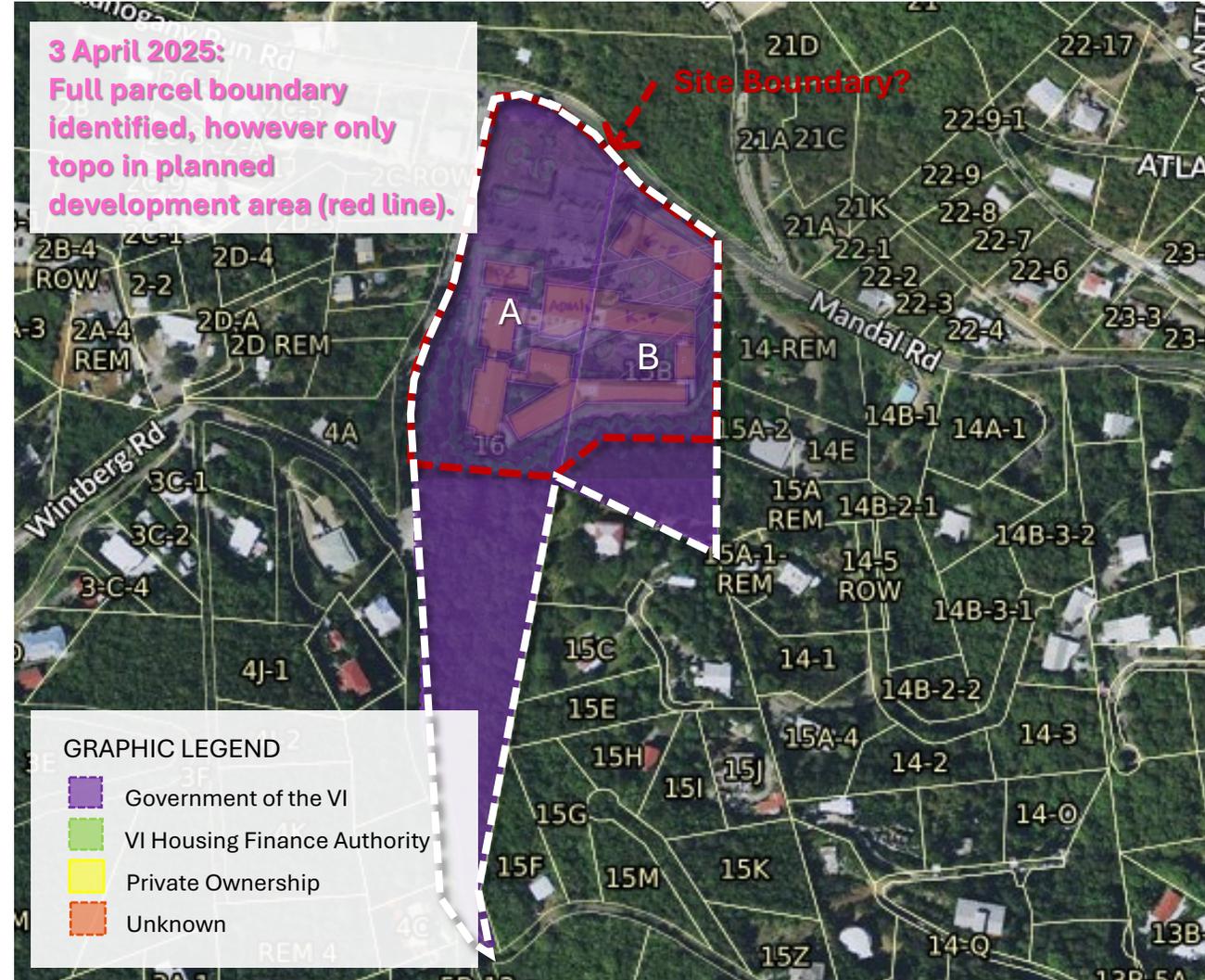
Erika Gulick  
April 1, 2025 at 7:46 PM

The general area identified by Suffolk within Parcel A and Parcel B is intended to be redeveloped as part of this project. Surveys should be conducted and any easement information, deeds, project boundaries, legal descriptions and ownership should be confirmed by a registered land surveyor through Suffolk-CBNA with the Government of the Virgin Islands, including the Department of Property and Procurement, as soon as possible as part of its pre-construction services.

Attachments

PARCEL LEGEND

- A** Property ID 103103020100  
Address MANDAHL 16 GREAT NORTHSIDE QTR  
Owner GOVERNMENT OF THE V.I.  
Address 8100 Lindbergh Bay 61  
St Thomas VI 00802
- B** Property ID 103103020200  
Address MANDAHL 15B 1 GR NORTHSIDE QTR  
Owner GOVERNMENT OF THE V.I.  
Address 8100 Lindbergh Bay 61  
St Thomas VI 00802

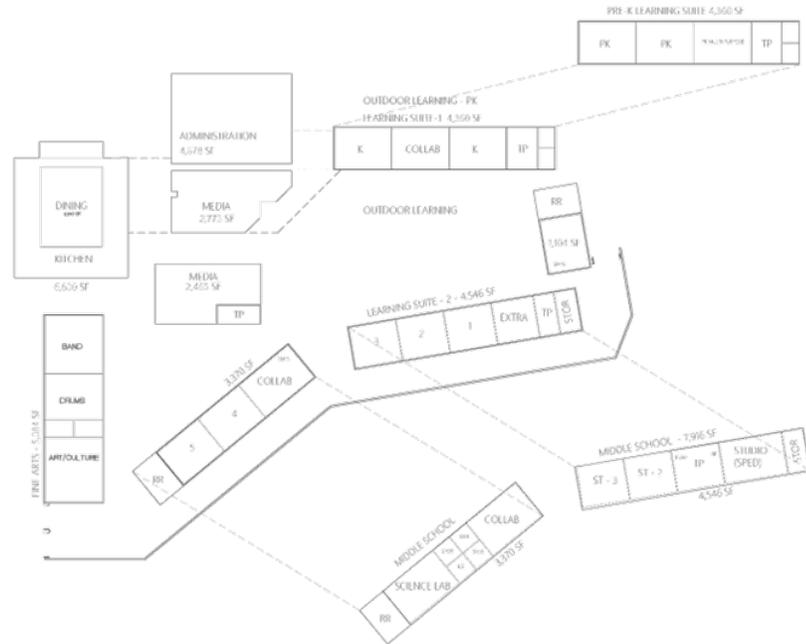


# VIDE Public Schools: Modernization / Expansion Projects on the Islands

## St. Thomas – Yvonne E. Milliner-Bowsky PreK-8 School – Modernization / Expansion



### TEST FIT



### LEGEND

- ADMINISTRATION
- DINING
- MEDIA CENTER
- GYMNASIUM / PHYSICAL ED
- SPECIALS
- SPECIAL ED
- PK
- K-5
- 6-8
- SUPPORT

**STUDENT STATIONS:**  
**Functional Capacity: 583**

| EXISTING - GSF |                  | RFP - NSF    |                   |
|----------------|------------------|--------------|-------------------|
| ADMIN:         | 4,878 SF         | ADMIN:       | 5,000 SF          |
| CORE:          | 25,034 SF        | CORE:        | 22,870 SF         |
| FINE ARTS:     | 5,084 SF         | FINE ARTS:   | 2,550 SF          |
| MEDIA:         | 5,254 SF         | MEDIA:       | 4,000 SF          |
| FOOD:          | 6,600 SF         | FOOD:        | 7,725 SF          |
| <b>TOTAL</b>   | <b>47,850 SF</b> | <b>TOTAL</b> | <b>42,145 SF</b>  |
|                |                  |              | <b>52,682 GSF</b> |
| GYM:           |                  | NEW GYM:     | 18,400 SF         |



# YVONNE MILLINER BOWSKY PREK-8

program (consider keeping same program of studies as Oliver for PreK-8)

U.S. Virgin Islands PK-8 Planning Program

Revised 9/17/2020

U.S. Virgin Islands PK-8 Program of Studies

**BOWSKY PK-8 PROGRAM ANALYSIS**  
U.S. Virgin Islands PK-8 Planning Program

| Program Area Summary  | 1,070 Target Capacity | Revised 5/29/2025 | 469 Target Capacity |
|---|-----------------------|-------------------|---------------------|
| 1.0 Administration  | 6,650                 | 4,048             | 0                   |
| 2.0 Core Academic   | 64,925                | 23,512            | 439                 |
| 3.0 Elective Spaces   | 6,825                 | 5,094             | 114                 |
| 4.0 Media Center  | 5,250                 | 4,905             | 0                   |
| 5.0 SPED Services   | 0                     | 0                 | 0                   |
| 6.0 Food Service  | 12,125                | 5,534             | 0                   |
| 7.0 Physical Education  | 18,100                | 13,890            | 30                  |
| 8.0 Building Support  | 1,775                 | 1,500             | 0                   |
| <b>Total Usable Area (Net Square Feet- NSF):</b>                    | <b>115,650</b>        | <b>60,483</b>     | <b>583</b>          |
| <b>General Building Area: Walls, Partitions, Mech. Elec., Circu</b> | <b>25% of Net SF</b>  | <b>15,121</b>     | <b>0</b>            |
| <b>Total Building Area (Gross Square Feet- GSF):</b>                | <b>144,563</b>        | <b>75,604</b>     | <b>583</b>          |
| <b>*Additional Covered Outdoor Learning Spaces</b>                  | <b>10% of Net SF</b>  | <b>6,048</b>      | <b>0</b>            |
| <b>TOTAL BUILDING AREA WITH OUTDOOR LEARNING</b>                    | <b>156,128</b>        | <b>81,652</b>     | <b>583</b>          |

US VIRGIN ISLANDS

## BOWSKY PK-8 PROGRAM ANALYSIS

U.S. Virgin Islands PK-8 Planning Program

Revised 10/25/2023

1,070 Target Capacity

DESIGN PARAMETERS

| Program Area Summary   | DESIGN PARAMETERS    | 1,070 Target Capacity         |
|--|----------------------|-------------------------------|
| 1.0 Administration   | 6,650                | 0                             |
| 2.0 Core Academic  | 64,925               | 1,086                         |
| 3.0 Elective Spaces  | 6,825                | 155                           |
| 4.0 Media Center   | 5,250                | 0                             |
| 5.0 SPED Services  | 0                    | 0                             |
| 6.0 Food Service   | 12,125               | 0                             |
| 7.0 Physical Education   | 18,100               | 30                            |
| 8.0 Building Support   | 1,775                | 0                             |
| <b>Total Usable Area (Net Square Feet- NSF):</b>                     | <b>115,650</b>       | <b>1,271</b>                  |
| <b>General Building Area: Walls, Partitions, Mech. Elec., Circu</b>  | <b>25% of Net SF</b> | <b>28,913</b>                 |
| <i>*Based on industry standards that include outdoor circulation</i> |                      |                               |
| <b>Total Building Area (Gross Square Feet- GSF):</b>                 | <b>144,563</b>       |                               |
| <b>*Additional Covered Outdoor Learning Spaces</b>                   | <b>10% of Net SF</b> | <b>11,565</b>                 |
| <b>TOTAL BUILDING AREA WITH OUTDOOR LEARNING</b>                     | <b>156,128</b>       | <b>STUDENT STATIONS 1,271</b> |

Revised 5/29/2025

469 Target Capacity

PROGRAM FROM RFP DRAWINGS

| Program Area Summary  | 1,070 Target Capacity | Revised 5/29/2025 | 469 Target Capacity         |
|---|-----------------------|-------------------|-----------------------------|
| 1.0 Administration  | 6,650                 | 4,048             | 0                           |
| 2.0 Core Academic   | 64,925                | 23,512            | 439                         |
| 3.0 Elective Spaces   | 6,825                 | 5,094             | 114                         |
| 4.0 Media Center  | 5,250                 | 4,905             | 0                           |
| 5.0 SPED Services   | 0                     | 0                 | 0                           |
| 6.0 Food Service  | 12,125                | 5,534             | 0                           |
| 7.0 Physical Education  | 18,100                | 13,890            | 30                          |
| 8.0 Building Support  | 1,775                 | 1,500             | 0                           |
| <b>Total Usable Area (Net Square Feet- NSF):</b>                    | <b>115,650</b>        | <b>60,483</b>     | <b>583</b>                  |
| <b>General Building Area: Walls, Partitions, Mech. Elec., Circu</b> | <b>25% of Net SF</b>  | <b>15,121</b>     | <b>0</b>                    |
| <b>Total Building Area (Gross Square Feet- GSF):</b>                | <b>144,563</b>        | <b>75,604</b>     | <b>583</b>                  |
| <b>*Additional Covered Outdoor Learning Spaces</b>                  | <b>10% of Net SF</b>  | <b>6,048</b>      | <b>0</b>                    |
| <b>TOTAL BUILDING AREA WITH OUTDOOR LEARNING</b>                    | <b>156,128</b>        | <b>81,652</b>     | <b>STUDENT STATIONS 583</b> |

2. Delete 33,275sf for a reduction of 633 students. Of 3 R-3 SEC's and 1 MS SEC for 33 collaboration areas 2 SPED, plus the arts. Verify fit versus existing at Bowsky, excluding modulars.

3. Delete "other electives spaces" for 2400sf.

4. Reduce commons by 3,000sf. Support areas by 1575sf.

5. Add wastewater treatment plant.

6. Add "safe room/gym. Existing gym becomes dining commons.

**STUDENT STATIONS:**  
**Functional Capacity: 583**

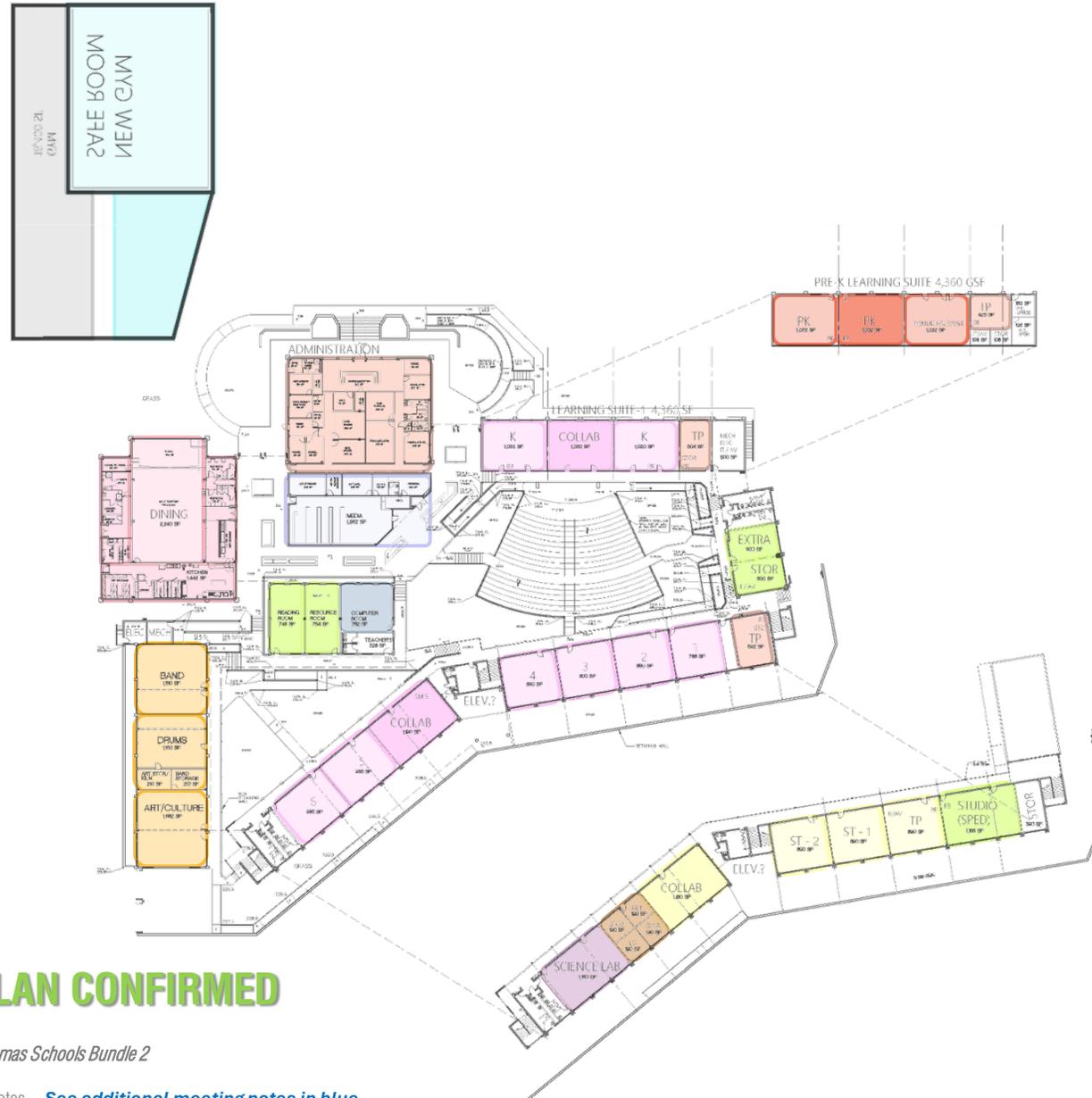
| Program Area Summary  | 1,070 Target Capacity | Revised 5/29/2025 | 469 Target Capacity         |
|---|-----------------------|-------------------|-----------------------------|
| 1.0 Administration  | 6,650                 | 4,048             | 0                           |
| 2.0 Core Academic   | 64,925                | 23,512            | 439                         |
| 3.0 Elective Spaces   | 6,825                 | 5,094             | 114                         |
| 4.0 Media Center  | 5,250                 | 4,905             | 0                           |
| 5.0 SPED Services   | 0                     | 0                 | 0                           |
| 6.0 Food Service  | 12,125                | 5,534             | 0                           |
| 7.0 Physical Education  | 18,100                | 13,890            | 30                          |
| 8.0 Building Support  | 1,775                 | 1,500             | 0                           |
| <b>Total Usable Area (Net Square Feet- NSF):</b>                    | <b>115,650</b>        | <b>60,483</b>     | <b>583</b>                  |
| <b>General Building Area: Walls, Partitions, Mech. Elec., Circu</b> | <b>25% of Net SF</b>  | <b>15,121</b>     | <b>0</b>                    |
| <b>Total Building Area (Gross Square Feet- GSF):</b>                | <b>144,563</b>        | <b>75,604</b>     | <b>583</b>                  |
| <b>*Additional Covered Outdoor Learning Spaces</b>                  | <b>10% of Net SF</b>  | <b>6,048</b>      | <b>0</b>                    |
| <b>TOTAL BUILDING AREA WITH OUTDOOR LEARNING</b>                    | <b>156,128</b>        | <b>81,652</b>     | <b>STUDENT STATIONS 583</b> |

NATURE AND DESIGN FOR PLACING FURTHER PROJECTS



US VIRGIN ISLANDS  
SCHEMATIC DESIGN

**PROGRAM CONFIRMED**



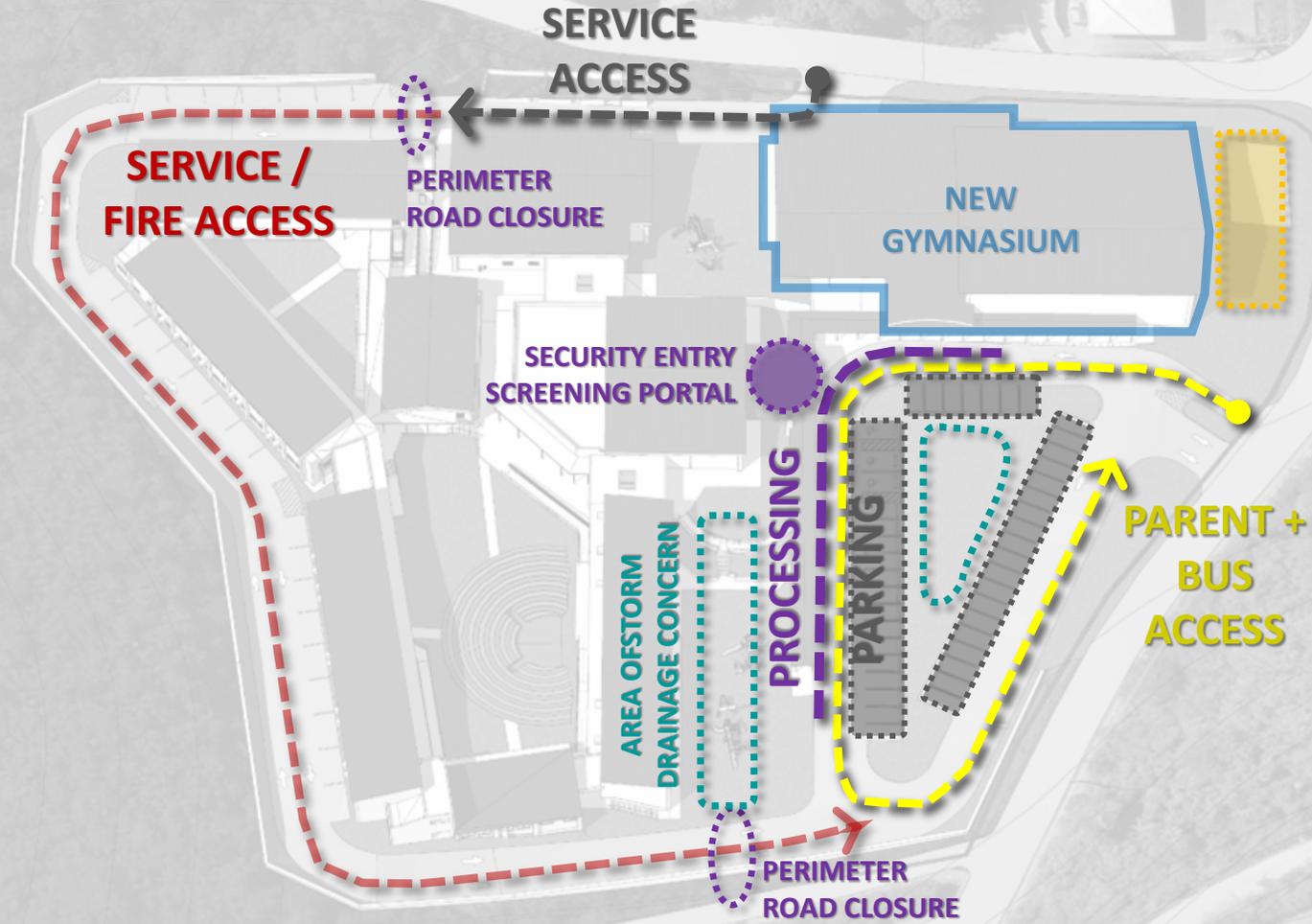
**LEGEND**

- ADMINISTRATION
- DINING
- MEDIA CENTER
- GYMNASIUM / PHYSICAL ED
- SPECIALS
- SPECIAL ED
- PK
- K-5
- 6-8
- SUPPORT

**CONCEPT FLOOR PLAN CONFIRMED**



# CONCEPT REVIEW



**WASTE-WATER PLANT**

*Per fire Department Review meeting, emergency vehicle access is to be maintained at full perimeter of this school site. This may allow for the design team to address existing storm drainage conditions at the interior courts and the existing PK classrooms.*

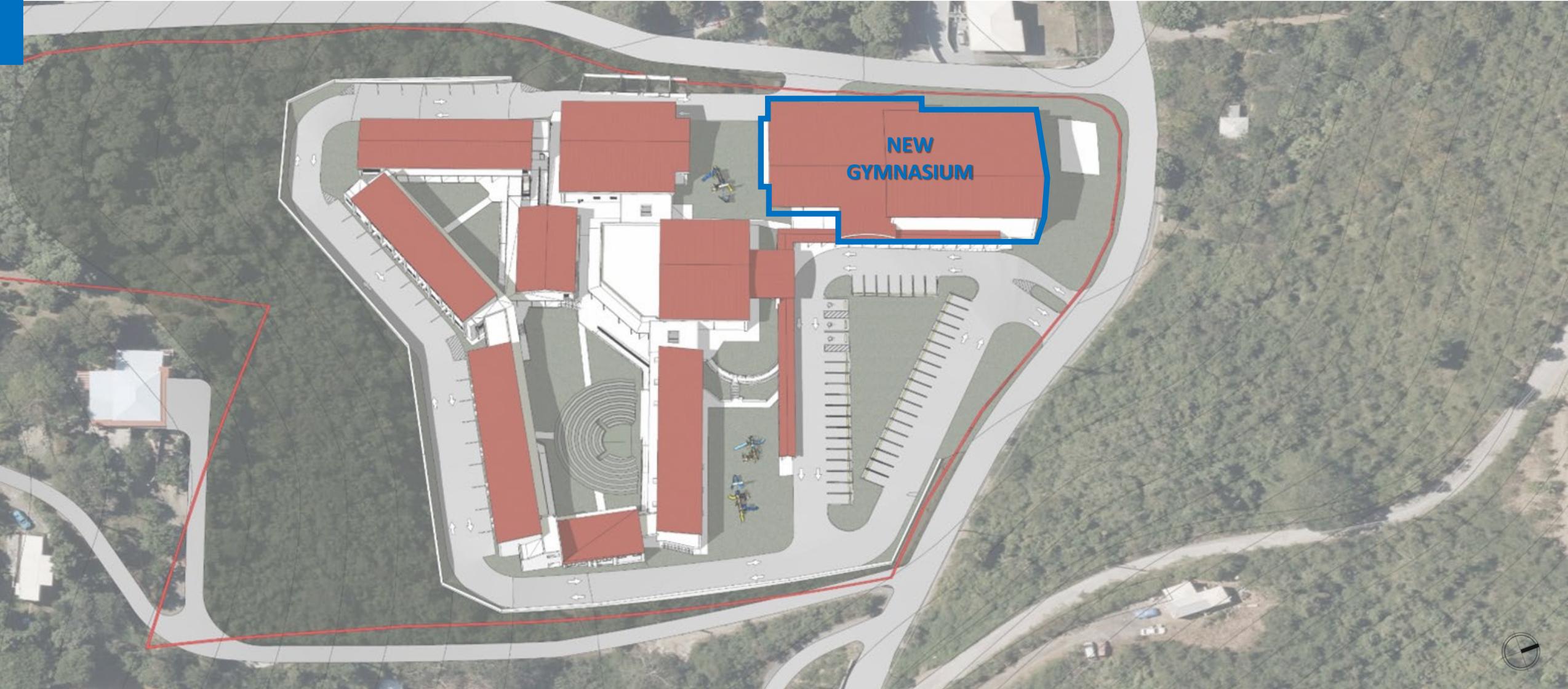
*Site access at the south side of the site (loop) may be reduced to 12' clear.*

*DCP requested evaluation of alternate site locations for the new waste-water treatment plant to be determined based on proximity to the storm water outfall on the campus. Alternate locations are under review.*

*VIDE requested locations be indicated for access control / security screening for all students and visitors ate entry to the formal interior of the campus.*



## CONCEPT REVIEW





## CONCEPT REVIEW



**CONCEPT MASSING CONFIRMED**



## CONCEPT REVIEW

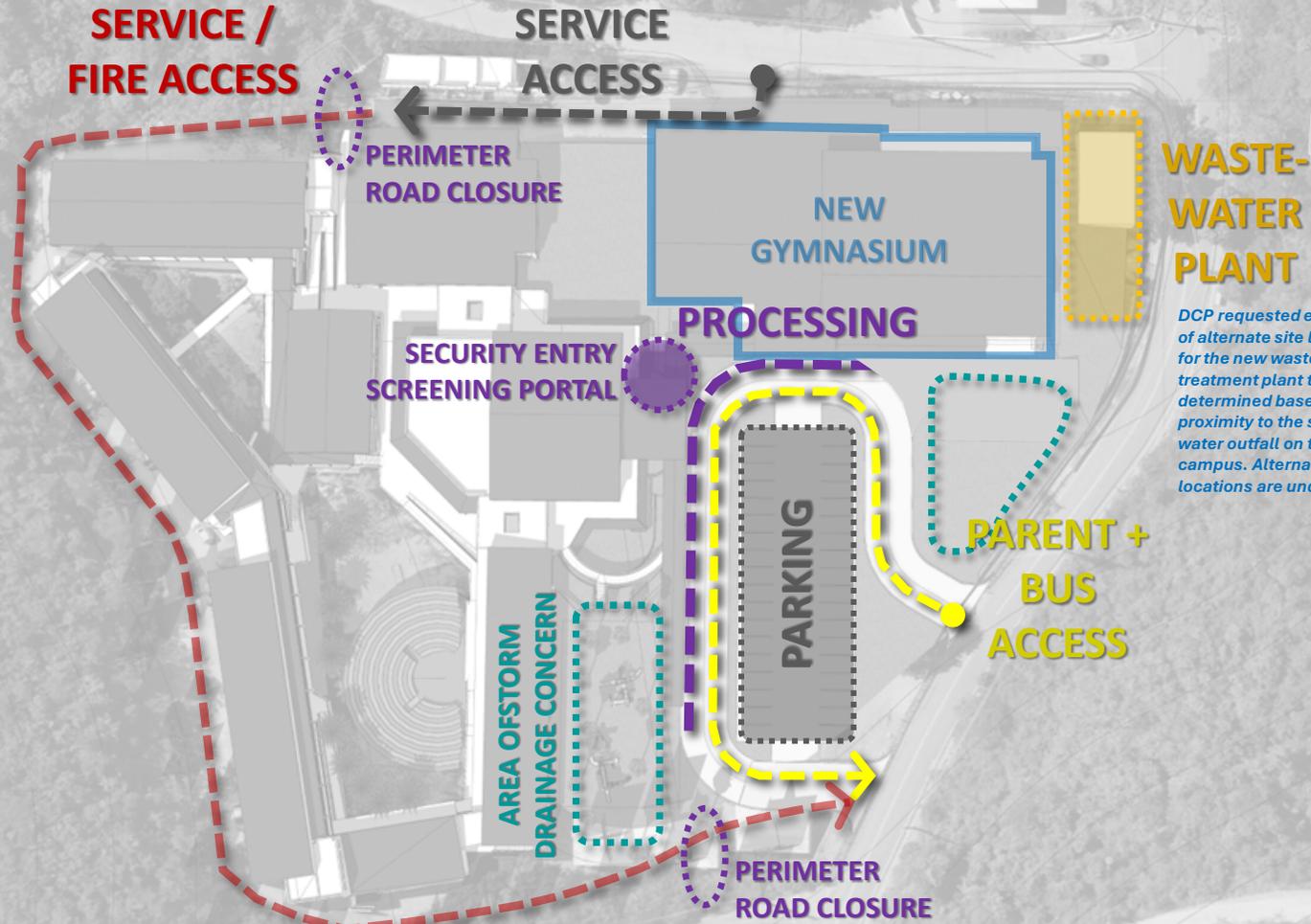


**CONCEPT MASSING CONFIRMED**





## CONCEPT REVIEW



Per fire Department Review meeting, emergency vehicle access is to be maintained at full perimeter of this school site. This may allow for the design team to address existing storm drainage conditions at the interior courts and the existing PK classrooms.

Site access at the south side of the site (loop) may be reduced to 12' clear.

VIDE requested locations be indicated for access control / security screening for all students and visitors ate entry to the formal interior of the campus.

DCP requested evaluation of alternate site locations for the new waste-water treatment plant to be determined based on proximity to the storm water outfall on the campus. Alternate locations are under review.





## EXISTING SITE CONDITIONS



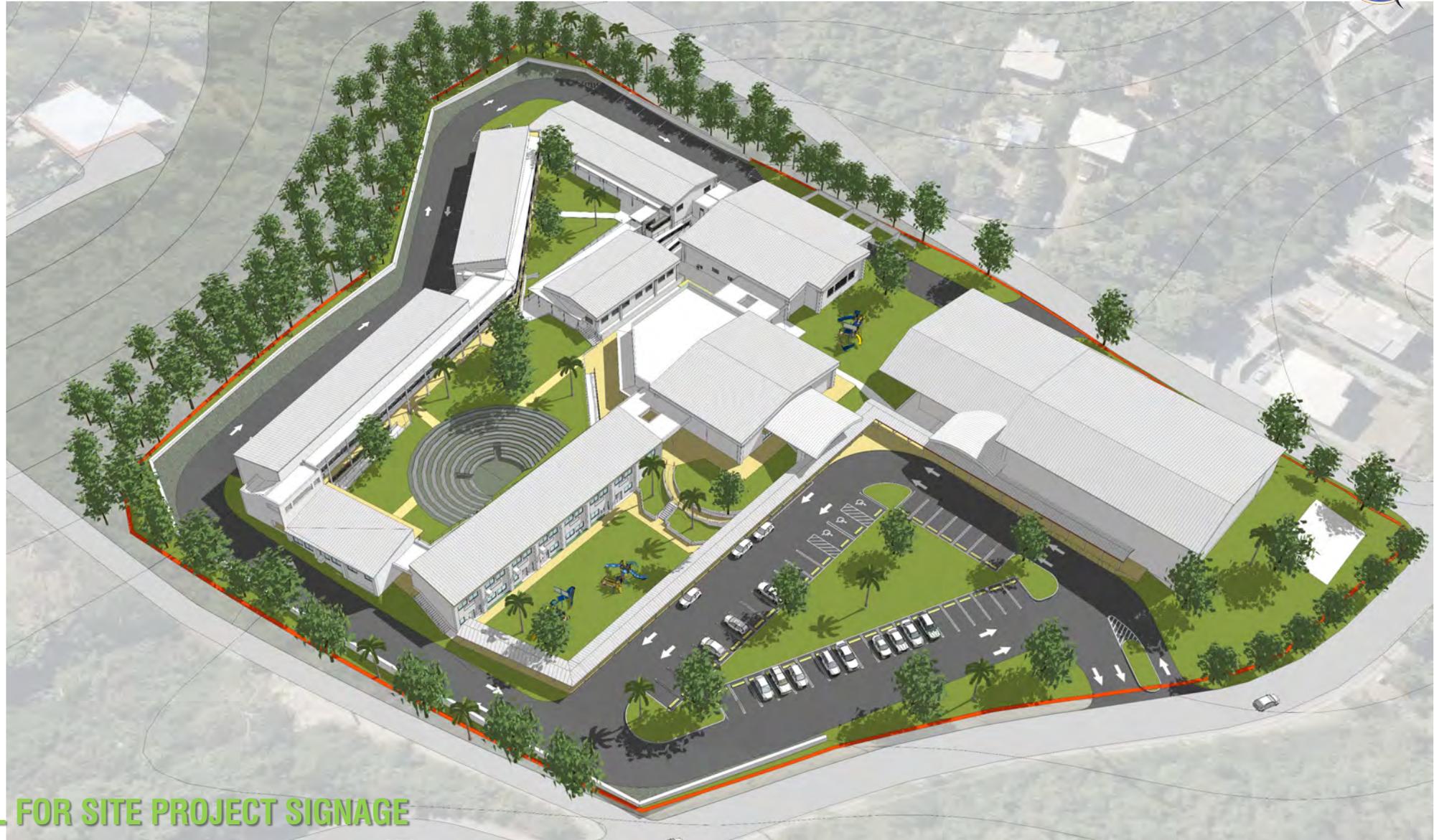


## EXISTING SITE CONDITIONS





# SITE PLAN

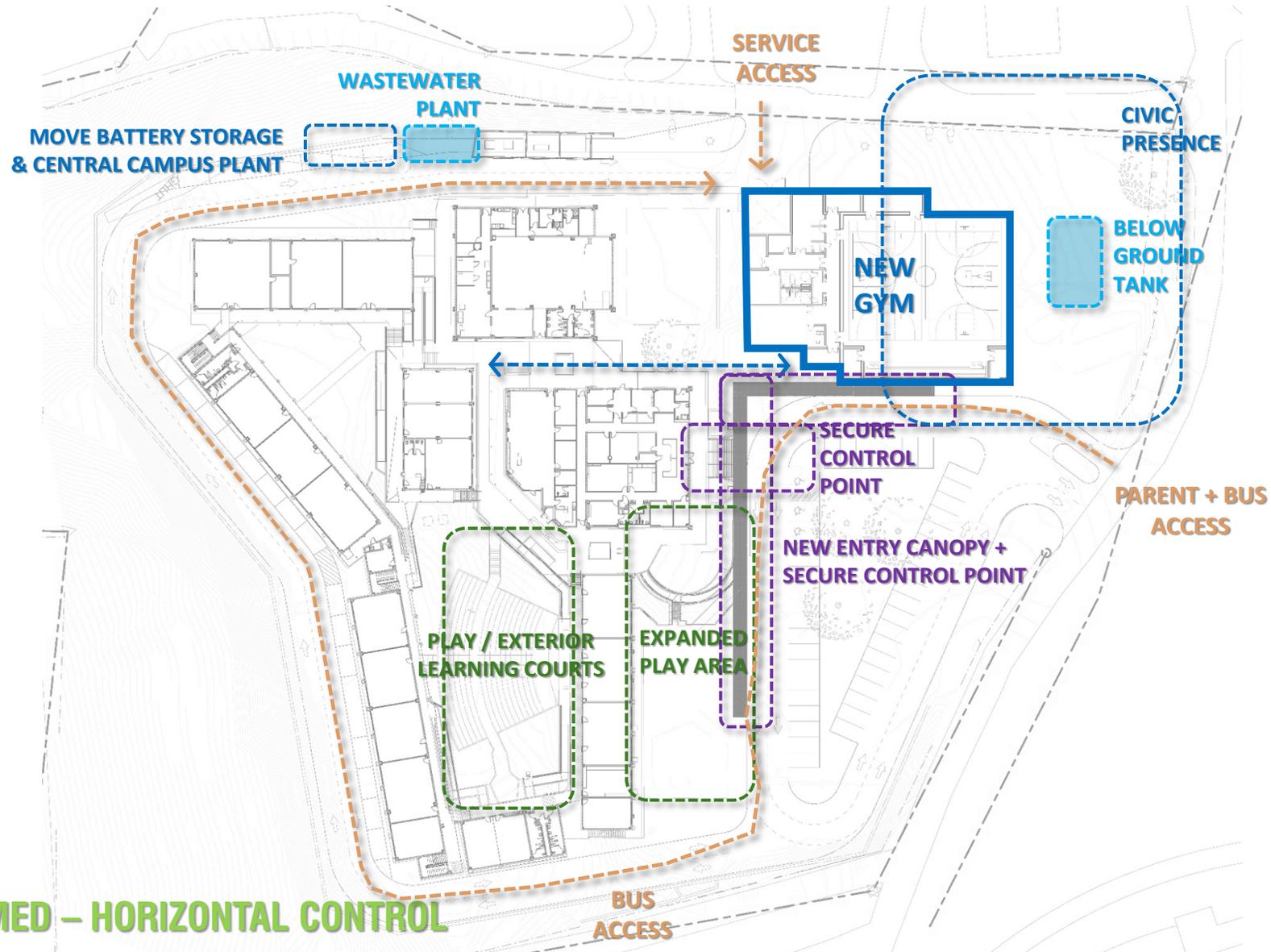


 **CONCEPT APPROVAL FOR SITE PROJECT SIGNAGE**





## CONCEPT REVIEW



 **SITE PLAN CONFIRMED – HORIZONTAL CONTROL**





# CONCEPT REVIEW EXISTING CONDITIONS



LIMITED ACCESS



LIMITED ACCESS

MOVE BATTERY STORAGE & CENTRAL CAMPUS PLANT

WASTEWATER PLANT

SERVICE ACCESS

CIVIC PRESENCE

BELOW GROUND TANK

NEW GYM

SECURE CONTROL POINT

PARENT + BUS ACCESS

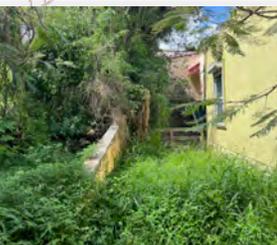
NEW ENTRY CANOPY + SECURE CONTROL POINT

RETAINING WALL



PLAY / EXTERIOR LEARNING COURTS

EXPANDED PLAY AREA



RETAINING WALL

BUS ACCESS

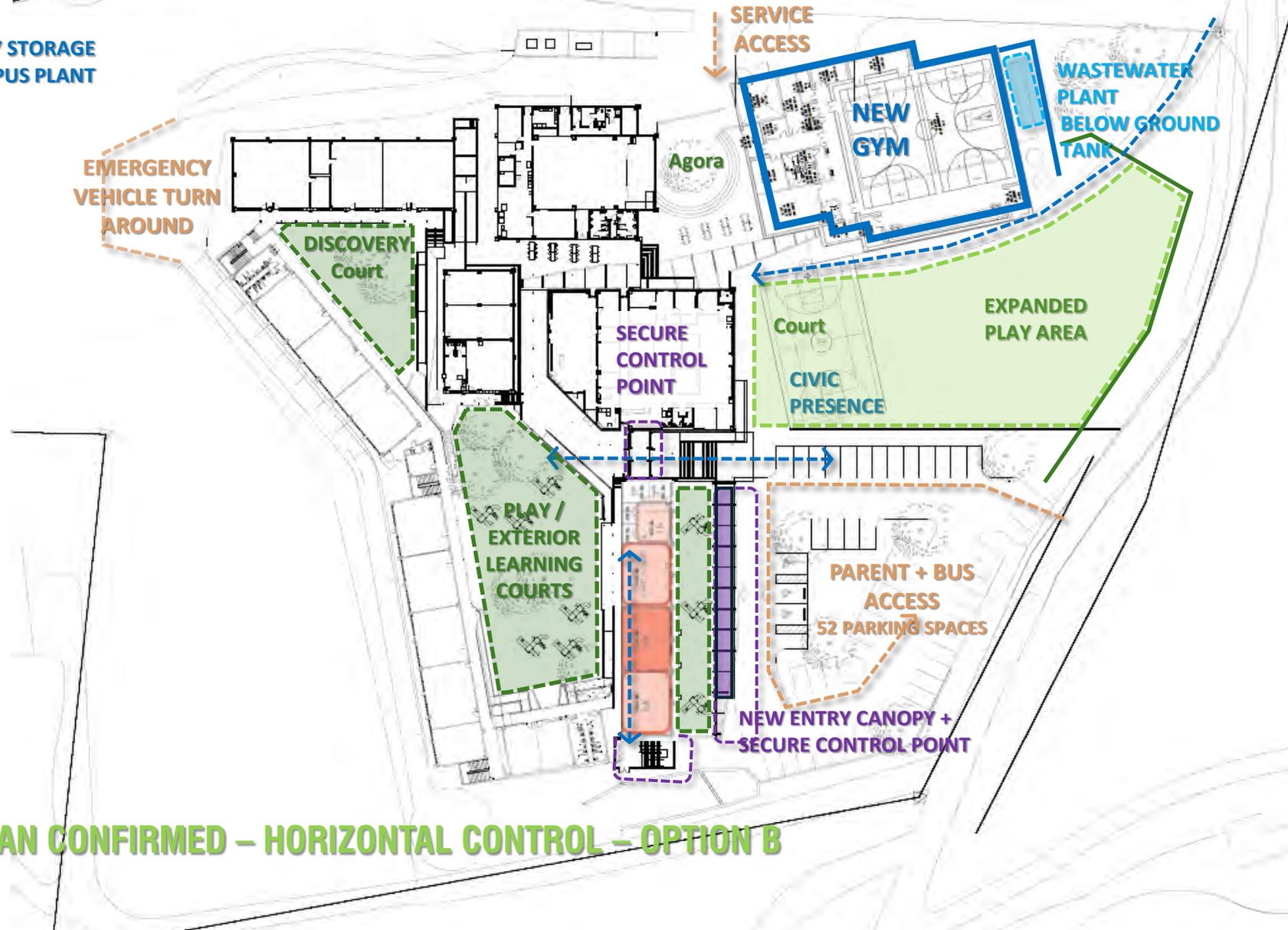


 **SITE PLAN CONFIRMED – HORIZONTAL CONTROL**



# CONCEPT REVIEW

**MOVE BATTERY STORAGE & CENTRAL CAMPUS PLANT**



**SITE PLAN CONFIRMED – HORIZONTAL CONTROL – OPTION B**



## 6.0 ENVIRONMENTAL HAZARDS

### A. ENVIRONMENTAL ASSESSMENT

Environmental site surveys have been completed both for the Environmental Assessment (EA) for EHP and FCD and the Phase I Environmental Assessment. The draft EA is attached here with pending the next phase of design. The Phase I Environmental Assessment which documents the recognized environmental conditions of the site will be completed during the next phase of design.

### B. FLOODPLANS

After review of local regulations and the existing site storm water master plan it was determined that the project is not located in a flood zone. The site is within Flood Zone X as shown on FEMA's FIRM Map 13 of 94 and the US Virgin Island Flood Hazard Resource Map. The site grading is planned to generally match the existing ground elevation, with minimal soil filling to facilitate proper drainage and site preparation. The new facilities are planned to be at the same level as the existing adjacent building elevations (to the extent possible). The initial elevation will determine from an official topographic survey during the design stage. Additional filling or grading and retaining walls will likely be required to control perimeter site elevation requirements as well as potentially elevating select areas of the site and new structure. Per response for RFI #19 the Tsunami considerations for this site are not applicable.

### C. CULTURAL RESOURCES

A Section 106 request for the project site will be prepared by Bioimpact, Inc. for submittal to DPNR's Office of Historic Preservation for advice on the project and to receive State Historic Preservation Office (SHPO) clearance. Historical and cultural assets are not expected to be present on the site. The planned project development is not expected to impact cultural resources. However, it is possible that SHPO will require archeological monitoring during excavation or any footer or during earthwork.

### D. WETLANDS

The proposed site for the facility is previously developed and does not occupy or disturb any known wetlands or wetland buffers. The property is not shown as a wetland on Fish and Wildlife Services' National Wetland Inventory. Riparian streams are shown to the east and west of the site. There will be no impact to those waters. Amy Dempsey of Bioimpact, Inc is a certified wetland delineator and has confirmed that no wetland impacts are anticipated.

### E. CRITICAL ZONES / BUFFERS

The project is not within the first-tier jurisdiction of Coastal Zone Management (CZM). The project is required to go through a Federal Consistency Determination as part of the federal approvals. There are riparian areas west are outside the disturbance footprint. As these areas do not have a direct surface connection to navigable waters, they are not USACE jurisdictional. There is a drainageway which is culverted under the trash and generator area on the western side of the property

## **F. VEGETATION**

A terrestrial survey has been completed for the site and there are no endangered or threatened species or habitat within the proposed disturbance area. However, the ESA listed VI Tree Boa could occur in the surrounding forested areas. The FWS's IPaC site also concurs that could potentially occur in the area. The terrestrial survey particular look for the VI Tree Boa, and no tree boas or their habitat were found on the developed portion of the property. There are many larger trees on the site which will be preserved if at all possible.

Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project will be delineated so that it will not be impacted. A training session will be held with the Division of Fish and Wildlife prior to the start of work and then again at the start of construction so workers can be informed about boas and what to do if they are encountered.

## **G. OPERATIONS CONSTRAINTS**

A determination was made after review and consultation with all potential affected parties that the final project will not encroach or constrain any planned future site and adjacent site operations.

## **H. HAZARDOUS MATERIALS**

All hazardous materials shall be managed as specified and regulated in a Hazardous Materials Management Procedures Program (HMMP). Additional investigation, engineering, and mitigation design will be addressed by the JV in the next phase of design development. There is a backup generator on site which has an internal fuel tank. There appear to be no leaks from this tank, however there are small quantities of hydrocarbons in containers around the generator and some de minimis staining. Any fuel in the tank of the generator and the small quantities of hydrocarbons present will be properly disposed of. Site hazardous materials removal will follow the applicable requirements as it relates to removal, receipt, distribution, storage and disposition of all hazardous materials on the site.

The presence of existing asbestos, lead-based paint, PCBs, etc. shall be investigated and a plan determined for any required abatement. Due to the age of the building, these hazards may be present and will require proper removal, disposal and mitigation in accordance with applicable standards.

## 7.0 SUPPORTING INFRASTRUCTURE

*Note: Structural, Civil, and MEPFP outline specifications subject to revision and value engineering through design process.*

### A. SITE PREPARATION AND GRADING

U.S. Virgin Islands Management Plans & Guidelines  
Virgin Islands Department of Natural Resources (VIDPNR)  
USVI Environmental Protection Handbook  
Virgin Islands Water and Power Authority (WAPA)  
Recommended Standards for Wastewater Facilities  
American Water Works Association (AWWA)  
Americans with Disabilities Act (ADA)  
Geometric Design of Highways and Streets (AASHTO)

FDOT Standards Index

NFPA Fire Codes NFPA 101

ICC500-202 Standard for the Design and construction of Storm Shelters

FEMA P-361 FEMA Standard for Design of Safe Rooms for Tornadoes and Hurricanes

IBC 2024 International Building Code, 2024

2021 US Virgin Island Code, Title 29 - Public Planning and Development, Chapter 5- Building Code

#### Existing Conditions:

The existing site is bounded on the north by Mandal Road, on the east by a residential property, on the south by a hill that rises about 210-feet above the school site and to the west by residential properties.

The existing school is composed of eight buildings clustered around a central playground area. These buildings shall remain and new amphitheater is proposed in the central playground area. The majority of the area surrounding the buildings is pervious mostly covered by grass except for the area north of the buildings which does not have grass and is prone to erosion and stormwater ponding.

The site topography varies between elevations 230-ft to 195-ft, with the higher areas being on the south and the lower areas being along the northwest corner of the site.

#### New Site Grading:

The project is within FEMA Zone X. Therefore, we propose placing the Minimum Finished Floor Elevation 1-foot above the average adjacent road elevation.

#### Demolition:

The existing buildings located north of the main school cluster shall be demolished along with the existing drop-off and parking area.

Other site features that shall be demolished include drainage structures, drainage pipes, fences and walkways within the drop-off, parking area and within the footprint of the proposed new buildings, parking area, the existing basketball courts and the existing wastewater treatment plant. Approximately 30-ft of existing 4'x4' concrete box culvert will need to be demolished and reconstructed outside of the footprint of the proposed Gymnasium building.

### **B. STRUCTURAL – LOAD & SEISMIC**

#### Design Criteria:

The structure will be designed and detailed in accordance with the following criteria.

The existing structures will be evaluated and designed and detailed in accordance with the following criteria.

In the case of conflict between these criteria, the most stringent requirement will govern.

|  |   |
|--|---|
| IBC 2024   | International Building Code, 2024                                     |
| 2021 US Virgin Island Code, Title 29 - Public Planning and Development, Chapter 5- Building Code |   |
| ASCE 7-22  | Minimum Design Loads for Buildings and Other Structures,              |
| ICC500-202   | Standard for the Design and construction of Storm Shelters            |
| FEMA P-361   | FEMA Standard for Design of Safe Rooms for Tornadoes and Hurricanes   |
| ACI 318-19   | Building Code Requirements for Structural Concrete,                   |
| TMS 402-16/602-22  | Building Code Requirements and Specifications for Masonry Structures, |
| AISC 360-22  | Specification for Structural Steel Buildings,                         |
| AISC 341-22  | Seismic Provisions for Structural Steel Buildings                     |
| AISI S100-20   | Specification for Design of Cold Formed Steel Structural Members      |
| AISI S240-20   | Standards for Cold Formed Steel Structural Members                    |

#### Design Basis:

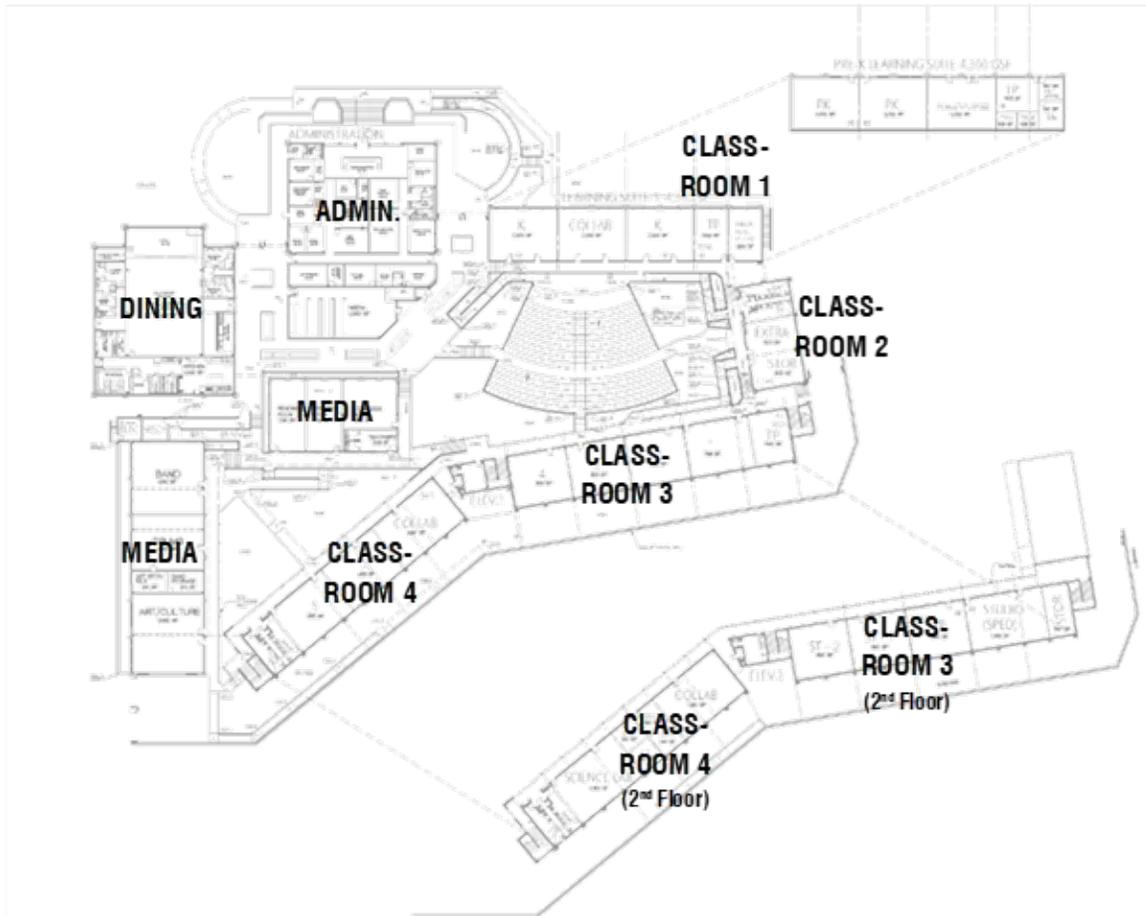
Bowsky PK-8 School will be renovated and expanded using the criteria developed with Lockhart document that serves as a precedent. Bowsky School will include renovation of the existing facilities as well as adding one new single story Gym with lockers (per Criteria on Bridging documents and Safe Room requirements).

The current PreK-8 school sits on a sloped site that is oriented to north facing route 42. Coordination with Architect, Civil, Geotechnical disciplines will consider the site slopes and geometry when locating in plan the new construction, as well as, assess the potential need for retaining walls throughout the site in the next phases of design.

Alterations, modifications, additions or change of occupancy will require structural evaluation in accordance with IEBC 2024. Structural upgrades or retrofits to mitigate effects of a significant earthquake or hurricane event may be necessary and will be designed in accordance to ASCE 41-2023. Any new work within existing buildings will be required to be designed in accordance with IBC2024. If

## BOWSKY PK-8 SCHOOL

extensive renovations are done to the existing building structures, triggers for seismic evaluation will be required. Due to the lack of drawings for the existing building structures, structural assessments of the existing buildings have been conducted to determine whether the structural retrofits required for different structural components.



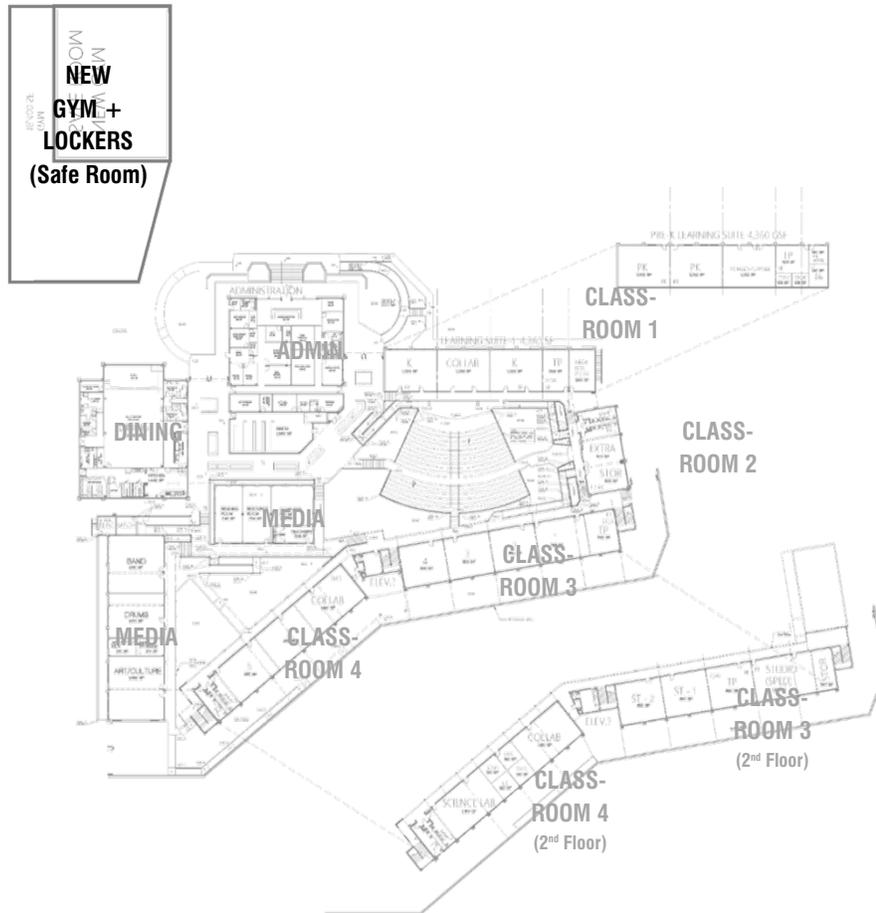
### Existing Building Construction Description:

Existing building structural framing systems are described as follows:

|                                 |  |
|---------------------------------|--|
| Record Drawings:                | No existing drawings are available   |
| Number of Stories:              | 1 to 2 story buildings   |
| Gravity Framing:                | Masonry load bearing walls with cast in place basement walls where outside grading is sloping.<br>Joist floor framing with slab on metal deck at classroom floor and joist roof framing with metal deck at roof. |
| Lateral Force Resisting System: | Assumed Masonry Special reinforced shear walls, to be more likely retrofit   |
| Foundation System:              | Shallow footing foundations  |

*Note: Structural, Civil, and MEPFP outline specifications subject to revision and value engineering through design process.*

# BOWSKY PK-8 SCHOOL



Any new building structure will be designed in accordance with IBC 2024. Existing buildings to be considered Risk Category III, and new buildings will be considered Risk Category IV buildings per RFI 023. The new Gym structure is designated as Storm Shelter Safe Room, the building is considered Risk Category IV building and will be designed in accordance ICC 500-202 and FEMA P-361.

### New Building Construction Description (New Gym + Locker):

New building structural framing systems will consider various factors, with the guidance of the structural narrative from the Design Criteria from Lockhart school as a precedence, such as:

- Local construction materials and availability
- Geotechnical considerations to be received
- Exposure classification to coastal environments
- High seismic region
- Wind loading
- Storm Shelter, where applicable
- Sustainability and resilience

Based Lockhart PK-8 School criteria (used as a precedent), the structural framing system may consist of the following:

Gravity Framing: Steel columns and concrete slab on metal deck on steel beams and girder framing.

*Note: Structural, Civil, and MEPFP outline specifications subject to revision and value engineering through design process.*

SUPPORTING INFRASTRUCTURE

## BOWSKY PK-8 SCHOOL

Foundation System: Cast-in-place footings and slab on grade at ground floor (to be coordinated and confirmed when cistern location is defined)

Lateral Force Resisting System: Cast in place shear walls around main gym area. The shearwalls thickness will vary between 12" to 16".

## C. HEATING / VENTILATION / AIR CONDITIONING

### Codes and Standards:

The design of all HVAC and Process systems must comply with the applicable codes and standards established for the project, including local and state building codes, health department codes, as well as owner-designated standards and sustainability guidelines.

Codes - The following publications will be used as codes for the design of the HVAC systems on this project:

2024 International Building Code (IBC)

2024 International Existing Building Code (IEBC)

2024 International Energy Conservation Code (IECC) and ANSI/ASHRAE/IES Standard 90.1-2019

2024 International Mechanical Code (IMC)

2024 International Plumbing Code (IPC)

2024 International Fuel Gas Code (IFGC)

2020 National Electrical Code (NEC) - Effective January 1, 2023

National Fire Protection Association (NFPA) 101 Life Safety Code - 2015 (effective July 1, 2017)

Standards and Guidelines - The following publication will be used as standards for reference and care of the HVAC systems on this project.

NFPA 1, Fire Code, 2024 edition

NFPA 13, Standard for the Installation of Sprinkler Systems, 2025 edition

NFPA 15, Standard for Water Spray Fixed Systems for Fire Protection, 2022 edition

NFPA 20, Standard for the Installation of Stationary Pumps for Fire Pumps for Fire Protection, 2025 Edition

NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, 2023 edition

NFPA 30, Flammable and Combustible Liquids Code, 2024 edition

NFPA 54, National Fuel Gas Code, 2024 edition

NFPA 70®, National Electrical Code®, 2023 edition

NFPA 72®, National Fire Alarm and Signaling Code, 2025 edition

NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems, 2024 edition

NFPA 90B, Standard for the Installation of Warm Air Heating and Air-Conditioning Systems, 2024 edition

NFPA 101, Life Safety Code, 2024 edition

NFPA 110, Standard for Emergency and Standby Power Systems, 2025 edition

2022 ASHRAE Refrigeration

2023 ASHRAE HVAC Applications

2024 ASHRAE HVAC Systems and Equipment

2025 ASHRAE Fundamentals

ASHRAE Guideline 0-2019: The Commissioning Process

### Outdoor Design Conditions (See Information Below):

*Note: Structural, Civil, and MEPFP outline specifications subject to revision and value engineering through design process.*

# BOWSKY PK-8 SCHOOL

1. For all designed spaces
  - a. Summer outdoor design conditions have been selected based on the 0.4% °F wet bulb (wb) and mean coincident dry bulb (db) conditions listed in the latest ASHRAE Fundamentals Handbook for the project location (with owner exception).
  - b. Winter outdoor design conditions have been selected based on the 99.6% °F heating dry bulb (db) conditions listed in the latest ASHRAE Fundamentals Handbook for the St. Thomas Cyril King Airport. This value is recommended to minimize the number of hours per year that design conditions are exceeded.
2. The following will be the design conditions, as recorded at the St Thomas Cyril King Airport (Weather Station 985430):
  - a. Summer Outside: 89.8 °F DB / 78.2 °F WB
  - b. Summer Dehumidification 83.7 °F DB / 80.3 °F WB / 79.2 °F DB [DP]
  - c. Summer Evaporation 85.9 °F DB / 80.3 °F WB
  - d. Summer Enthalpy 86.5 °F DB / 80.9 °F WB / 44.5 btu/lb
  - e. Winter Outside: 70.5 °F

2021 ASHRAE Handbook - Fundamentals (IP)

 ST THOMAS CYRIL KING, VIRGIN ISLANDS, U.S. (WMO: 785430)

| Annual Heating, Humidification, and Ventilation Design Conditions |                        |      |                               |       |                    |      |  |      |                       |      |            |      |                       |      |                |
|---|------------------------|------|-------------------------------|-------|--------------------|------|--|------|-----------------------|------|------------|------|-----------------------|------|----------------|
| Coldest Month   | Heating DB             |      | Humidification DP/MCDB and HR |       |                    |      |  |      | Coldest month WS/MCDB |      |            |      | MCWS/PCWD to 99.6% DB |      | WSF            |
|   | 99.6%                  | 99%  | DP                            | HR    | MCDB               | DP   | HR   | MCDB | WS                    | MCDB | WS         | MCDB | MCWS                  | PCWD |                |
| 2   | 70.5                   | 71.7 | 57.5                          | 70.5  | 76.2               | 60.2 | 78.0   | 76.5 | 22.8                  | 78.9 | 21.2       | 79.0 | 6.7                   | 80   | 0.464          |
| Annual Cooling, Dehumidification, and Enthalpy Design Conditions  |                        |      |                               |       |                    |      |  |      |                       |      |            |      |                       |      |                |
| Hottest Month   | Hottest Month DB Range |      | Cooling DB/MCWB               |       |                    |      |  |      | Evaporation WB/MCDB   |      |            |      | MCWS/PCWD to 0.4% DB  |      |                |
|   | 0.4%                   | 1%   | 0.4%                          | 1%    | 2%                 | 0.4% | 1%   | 2%   | 0.4%                  | 1%   | 2%         | 0.4% | 1%                    | 2%   |                |
| 8   | 8.7                    | 89.8 | 78.2                          | 88.9  | 78.1               | 88.2 | 78.0   | 80.9 | 85.9                  | 80.3 | 85.7       | 79.9 | 85.5                  | 14.2 | 130            |
| Dehumidification DP/MCDB and HR                                   |                        |      |                               |       |                    |      |  |      |                       |      |            |      |                       |      |                |
| DP  | 0.4%                   |      | 1%                            |       |                    | 2%   |  |      | 0.4%                  |      | 1%         |      | 2%                    |      | Extreme Max WB |
|   | HR                     | MCDB | DP                            | HR    | MCDB               | DP   | HR   | MCDB | Enth                  | MCDB | Enth       | MCDB | Enth                  | MCDB |                |
| 79.2  | 151.6                  | 83.7 | 78.7                          | 149.1 | 83.6               | 78.1 | 146.0  | 83.6 | 44.5                  | 86.5 | 43.9       | 85.7 | 43.3                  | 85.2 | 84.4           |
| Extreme Annual Design Conditions                                  |                        |      |                               |       |                    |      |  |      |                       |      |            |      |                       |      |                |
| Extreme Annual WS   |                        |      | Extreme Annual Temperature    |       |                    |      | n-Year Return Period Values of Extreme Temperature |      |                       |      |            |      |                       |      |                |
| 1%  | 2.5%                   | 5%   | Mean                          |       | Standard deviation |      | n=5 years  |      | n=10 years            |      | n=20 years |      | n=50 years            |      |                |
| 20.8  | 18.8                   | 17.6 | Min                           | Max   | Min                | Max  | Min  | Max  | Min                   | Max  | Min        | Max  | Min                   | Max  |                |
|   |                        |      | DB                            | WB    | DB                 | WB   | DB   | WB   | DB                    | WB   | DB         | WB   | DB                    | WB   |                |
|   |                        |      | 67.3                          | 92.7  | 3.5                | 2.4  | 64.8   | 94.4 | 62.7                  | 95.8 | 60.8       | 97.2 | 58.3                  | 98.9 |                |
|   |                        |      | 58.4                          | 81.6  | 5.6                | 1.2  | 54.3   | 82.4 | 51.0                  | 83.1 | 47.8       | 83.8 | 43.7                  | 84.6 |                |

## HVAC Building Systems Description

1. Central Energy Plant
  - a. The new elementary school complex will be cooled via chilled water central plant distribution. The central plant shall consist of two (2) high efficiency air-cooled rotary screw chillers. Chilled water piping systems shall include a variable-primary pumping distribution to the building cooling equipment. Acceptable manufacturers include Carrier, Daikin, JCI, Trane or equivalent air-cooled chiller manufacturer. Chillers shall include low-sound packages. Operational noise should meet local ordinances. The chiller plant is estimated to provide a nominal 500 tons of cooling. The chiller plant shall be capable of producing 100% of the calculated block load with one chiller.
  - b. Initial chiller sizing for the (2) rotary screw chillers is 250 tons each.

Note: Structural, Civil, and MEPFP outline specifications subject to revision and value engineering through design process.

SUPPORTING INFRASTRUCTURE

- c. Each chiller's condensing coil shall be hot dipped at the factory or remote facility to prevent premature corrosion. This coil coating is for protection from the environmental salty sea air.
2. Underground Chilled Water Piping
  - a. The building will be provided with new 6" chilled water supply and return piping from the new central energy plant. Underground chilled water piping shall be minimized as practical. Underground chilled water piping shall be direct burial HDPE piping.
    - i. HDPE Carrier Pipe: The innermost pipe, made of High-Density Polyethylene, carries the chilled water. HDPE is chosen for its excellent resistance to corrosion, chemical inertness, flexibility, and smooth interior bore.
    - ii. Thermal Insulation: Surrounding the HDPE carrier pipe is a layer of high-efficiency, closed-cell insulation, polyurethane foam. This foam is injected or foamed around the carrier pipe during manufacturing, creating a uniform, continuous barrier.
    - iii. HDPE Outer Jacket: The entire assembly (carrier pipe + insulation) is encased in a robust, corrugated High-Density Polyethylene outer jacket.
3. Chilled Water Pumping System
  - a. The chilled water pumping system shall be configured as a Lead/Standby System in a Variable/Primary pumping system. Total of 2 pumps (1 – Primary / 1 – Standby).
  - b. Pumps shall be split-coupled end suction pumps. Pumps should be controlled via variable frequency drives. Pumps shall be equipped with strainers, shut-off valves, check valves.
  - c. Primary and Standby pumps shall be sized for 400 GPM and roughly 60 feet of head pressure.
  - d. Pump motor horsepower is estimated to be 10 Horsepower.
4. Building Cooling Approach
  - a. The approximate tonnage for the renovation/addition to the Bowsky Elementary School is approximately 205 tons (2 – 250-ton chillers for N+1 redundancy). The building's cooling distribution pressure is anticipated to occur from the existing central energy plant with two new pumps (primary/standby) for building pressure control in low load conditions. Chilled water shut-off valves will be provided at each building's entrance. The valves are intended to be placed in the risers of exterior mechanical rooms. The piping system will be designed for a 12-degree temperature difference at the cooling coil with inlet water temperature of 45 °F.
  - b. Chilled water discharge temperature shall be evaluated for a reset schedule; however, due to the prevalence of dehumidification needs, reset scheduling is unlikely.
5. Blind Flange and Valves
  - a. The central energy plant shall have the ability to connect a temporary chiller via blind flanges and butterfly valves. These blind valves and flanges shall be provided in an accessible location.

6. Aboveground Chilled Water Piping
  - a. Aboveground chilled water supply and return piping from the mechanical rooms to AHU's and FCU's shall be pre-insulated HDPE. Aboveground chilled water piping shall be minimized as practical. Underground chilled water piping shall be direct burial HDPE piping.
    - i. HDPE is significantly lighter than metallic pipes, simplifying handling, shipping, and installation, especially in overhead applications.
    - ii. HDPE is a flexible material. This flexibility allows for natural movement and absorption of some stresses, including minor building deflections or seismic activity which this complex exists in. It also means it can be manufactured in long coils or sticks, reducing the number of field joints.

### Air Handling Unit Equipment (See Appendix C)

1. There will be Dedicated Outside Air Handlings (DOAS) that will provide pre-conditioned ventilation to each fan coil unit while the facility is in operation.
2. Air will leave the cooling coil at the Dedicated Outside Air Handling Units at approximately 52°F and be supplied to the occupied spaces at 55 °F (fan reheat/duct heat loss). The air system controls will allow for temperature resetting.
3. The air handlers will be semi-custom built up units (Carrier, Daikin, JCI, Trane or Equivalent). The DOAS shall be double-wall construction with 2" insulation. The units will have direct driven fans with variable frequency drives. They will have insulated, sloped, stainless steel drain pans. The air filtration will utilize 90-95% filters. The final filters are conceptualized as factory charge 2" disposable filters with an initial MERV rating of 14 (3M Filtrete Filters or similar). Ductwork will be galvanized sheet metal wrapped with mineral-fiber insulation outside of the mechanical room. Ductwork will be galvanized sheet metal insulated with mineral fiber board inside mechanical rooms.
4. The Dedicated outside air cooling coil shall be hot-dipped at the factory or remote facility to protect the coil from premature failure due to corrosion.
5. The dedicated outside air handling units shall be evaluated to be equipped with a fully modulating air-to-air heat-pipe run-around coil for pre-cooling and reheating to provide sensible reheating but also providing dehumidification. This option will be evaluated to maintain proper indoor humidity levels without overcooling. This evaluation will be determined in the early energy modeling phase for appropriateness.
6. The dedicated outside air handling units shall be equipped with air-to-air energy recovery to recapture energy from the exhaust air systems prior to exiting the buildings.
7. All air handling units will utilize two-way chilled water, pressure-independent, characteristic control valves to match water flow with building cooling demands.
8. Air handling equipment shall be equipped with a strainer with blowdown, supply and return shutoff valves, control valve, temperature gauges, pressure gauges, manual air vent, BMS sensors and P/T ports.

### Fan Coil Unit Equipment

## BOWSKY PK-8 SCHOOL

1. Fan coil units shall be provided to individual zone spaces which include classrooms, teacher planning, storage, counseling, science & maker spaces, workrooms, conference rooms, music, distance learning, PK Multipurpose, timeout, etc.
2. Fan coil units shall be equipped with multi-speed fans, overflow condensate drain pan with water sensor for fan shutdown, and factory-mounted disconnect.
3. Fan coil units will utilize two-way chilled water, pressure-independent, characteristic control valves to match water flow with building cooling demands.
4. Fan coil units shall be installed in an accessible location.
5. 42" working clearance shall be provided in front of disconnect. 36" working clearance shall be provided in front of filter section.
6. Fan coil equipment shall be equipped with a strainer with blowdown, supply and return shutoff valves, control valve, automatic air vent, BMS sensors and P/T ports.

### Terminal Units

1. Single-Duct terminal units shall be provided for each controllable zone to modulate ventilation to the fan coil unit(s) based on a demand ventilation control sequence. Single-Duct terminal units will be provided without heat and will be controlled via CO<sub>2</sub> sensors located in the space that the fan coil unit delivers air.
2. Terminal units shall be installed in an accessible location.
3. 24" working clearance in front of control panel.

### Building Exhaust

1. All toilets will be exhausted directly to the outside at the rate of 50 cfm / water closet or urinal. Toilet exhaust will be through constant exhaust fans connected to exhaust ductwork and exhausted at fan on the roof or through exterior louvers. The toilet exhaust fan will be interlocked with coordinating air handling units. The exhaust fan system will run continuously during occupied times and shut off during unoccupied times.
2. Janitor's closets and trash rooms shall be exhausted at a rate of 1 CFM/GSF but not less than 100 CFM.
3. The kitchen will be exhausted at a rate of 0.70 CFM/GSF.
4. Educational Science laboratories will be exhausted at a rate of 1 CFM/GSF.
5. Art classrooms will be exhausted at a rate of 0.70 CFM/GSF.
6. Storage rooms that contain chemicals or fuel will be exhausted at a rate of 1.5 CFM/GSF.
7. Locker Rooms shall be exhausted at a rate of 0.50 CFM/GSF.
8. All laboratory hoods shall be exhausted based on intended experiments and meet manufacturer's exhaust recommendations. Exhaust shall be provided at hood, distributed via FRP with appropriate resin to achieve compliance with UL 181.
9. It is intended that laboratory systems would be virtual without the use of chemicals. However, if a fume hood is provided, the laboratory exhaust system ductwork should be routed through the roof to the laboratory exhaust fan and discharged at least 25 feet away from the roof. Laboratory exhaust ductwork shall be evaluated for use by other man

## BOWSKY PK-8 SCHOOL

10. The DOAS exhaust air section, which includes its fan shall modulate to track with the demand control ventilation strategy to limit building over-pressurization. Fans should be sized to allow for adequate building pressurization and to provide code minimum exhaust.
11. Motorized exhaust fans are to have speed control, use solid state speed control.

### Energy Code Compliance

1. The design will need to comply with the mandatory provisions of the 2021 International Energy Conservation Code (IECC) and ANSI/ASHRAE/IES Standard 90.1-2019.
2. The facility has been modeled early for energy conservation. IES VE-Pro 2025 was utilized to review energy consumption. The energy model fully analyzed loads from cooling, lighting, power and envelope.
3. The energy model will be the basis for design to achieve NetZero Energy Cost per the negotiated contract with the USVI WAPA (Water and Power Authority).

## **D. PLUMBING**

### System Description

#### Codes and Standards

The design of all Plumbing and Process systems must comply with the applicable codes and standards established for the project, including local and state building codes, health department codes, as well as owner-designated standards and sustainability guidelines.

Codes - The following publications will be used as codes for the design of the Plumbing systems on this project:

- International Building Code (2024)
- International Mechanical Code (2024)
- International Plumbing Code (2024)
- International Fuel Gas Code (2024)
- International Energy Conservation Code (2024)
- International Fire Code (2024)

#### Local Standards

US Virgin Islands Local Jurisdiction Requirements

Other Standards - The Piping Systems will be designed in accordance with appropriate portions of the following Guidelines and Standards:

- Occupational Safety and Health Act (OSHA)
- National Fire Protection Association (NFPA)
- American National Standards Institute (ANSI)
- American Society of Mechanical Engineers (ASME)
- American Society of Sanitary Engineering (ASSE)
- American Society for Testing and Materials (ASTM)
- American Water Works Association (AWWA)
- ADA Standards for Accessible Design (ADA)
- National Sanitation Foundation (NSF)
- Cast Iron Soil Pipe Institute (CSPI)
- Plumbing and Drainage Institute (PDI)
- ANSI Z358.1 Emergency Eyewash and Shower Equipment, 2015
- American Society of Plumbing Engineers (ASPE) Data books.

# BOWSKY PK-8 SCHOOL

## Building Systems

### 1. Water Systems

| System Type         | Minimum Design Pressure at Fixture (psi) | Maximum Design Pressure at Fixture (psi) | Maximum Fluid Velocity (ft/sec) | Maximum Pressure Loss (psi/100ft) | Note   |
|---------------------|--|--|---------------------------------|-----------------------------------|--------|
| Domestic Cold Water | 20                                       | 80                                       | 6                               | 4                                 |        |
| Domestic Hot Water  | 20                                       | 80                                       | 6                               | 4                                 | Note 1 |
| Industrial Water    | 30                                       | 60-80                                    | 5                               | 4                                 |        |

Note 1 - Potable hot water shall be distributed at 120 °F to all fixtures and scientific equipment. The final water temperature shall be controlled locally at the fixtures and equipment with the use of thermostatic mixing valves.

- a. All domestic system valves shall be bronze ball valves.
- b. Additional pressure reduction to better the building's EUI will be evaluated in the field during the commissioning process.
- c. Water to the waste-water treatment plant (Industrial Equipment) shall be evaluated for its exact pressure needs in design.

### 2. Drainage Systems

| System Type             | Peak Rainfall Intensity (inches/hour) | Event Duration (minutes) | Event Return Period (years) | Fluid Velocity (ft/sec) | Note   |
|-------------------------|---------------------------------------|--------------------------|-----------------------------|-------------------------|--------|
| Storm Water (Primary)   | 4.5                                   | 60                       | 100                         | 3-5                     |        |
| Storm Water (Secondary) | 4.5                                   | 60                       | 100                         | 3-5                     |        |
| Sanitary Waste          | NA                                    | NA                       | NA                          | 2-4                     | Note 1 |

Note 1 - Liquids or solids that constitute a hazard to humans or animals, capable of causing damage or hazard to structures equipment or create any hazard in the receiving waters of the sewage treatment plant shall not be introduced into the sewage system.

Water and Energy Conservation

1. Plumbing Fixtures
  - a. Plumbing fixtures shall be installed using the following maximum volumes of water:

| <b>Plumbing Fixtures</b> | <b>Flow rate</b>           |
|--------------------------|----------------------------|
| Water Closet             | 1.28/0.8 gallons per flush |
| Urinal                   | 0.125 gallons per flush    |
| Kitchen sink             | 1.5 gallons per minute     |
| Laboratory sink          | 1.5 gallons per minute     |
| Lavatory sink            | 0.5 gallons per minute     |

2. Energy Conservation
  - a. Optimize Energy Performance: Plumbing equipment contributes to overall energy use. The following methods may contribute to energy conservation:
    - i. Reduce operating water pressures.
    - ii. Install high efficiency motors, pumps, and water heaters
    - iii. Design energy-conserving distribution systems

PLUMBING SYSTEM CRITERIA

1. Overview
  - a. Anticipated program includes office spaces, conference rooms, classrooms, science lab, IT space and mechanical/electrical equipment spaces.
2. Anticipated services to be provided include:
  - a. Water service and meter.
  - b. Sanitary main(s) exiting the buildings to site/civil connections.
  - c. Storm drainage main(s) exiting the buildings to site/civil connections.
  - d. Sanitary waste and vent systems.
  - e. Storm water systems.
  - f. Secondary storm drainage systems discharging to daylight at grade or scuppered.
  - g. Potable hot and cold-water system.
  - h. Elevator hoist way sump pumps.
  - i. Water softening for kitchen only.
3. Overall, the plumbing systems will be designed to promote the safety, comfort and convenience of the building occupants, as well as providing reliable, sustainable and efficient operation of the facility.

Potable Cold Water System

1. The facility will collect roof stormwater runoff to two underground cisterns. One approximately 75,000 gallon cistern will be dedicated to fire protection water storage, and one approximately 175,000 gallon cistern will be used for grey water distribution to water closets, urinals, and exterior wall hydrants.

- a. A particulate filter shall be provided upstream of the cistern to collect large debris and contaminants.
  - b. Chlorination distribution system shall be provided to the cistern to limit biological growth.
  - c. A potable water, drinking water, system consisting of controllers, pumps, particulate filter, carbon filter, reverse osmosis filter, break tank, UVc light, biologic filter and HDPE piping distribution shall be provide to deliver potable-grade drinking water to lavatories, drinking fountains and sinks.
  - d. Domestic water system consists of controllers, pumps and HDPE distribution pipe.
  - e. A secondary connection from WAPA shall be provided for use in low-cistern water conditions. Both electronic and mechanical water level monitoring shall be provided to automatically fill water to the break tank.
2. The proposed water distribution for the facility will be 4 inches. The backup water service from WAPA is anticipated to be 2 inches. The incoming main and water meter will be located on the ground floor. Duplex backflow preventers located outside of the building will be provided on the incoming water service to protect the site distribution main.
  3. Shut-off valves will be provided at each branch take-off. Locate plumbing valves in accessible areas, in corridors if possible. Valves shall not be permitted above bathroom stalls.
  4. Hose bibs will be provided in all public toilet rooms, locker rooms and at all mechanical rooms. Group toilet rooms shall be key access.
  5. Wall hydrants will be provided around the perimeter of the building within 100 feet of each other and at each face of the roof.
  6. Hose bibb adjacent to track and play courts shall be provided for pressure washing. Hose bibb shall be key locked.
  7. Water hammer arrestors shall be provided on all quick action valves connected to domestic water system.
  8. Backflow prevention devices shall be provided for any coffee maker connected directly to the domestic water system.
  9. The underground piping shall be HDPE.
  10. Isolation valves shall be provided at entrance of the new/renovated building. Shutoff valves shall be provided at trunk line branches within a building so that water service shutdowns do not affect an entire building for isolated situations and in main piping within large buildings with long pipe runs. Valves shall be located above acoustic tile ceilings. Where not possible a minimum 24"x24" ceiling access panel shall be provided to facilitate maintenance.
  11. All exposed pipe in kitchens shall be Type L copper.

### Domestic Hot Water System

1. Domestic hot water will be made available for janitorial needs using individual electric hot water heaters located in the janitor's closet. Piping systems shall be insulated to comply with ASHRAE 90.1 to prevent excessive heat loss and conserve energy. Hot water re-circulating pumps are not anticipated but will be provided for hot water piping where runs exceed 50'-0".

## BOWSKY PK-8 SCHOOL

2. Liquid Propane Instantaneous hot water heaters are anticipated for the kitchen and showers. Size and location shall be determined based on the anticipated flow rate needed for those spaces. Liquid propane tanks shall be located near the heaters to limit gas piping distribution on the site.
3. All hot water piping will be insulated with mineral fiber insulation.
4. Shut-off valves will be provided at each take-off branch. Valves will be located at accessible locations.
5. Design Hot Water Temperatures 110 °F: Clinic Sinks, Showers, Staff Toilet Room Sinks, Custodial Mop Sinks and Kitchen Hand Sinks.
6. Design Hot Water Temperatures 140 °F: Pot Wash, 3-Compartment Sink, Dishwashers.

### Piping Materials

1. Domestic cold and hot water piping material will be HDPE or other approved plastic piping system with supports per manufacturer's recommendations. The domestic water distribution system shall be constructed utilizing an adequately sized system sized to limit velocity to 8 fps to reduce noise and water hammer.

### Storm Drainage System

1. Storm water drainage system will be provided to convey precipitation from roof drains to the on-site, underground cisterns. A particulate filter shall be provided prior to entrance of the cistern. Storm water will be collected by gravity. If cistern capacity is exceeded with on-site collection of water, a storm bypass shall be provided, and storm water shall be discharged to the site civil system.
2. Storm piping is intended to be HDPE and sized for expected rainfall collection on a flow basis.

### Sanitary Waste System

1. Conventional (two-pipe) interior waste collection systems will be provided. A hard-piped sanitary waste and vent riser system will service plumbing fixtures in toilet rooms, hand sinks, mop sinks, exterior can wash and floor drains in toilet rooms, indirect drains and mechanical equipment rooms.
2. Sanitary waste and vent piping will be HDPE. Sanitary piping will be designed for 1/8" per 1'-0" of slope for 3" pipe and larger. Piping smaller than 3" will be designed for 1/4" per 1'-0" of slope. Cleanouts will be provided to meet code and good design practices.
3. Cleanout installed outside the building shall be configured with two separate Y fittings installed in opposing directions instead of single 2-way cleanout fitting.
4. Grease piping shall be provided from the 3-compartment sink to a grease interceptor located at the exterior of the facility in an accessible location.
5. Grease piping is intended to be high-temperature Schedule 80 PVC or HDPE approved for high temperatures.
6. Cross fittings are NOT permitted in sanitary waste pipe.
7. DWV Double Wye Fittings are NOT permitted in the Sanitary Waste line.
8. Routing of sanitary mains beneath corridor with cleanouts in the corridor (or non-student occupied spaces adjoining the corridor) is preferred.

### Liquid Propane Gas System

## BOWSKY PK-8 SCHOOL

1. A liquid propane storage tank, gauges, piping and regulation shall be provided for distribution to the hot water heater for the kitchen and cooking equipment for the kitchen. Tank shall be sized for monthly filling.
2. A liquid propane storage tank, gauges, piping and regulation shall be provided for distribution to the hot water heater for the locker room showers. Tank shall be sized for monthly filling.
3. Gas piping shall be corrugated stainless steel or Type "L" copper and provided in a carrier pipe underground if buried underground. Carrier piping shall be properly vented.

## **E. WATER / SEWER / GAS**

### Water

There is no WAPA water main along Wintberg Road. Therefore, the existing cistern shall be retrofitted as required to make it fully functional.

Potable water distribution pipes shall be minimum 4-inch DIP. The potable water shall be pumped from the potable water cistern chamber to the various buildings throughout the site.

Fire water shall come from the cistern. The water shall be pumped from the cistern to the various fire hydrants located throughout the project site. Fire hydrants shall be located so that points within 250-foot of the hydrant can be reached by a fire hose.

### Sanitary Sewer

The gravity sanitary sewer collection system within the school site shall be composed of concrete sanitary sewer manholes and minimum 8-inch diameter SDR35 PVC pipes. Sanitary sewer manholes shall be located at maximum 400-foot spacing and at every change in pipe direction. Sanitary sewer service laterals shall be minimum 6-inch diameter SDR35 PVC pipe with cleanouts at the exit point from a building and change in pipe direction. The proposed gravity sanitary sewer system shall convey sanitary sewage to the proposed wastewater treatment plan that will be located at the northwest corner of the site. The plant will produce effluent meeting irrigation water quality standards. Excess treated water will be released into the stormwater drainage system overflow concrete channel also located at the northwest corner of the project site.

A concrete sanitary sewer holding tank with a 3-day holding capacity will be required. The proposed gravity sanitary sewer system shall be designed with a diversion structure that allows for sanitary sewage to be diverted to the holding tank during emergencies.

### Gas

The project will not incorporate a gas utility system.

## F. ELECTRICAL

### Electrical Design Criteria

#### Codes and Standards

The design of all Electrical and Process systems must comply with the applicable codes and standards established for the project, including local and state building codes, health department codes, as well as owner-designated standards and sustainability guidelines.

Codes - The following publications will be used as codes for design of the electrical systems on this project:

2024 International Building Code (IBC)

2024 International Existing Building Code (IEBC)

2024 International Energy Conservation Code (IECC) and ANSI/ASHRAE/IES Standard 90.1-2019

2024 International Mechanical Code (IMC)

2024 International Plumbing Code (IPC)

2024 International Fuel Gas Code (IFGC)

2020 National Electrical Code (NEC) - Effective January 1, 2023

National Fire Protection Association (NFPA) 101 Life Safety Code - 2015 (effective July 1, 2017)

Standards - The following publication will be used as standards for reference and care of the electrical systems on this project.

NFPA 1, Fire Code, 2021 edition

NFPA 70®, National Electrical Code®, 2020 edition

NFPA 72®, National Fire Alarm and Signaling Code, 2019 edition

NFPA 101, Life Safety Code, 2021 edition

The following industry standards are also referenced to establish design criteria:

Institute of Electrical and Electronics Engineers (IEEE)

American with Disabilities Act (ADA)

Illumination Engineering Society (IES) Handbook 10th Edition

National Electrical Manufacturers Association (NEMA)

Occupational Safety and Health Administration (OSHA)

Underwriters Laboratories (UL)

Medium Voltage Distribution Utility Standards (WAPA)

### Electrical Power and Lighting Criteria

1. The design of all Electrical systems must comply with the applicable codes as referenced by the Building Code. The electrical systems will be designed in accordance with the following local and national codes:
2. All of the power densities listed below are preliminary and will be refined as the design progresses in the design development and construction document phases of this project. The electrical

## BOWSKY PK-8 SCHOOL

distribution system shall be designed to meet the following design load densities calculated on watt/sq. ft. The loads will be confirmed pending final program information.

| Power Density Assumptions  |                            |                                   |                           |                                  |
|----------------------------|----------------------------|-----------------------------------|---------------------------|----------------------------------|
| Area                       | Distribution System Level  |                                   |                           | Estimated Service Demand (W/GSF) |
|                            | Local Branch Panel (W/GSF) | Local Distribution Panels (W/GSF) | Service Equipment (W/GSF) |                                  |
| Office Lighting            | 3                          | 2.5                               | 2                         | 1.1                              |
| Office Power               | 6                          | 4                                 | 2                         | 1.5                              |
| Conference Lighting        | 3                          | 2.5                               | 2                         | 1.1                              |
| Conference Power           | 6                          | 4                                 | 2                         | 1.5                              |
| Kitchen Lighting           | 5                          | 3                                 | 2                         | 3                                |
| Kitchen Power              | 10                         | 25                                | 2                         | 35                               |
| Cafeteria Lighting         | 5                          | 3                                 | 2                         | 3                                |
| Cafeteria Power            | 6                          | 4                                 | 2                         | 1.1                              |
| Classroom Lighting         | 5                          | 3                                 | 2                         | 3                                |
| Classroom Power            | 6                          | 4                                 | 2                         | 1.5                              |
| Science Classroom Lighting | 5                          | 3                                 | 2                         | 3                                |
| Science Classroom Power    | 6                          | 4                                 | 2                         | 1.5                              |
| Media Lighting             | 3                          | 2.5                               | 2                         | 1.1                              |
| Media Power                | 6                          | 4                                 | 2                         | 1.5                              |
| Corridor Lighting          | 2                          | 1.5                               | 2                         | 1                                |
| Corridor Power             | 2                          | 2                                 | 2                         | 2                                |
| Restroom Lighting          | 3                          | 2.5                               | 2                         | 1.1                              |
| Restroom Power             | 2                          | 2                                 | 2                         | 2                                |
| Mechanical Equipment       | 18                         | 30                                | 10                        | 5                                |
| <b>Design Average</b>      | <b>15-20</b>               | <b>25-30</b>                      | <b>8-10</b>               | <b>15-20</b>                     |

3. Equipment Sizing Criteria: Service and distribution system components including switchboards, distribution panelboards, feeders, transformers, circuit breakers and other equipment, will be sized for present loads and future allowances as follows:
  4. Switchboards will include 20 percent
  5. Distribution panels will include 25 percent.
  6. Lighting panels will include 25 percent.
  7. General purpose branch circuit panels will include 25 percent.
8. Lighting Criteria: Unless otherwise noted, illumination levels will be selected according to the method described in the 10th Edition Handbook of the Illuminating Engineering Society of North America (IESNA).

*Note: Structural, Civil, and MEPFP outline specifications subject to revision and value engineering through design process.*

SUPPORTING INFRASTRUCTURE

| Average Footcandles (FC)  |                       |                     |
|---------------------------|-----------------------|---------------------|
| Area                      | FC Range at Task Area | Weighted FC Average |
| Offices                   | 30-40                 | 35                  |
| Conference Rooms          | 20-30                 | 20                  |
| Kitchen                   | 40-50                 | 30                  |
| Cafeteria                 | 25-30                 | 15                  |
| Classroom                 | 40-50                 | 30                  |
| Media                     | 20-30                 | 20                  |
| Corridors                 | 10-15                 | 10                  |
| Restrooms                 | 7.5-30                | 18                  |
| Stairwells                | 10-15                 | 15                  |
| Storage                   | 10-30                 | 15                  |
| Mechanical/ Electrical/IT | 20-40                 | 30                  |

| Minimum Egress Maintained Footcandle Illumination Area |                       |
|--|-----------------------|
|  | Recommended Level     |
| Path of Egress   | 1 average, .2 minimum |
| Exterior Exit Discharge                                | 1 average, .2 minimum |
| Stair/Elevator Lobby                                   | 1 minimum             |

Electrical Systems Description

Medium Voltage Distribution

1. Utility Company Interface: The main electrical service to the building will be fed from one (1) 750 kVA, pad mounted utility transformer.
2. Utility service lines will enter the campus via a Medium Voltage above ground tap box at elevation 11' above sea level.
3. A medium voltage above ground net metering cabinet will be provided ahead of the utility transformer.
4. Medium voltage concentric neutral cabling and dead front connections will be made per WAPA standards.
5. All equipment shall be at 11' above sea level. This will be accomplished either by grading or by above ground vault extensions.
6. Medium voltage manholes will be provided were necessary based on site conditions.
7. Direction boring will be utilized wherever possible.

*Note: Structural, Civil, and MEPFP outline specifications subject to revision and value engineering through design process.*

### Building Electrical Service – Central Energy Plant (CEP)

1. Utility Company Interface: The main electrical service to the building will be fed from one (1) 750 kVA, pad mounted utility transformer
2. The utility transformer will step down the utility service lines to 480Y/277V and serve one (1) 480Y/277V, 3 phase, 4 wire switchboards. Electric service will be secondary metered at the switchboards. The electrical service disconnecting means will be contained in a floor-mounted switchboard.
3. The new facility is estimated to be a 2,000-amp electrical service.
4. Emergency Roll up Generator power connection will be provided for campus. If there is an EHPA Shelter, this system will have its own roll up generator connection.
5. The main campus electrical distribution system will remain phased to accommodate the CM's approach to construction.
6. The existing buildings will be served by a new central electrical service.
7. Buildings will be fully renovated, and all electrical system modifications will be provided in order to accommodate and bring the facility to current code and meet local standards.

### New Building Normal and Standby Power Distribution

1. Main distribution feeders will be raceway and wire for horizontal and vertical distribution, in accordance with local Standards. Distribution for the facility will be 480 volt, 3 phase, 3 wire for motor loads, 480Y/277 volt, 3 phase, 4 wire for miscellaneous power and lighting loads, 208Y/120 volt, 3 phase, 4 wire for miscellaneous power loads via dry type transformers. Electric closets will be provided on each floor.
2. Each electrical room will have a lighting panel, with an estimated 125A panel rating. The electrical room will also be provided with an estimated 75kVA dry-type step-down transformer. Each transformer will feed a two-section or three-section panelboard with 84 to 126 poles, and a main breaker rated at 300 amps. The mechanical panel in each electrical room is anticipated to be rated between 225 and 400 amps and be provided with 42 poles.
3. All panelboards to have a main breaker based on NEC requirements and surge protection devices to create a cascading surge protection design.
4. The electrical distribution system will be a fully-rated system with circuit breakers coordinated per the requirements of the NEC. The expected kAIC rating of the switchboard, lighting panels and mechanical panels will be 65kAIC. The expected kAIC rating of the 120/208V panels will be 10kAIC.
5. Transformers will meet the efficiency requirements defined by DOE 2016. Transformers will have 220 C rated insulation. Transformer will be UL listed and meet requirements of latest NEMA and ANSI standards.
6. Vibration Isolation: All transformers, whether hung from the structure or floor mounted, will be provided vibration isolation devices.
7. Each floor will be provided with an electrical room. The main electrical room will be located on the ground floor, as close to the location of the utility transformer as possible, on an exterior wall. The 2nd floor electrical rooms will be vertically stacked above the first floor electrical rooms, one set of

stacked rooms on each side of the building. This allows for reduced feeder/circuit runs and a cleaner distribution system .

8. Emergency Electrical Distribution: The emergency distribution system will utilize a dedicated emergency electrical room in the building C for the ATS equipment and emergency distribution switchboards. All branch/distribution panel boards will be located with the normal electrical panels within a typical electrical room. This distribution system will stack and all feeders will be fire protected per the NEC requirements.

### New Photovoltaic System

1. A minimum 1200A rated switchboard shall be provided to connect PV inverters located within each building back to a single point. This distribution panel will interconnect with the main electrical switchgear to provide PV generator electrical power @ 480V 3ph. Each building will have either a single or multiple local inverter that will be connected as noted.
2. There shall be a networked PV microgrid control system provided throughout the campus. This control system will monitor all microgrid system components and also provide instruction for switching to stored battery energy throughout normal operation.
3. The estimated system capacity total 500kW. This is intended to generate a Net Zero outcome as it relates to power. However, the final system capacity may vary.

### Distribution Systems Voltage and Starter Criteria

1. The nominal distribution system Voltages will be as follows:
  - a. 480V, 3 phase for equipment (mechanical, plumbing, other large loads)
  - b. 277V, 1 phase for lighting, normal and emergency
  - c. 208V, 3 phase for miscellaneous equipment loads as required
  - d. 120V, 1 phase for convenience power in office, general areas, etc.
  - e. 120V, 1 phase for other miscellaneous systems (fire alarm, communications, etc.)
2. Motor Voltages
  - a. Less than 4 HP – single phase (voltage may vary)
  - b. 4 and larger HP – three phase (voltage may vary)
3. Motor Starter Types
  - a. ¼ HP and below – Thermal overload switch
  - b. 1/3 to 25 HP – VFD or combination circuit breaker and reduced voltage starter.
  - c. Above 25 HP – VFD
4. Variable Frequency Drives (VFD): VFD's will be provided for equipment identified by Division 23. VFD's will be 6 or 12 pulse IGBT type drives. The design will include dV/dt filters and line reactors to mitigate harmonics.

### Building Standby Emergency Power/Battery Backup/Solar Photovoltaic Panels

## BOWSKY PK-8 SCHOOL

1. Centralized Building and standby emergency storage system, 850kW/1700kWh, 480V, 3-ph with a minimum of 1,200A of inverter output capacity.

### Option 1

- A. Centralized integrated battery storage solution will be utilized for energy storage and energy management. This system will allow the PV and battery system interact with the facility energy usage, allowing it to monitor energy production, storage, discharge, usage rates and predict demand.
- B. Scalable battery capacity up to 1 GWh. This system will need approximately 3.5 MWh of battery storage.
- C. Turn key system – connection of power and communications is all the system will require once located and placed on site. This allows for fast termination and minimal labor effort.
- D. Integrated optimization software developed for SCADA integration and fast response controls.
- E. Ventilation and safety features built in and provided without the construction of a battery room.
- F. Reduced foot print overall.
- G. Ease of permitting.
- H. Basis of Design – TESLA MEGAPACK

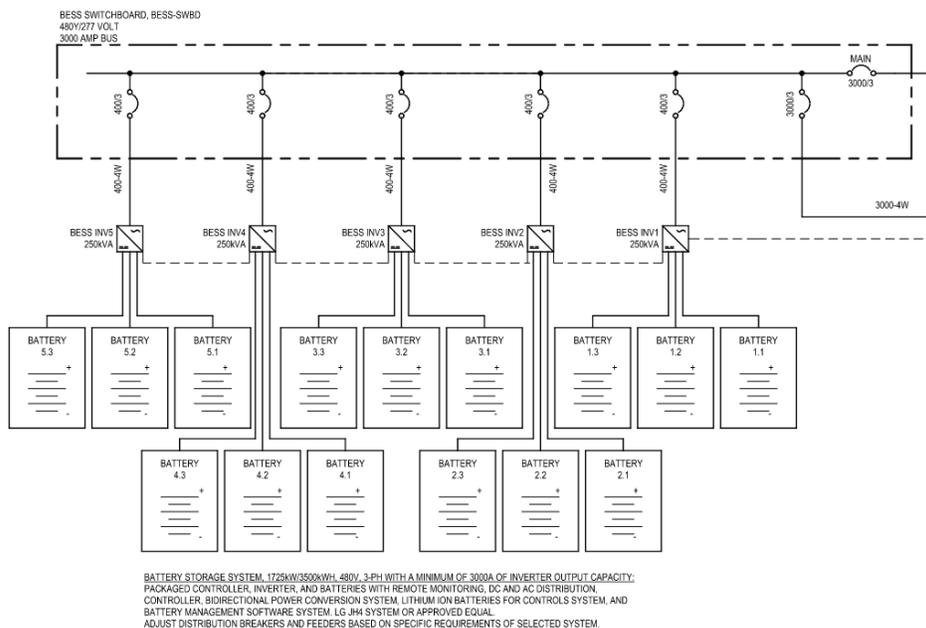


### Option 2

*Note: Structural, Civil, and MEPFP outline specifications subject to revision and value engineering through design process.*

SUPPORTING INFRASTRUCTURE

- A. Traditional switchgear, inverter, and battery storage design.
- B. Battery rooms and required HVAC/Safety designs
- C. Containment system design
- D. Integration of controls systems across multiple system components from differing manufacturers.
- E. Large footprint/space requirements
- F. Separate fire protection system requirements.



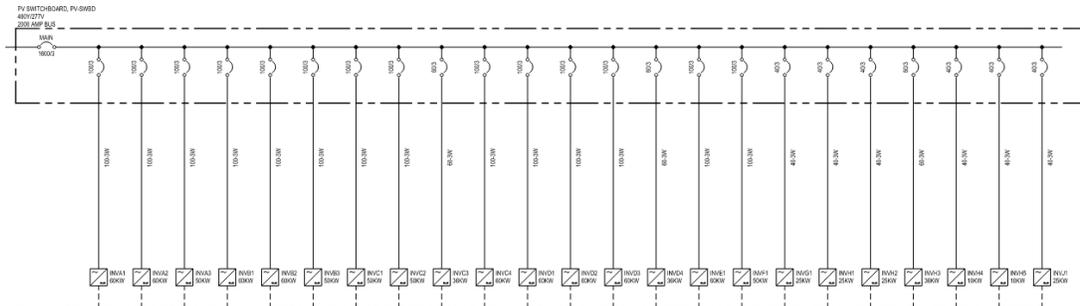
2. Whole system transfer switches will be manual open transition, with bypass isolation. The transfer switch withstand ratings will be selected with consideration given to the upstream overcurrent protective device clearing times. The transfer switch used for emergency power will be selected with 18 or 30 cycles rating to allow for selectively coordinated overcurrent protective devices.

3. A Manual transfer switch connection will be provided for the shelter emergency power as a backup to the centralized battery system. Basis of Design will be Trystar with network connectivity. Cam

lock cable transition between normal source and alternate source.



4. At each building, a centralized battery inverter will be provided to provide Life safety lighting throughout. All life safety systems within each building will be provided with battery power per the requirements of NFPA.
5. At each building, a PV system and inverter will be installed and connected to a centralized combiner panel. This combiner panel will be connected to the main switchgear to provide solar energy to the entire campus and provide charging to the battery storage system.



*Note: Structural, Civil, and MEPFP outline specifications subject to revision and value engineering through design process.*

Electrical Branch Circuit Wiring

1. The power distribution system design will limit voltage drop on panel feeders to 2% for feeders and 3% for branch circuits as a project standard. Feeders and branch circuits will be upsized as required. All wiring will be copper. Grounding wires will be Copper. Wiring methods will be concealed where possible. Mechanical equipment feeders are required to be insulated copper.
2. A minimum of 20-ampere branch circuits will be provided for lighting and power. The minimum size wire for standard 120-volt, 20 ampere circuits shall be #12 AWG. The minimum size wire for any special purpose receptacles will be #10 AWG.
3. All lighting and power circuits will be provided with dedicated neutrals.
4. Receptacles with integral 5 mA ground fault protection will be provided in the following areas or as required by code or program:
  - a. Restrooms
  - b. Roof
  - c. Exterior outlets.
  - d. Wet Locations
  - e. Where located within 6 foot radius of water supply, such as sinks.
  - f. Vending machines
  - g. Entrance Lobbies
5. Feeders and branch circuit wiring will be concealed wherever possible. Wiring method applications include:

| <b>Application</b>                     | <b>Raceway</b>   | <b>Conductors</b>   |
|--|--|---|
| Feeders: outdoor, underground          | Concrete Encased PVC w/rebar cage  | XHHW or THHN copper Wet Listed  |
| Feeders; Outdoor, aboveground          | Rigid Steel conduit  | XHHW or THHN copper Wet Listed  |
| Feeders; Indoors concealed             | Rigid Steel Conduit, IMC or EMT  | THHN-THWN copper conductors   |
| Feeders; indoors exposed               | RSC, IMC, or EMT   | THHN-THWN copper conductors   |
| Branch Circuits                        | EMT  | THHN-THWN copper conductors   |
| Emergency and Legally Required Feeders | RSC, IMC, or EMT protected in accordance with NEC or fire rated cable assembly | THHN-THWN copper conductors protected in accordance with NEC or MI Cable. |

6. Rigid Steel Conduit (RGS)

*Note: Structural, Civil, and MEPFP outline specifications subject to revision and value engineering through design process.*

## BOWSKY PK-8 SCHOOL

- a. Exposed exterior locations (including loading dock).
  - b. Ductbank elbows/turn-ups into equipment or above grade. If below grade, elbow shall be zinc/bitumastic coated to provide corrosion resistance.
  - c. Other areas subject to physical abuse.
7. Schedule 80 PVC
    - a. Concrete encased raceway in slab, in ductbank or under slab.
  8. Electrical Metallic Tubing (EMT)
    - a. Other interior exposed areas.
    - b. Set screw fittings

### Grounding

1. The building grounding electrode system will consist of all code required grounding electrodes bonded together including metal underground water pipes, metal frame of building or structure, concrete encased electrodes and ground rods.
2. The grounding system will be in accordance with NFPA 70. The grounding will consist of a three ground rods in a triad arrangement connected with 4/0 AWG bare copper ground conductor under a minimum of 1 foot of cover. The ground rods will be copper clad steel rods 3/4-inch diameter x 10 feet long with top 1 foot below grade. Ground rods will be located as a minimum one at each lightning protection down conductor, three at the service entrance location spaced at least one rod length from each other and at least the same distance from other grounding electrodes and at no more than 100 foot intervals around the perimeter.
3. The building main electrical room will be provided with a connection to the grounding electrode system for bonding the neutral conductor at the transformer secondary overcurrent protective device. The grounding electrode system will also be extended to ground buses located distributed electrical rooms for supplemental grounding and bonding of separately derived systems.
4. A separate connection to the grounding electrode system will be extended to ground buses located in the main communication and intermediate distributed communication rooms.
5. All underground connections and connections to structural steel will be exothermically welded connections. Above ground exposed connections will be bolted connections.
6. All feeders and branch circuits will have an insulated equipment grounding conductor.
7. Electrically classified, hazardous, areas will be provided with a supplemental ground bus to ensure exposed metal surfaces are at an equipotential level.

### Lightning Protection

1. The building will be equipped with a conventional NFPA 780 lightning protection system to safeguard persons and property from hazards arising from exposure to lightning.

### Lighting

1. The lighting systems (luminaires, placement, and controls) used will be selected to satisfy the prescribed visual, environmental, and energy requirement while also eliminating light trespass from

the building and site. In addition to designing for task requirements, lighting systems will be designed to create pleasant aesthetic and psychological impressions in finished spaces.

2. The lighting design will include predominantly high performance, fixtures to optimize lumen output and energy efficiency. Fixture construction for Mechanical/Electrical areas, elevator pits, etc. will be commercial specification-grade LED luminaires as a minimum standard of quality.
3. The lighting design will include predominantly high performance, LED fixtures to optimize lumen output and energy efficiency and 0-10V dimming. General interior areas in offices and conference rooms will be provided with 2'x2', volumetric fixtures, utilizing LED technology.
4. Coordination with architect for any specialty lighting will be given to the lobby, conference, and other specialized spaces to accommodate a desire for a unique and inviting atmosphere. Fixture selection will be performed by architect in this situation and reviewed by the owner prior to incorporation into the plans by the TLC design team.
5. Light fixtures in stairways shall be mounted above the landings and on the walls adjacent to the stairs. All fixtures within the stairwells shall be connected to inverters.
6. Exit lights will be LED edge-lit type in front of house spaces. Exterior and back of house spaces will be thermoplastic type UL listed for the space that they are installed.
7. Emergency lighting and exit lights will be provided and powered by inverter.
8. Emergency lighting will be provided in electrical rooms, mechanical rooms, public restrooms, classrooms, and conference rooms, in addition to where required by code.
9. Exterior lighting will consist of building mounted LED luminaires. Exterior site lighting shall be 480V three-phase balanced load. Exterior building lighting, will be 277V. Landscape lighting, if desired, will be designed by a landscape architect and the power for these fixtures will be accommodated on TLC plans.

### Lighting Controls

1. The lighting control system shall consist of local indoor automatic, digital network area lighting controls. The building lighting control will be provided by a combination of Vacancy/occupancy sensors and photocells (for dimmed daylight harvesting). The controls will be automated wherever possible for the maximum reduction of energy consumption.
2. It is anticipated that a SensorSwitch nLight, or equal, lighting control system will be used as a basis of design for the building lighting control system, which will be interfaced with the BAS system through BACnet protocol. The nLight, or equal, system will control restrooms, corridors and exterior lighting.
3. In individual spaces such as private offices, small conference rooms, storage rooms, lighting control shall be through stand-alone components, not interfaced with the building lighting control system.
4. Vacancy sensor dual technology shall be provided in all offices. Occupancy sensor dual technology shall be provided in all restrooms, common areas, open office areas and corridors.
5. All rooms which exceed the required wattage within a natural lighting level zone will be provided with daylight sensor dimming control.
6. Mechanical rooms, electrical rooms, telecommunications closets will be provided with only local switching for lighting controls.

## BOWSKY PK-8 SCHOOL

7. Exterior Fixtures designated for security purposes will be controlled by photocell on/photocell off operation, while the remaining fixtures will be controlled by photocell on/timeclock off operation through a building lighting control system, which is to be interfaced with the BAS system.

### Emergency Lighting

1. An emergency lighting system will be provided to allow the safe evacuation of the building in the event of a loss of the normal lighting power.
2. Exit signs and emergency path of egress lighting will be provided in accordance with applicable codes in exit routes, exit stairways, exit passageways, open plan office spaces, electric rooms and mechanical rooms.

### Required Electrical Studies

1. In order to provide a baseline database for operation and maintenance of the building, the project specifications will require the following studies to be performed by the installing contractor. All electrical studies will be performed by a registered professional engineer and submitted for review and approval by the electrical engineer and Owner prior to releasing any equipment and shall include the following:
  - a. Short circuit: Study shall be conducted at all busses in the system. Study shall be performed for both utility, generator and transition mode. Study shall assume full contribution from all motor loads. A full report shall be provided showing fault currents in all configurations and associated X/R ratio.
  - b. Selective Coordination: Study shall provide all settings for programmable trip units and adjustable breakers. The emergency system breakers shall be fully coordinated as required by the NEC. Study shall include copies of all TC curves used and graphic and text data indicating proper coordination. The contractor will be required to provide the appropriate breaker type/style/rating/framing as required by this study.
  - c. Arc Flash: Study shall indicate working distance for all panels. Study shall include all labeling required per NFPA 70E. Labels will be required in electronic format and installation of labels will be included as a requirement of the specification.

### General Electrical Requirements

1. Three-pole breakers will be used for machinery type equipment.
2. All individual circuits will have a means of single disconnect (i.e., one breaker) and each individual circuit will have a dedicated neutral. This will include circuits to pre-wired office furniture systems.
3. Panels shall have lockable, bolt-on type breakers, shall be specification grade with full size copper busses, ground bar and isolated ground bar.
4. Vending areas will be provided with a dedicated receptacle mounted at approx.. 7' AFF. With data outlet at 6' on center against the wall in where the vending machines will be located. A 120V

- dedicated receptacle and 208V 20A 1ph receptacle and data outlet will be provided at all copier locations.
5. Offices and large storage rooms will be provided with a minimum of (1) receptacle on each useable wall. Lobbies and study areas will be provided with receptacles a minimum of 12' on center, Unless otherwise requested.
  6. Corridors without room for seating will be provided with a minimum of (1) receptacle approx. every maximum 50 feet.
  7. Receptacles will not be located within stairwells.
  8. A receptacle will be provided at each roof access landing accessible by a fixed stairwell. Receptacles will be provided with 25' of any serviceable HVAC systems located on the roof.
  9. Stainless Steel Faceplates and colored devices shall be provided throughout.
  10. Each mechanical, electrical and telecommunications room shall have receptacles near the entry door into the room, with additional receptacles as required.
  11. All empty conduits shall be provided with a polyolefin pull string, JET LINE #232, or approved equal, with an engraved metal tag at each end indicating conduit designation.
  12. A comprehensive identification system for all system's conduits, panels, rooms, and equipment must be provided.
  13. All switch plates, receptacles covers, and junction boxes shall be permanently identified by panel number and circuit number. Switch plates and receptacles covers shall additionally be marked on the reverse side by indelible ink and junction box covers marked on the front with indelible ink, in neat, legible handwriting.
  14. All lighting switches and wall outlets shall have a lifetime warranty.
  15. Flexible conduit, including MC, is limited to 6 feet maximum length.
  16. Emergency lighting and exit lights will be provided with dedicated circuits.

### SURGE PROTECTION DEVICES (SPD)

1. Surge protective devices will be provided at the service switchboard, distribution panels, lighting panels, mechanical panels and 120/208V panels. Additional surge suppression devices will be provided for all fire alarm circuits exiting building and for site lighting circuits.
2. Type 1 Service Entrance UL 5th edition rating.
3. Type 2 UL 5th edition rated for distribution equipment and panelboards.

### FIRE ALARM AND MONITORING SYSTEM/VOICE EVACUATION SYSTEM

1. The Bowsky Elementary School will be provided with a new fire alarm system and voice evacuation system. The fire alarm system will be a Class A system with voice speakers as the typical notification appliance. Acceptable manufacturers are Siemens(Cerberus Pro), Notifier (NFS2 Series (BOD)) or Edwards Systems Technologies (EST-3) for the fire alarm system, and Cooper Notification or approved equal for the mass notification system. Combination systems are not acceptable.
2. The fire alarm control panel (FACP) shall be recessed in the main lobby or a common corridor near a fire department accessible exit. An additional remote annunciator shall be provided in a location as directed by Virgin Island Public Schools.

3. The FACP must include Walk Test, Positive Alarm Sequence, Alarm Verification, Voice Evacuation, multi-level alarm processing, trouble reminder, dry contacts (zone, trouble, alarm and supervisory), smoke detector sensitivity testing, and must be 24VDC non-coded power limited.
4. The FACP must have a minimum 80-character alpha-numeric LCD display with user defined character capacity. The display must indicate all system conditions and device locations with description, room number, and relative compass location within the building.
5. All initiation, notification, and signaling line circuits shall be Class A (NFPA Style Z) with no T-Tapping or spider-webbed type circuitry.
6. Addressable relay modules shall be provided to interface with building sound systems, to be coordinated with VIDE, to be located at the AV amplifier or to disconnect each sound system circuit, as directed by Virgin Island Public Schools.
7. Manual pull stations and annunciating devices will be provided at Code required locations. Audible/visual indicating appliance devices will be provided throughout the building. The system will be designed to current ADA and NFPA requirements. The fire alarm system will be interfaced with the mechanical air handling and exhaust system equipment for automatic shut down upon fire alarm actuation, likewise, any required pressurization system HVAC equipment will be activated.
8. Qualified installers must be a direct sales division, or a trained and authorized vendor, of Notification MNS System. Installer must have a NICET Level IV qualified individual for project management.
9. The MNS must operate in conjunction with the separate building fire alarm voice evacuation system and must include all components necessary for that interconnection. The MNS system must be capable of capturing and making voice announcement with the fire alarm appliances or with a dedicated speaker system through the facility at levels sufficient for comprehension, but no less than 15dB above ambient noise or 50dB in normally occupied areas, whichever is higher. System shall be field adjustable/modified/programmed to accommodate this requirement.

## G. COMMUNICATIONS

### Technology Project Overview

1. This project involves multiple buildings across the property. Some buildings will be renovated and others will be fully new construction.
2. The MDF will be installed in one of the first phase's completed building. This MDF must also be constructed in a location free and clear of footer to allow distribution of multiple 4" conduits. These conduits cannot exceed (2) 90-degree bends. All conduits designated for fiber optics must have a 10x bend radius. Once the new MDF is up and running, a new Fiber optic cable will be provided, and a scheduled switchover with VIDE will take place to minimize downtime. A set of new service provider conduits will also be provided to the coordinated location on the property line to allow for a clean break from the existing campus network and minimal rework and site conflicts with the new parking lot.

### General Communications Requirements

#### IDFs and MDF Requirements

1. A minimum of four (4) 4" PVC conduits will be provided from an existing site telecommunications manhole to the new main telecommunications room (MDF) in the new building. The MDF room will be 10' x 20' minimum. (specific sizes will be identified and provided to the architect during the early DD phase once a Revit model is provided and an initial layout is available). The MDF will be for the entrance facility and cabling for the first floor up to the maximum 100-meter distance to any station outlet in the building.
2. Telecommunications rooms (IDFs) will be stacked in the building to provide a practical method of system wiring concerning the distance to the user. IDFs will be located on the 1st and 2nd floors of the building to maintain the maximum 100-meter distance to any station outlet in the building. IDF rooms will be 8' x 10' minimum (specific sizes will be identified and provided to the architect during the early DD phase once a Revit model is provided and an initial layout is available).
3. (1) 4" Conduits will be provided with (4) 1" Innerducts for Voice/Data only and (2) 4" conduits with (4) 1" Conduits for public address, Fire alarm, Master Clock and all other Technology cables.
4. The MDF/IDF room will have data racks for network equipment provided by VIDE, with an overhead ladder cable tray from the rack to the wall.

#### Equipment & Layout

1. Racks & Cabinets: Floor-mounted or wall-mounted racks house switches, patch panels, and other active components.
2. Clearances & Accessibility: Maintain minimum clearance of 3 feet around equipment for easy maintenance.
3. Grounding & Bonding: All equipment is properly grounded per TIA-607-D standards to prevent electrical hazards.
4. Patch panels shall be used for structured cable termination and efficient cable management.

### Wireless & IP Integration

1. Structured cabling supports Wi-Fi access points (APs) at strategic locations for optimal coverage and performance.
2. Power over Ethernet (PoE) technology is implemented for APs, security cameras, and VoIP phones to reduce power cabling needs.
1. Classrooms must have (2) duplex data outlets for classroom use. One is in front near the teaching wall (TI), and the other is in the back of the room for flexible teacher/classroom use. An additional duplex data outlet for the WAP is located above the ceiling at the center of the room. The teacher wall data outlet (TI) must include (2) data outlets and (1) HDMI cable to the projector installed in the room.
2. Conference rooms must have (2) duplex data outlets (one for phone/ one for printer). They must also have a floor box/poke-thru in the center of the area under the table with (2) data outlets installed.
3. Offices must have (2) data outlets with (3) data jacks in each and installed on opposite walls for flexible office layout.
4. Overhead cable tray will be provided as a telecommunication distribution system throughout the facility. The cable tray will be wire mesh type with minimum dimensions of 4 inches deep and 18 inches wide. The cable tray must also be installed 12" away from the wall.

### Safety and Security Compliance

1. Fire-rated cables and conduits comply with local and national building codes.
2. Secure network infrastructure minimizes unauthorized access and cyber threats.
3. Regular testing and certification ensure adherence to performance benchmarks.

### Data and Telephone System

1. The data system wiring will be provided in conjunction with meeting with VIDE and DLR. It will consist of T568B RJ-45 jacks at designated locations and Category 6A UTP cabling terminated in designated MDF or IDF. Fiber optic cabling (In 1" multicell innerduct) will be provided from MDF to each IDF and terminated in rack-mounted fiber optic distribution centers (FDC). The data riser cable shall be 62.5  $\mu$  m multi-mode / 9  $\mu$  m single mode fiber optic cable. The data system shall exhibit a forward band-pass of 1 GHz.
2. Any copper or fiber optic cable installed in conduits in the ground shall be provided as flooding cable or with a water-blocking compound.
3. CCTV cameras Category 6A cable must be orange in color
4. All other data cables must be blue in color
5. In addition to the contractor's 1-year warranty on all labor and materials, the manufacturer of the horizontal distribution system must provide a 25-year system performance warranty.
6. All Data cabling will terminate on patch panels in the IT rack of the associated MDF or IDF. For any devices that require a copper connection, a patch cable will be provided and connected to a 24-port voice patch panel that is then connected to a 66-block installed on the wall.
7. The number of telephone pairs required will be coordinated with the VIDE and DLR.

8. Telephone lines will be provided in the building elevators, which utilize a permanently mounted telephone. Wall-mounted outlets for emergency telephones will be on each floor.
  9. Primary Protector blocks must protect all 66 blocks between the MDF and the IDF.
- An owner-provided contractor installs wireless access points and all wireless access point brackets. However, the contractor also provides all wireless access point hangers, which must be B-Line BA50A.

### Audio Systems

1. Ceiling mounted loudspeakers provide intelligible, high-impact, full range audio for voice reinforcement & non-emergency public address messaging. Audio systems shall have an override to mute in event of an emergency alarm.
  - a. Provisions for Assisted Listening Services are available in each room to accommodate American Disabilities Act requirements for hearing impaired.
  - b. Wireless microphones are included for instructors use during teaching sessions for voice reinforcement and to elevate the vocal presentation to 15-25dB above the ambient noise within each room.
  - c. Controls of the audio system(s) are provided by the control panel mounted on/near the teaching wall.

### Video Systems

1. Video systems in all teaching spaces are to be via mobile carts, providing the greatest flexibility of room arrangements, and allows the instructor to use displays or projection carts for their specific segments of instruction. The connection points for the mobile video carts are provided on three of the walls, and the floor (second story and above) via a connection plate. These mobile video carts will be fed from a user-provided laptop, or additional school-provided sources.
  - a. A wireless transmitter shall be installed on each mobile cart, or wireless sharing devices, to pass audio/video content to the in-room amplifier and ceiling mounted speakers.
  - b. Control and selection of the video input signals are provided by the push-button control panel mounted on/near the teaching wall.

### Intercom System

1. Master Stations: Centralized control panels located in administrative offices or security rooms allow for direct communication with all areas.
2. Substations: Wall-mounted or desktop intercom units placed in classrooms, offices, and common areas provide two-way communication.
3. Hands-Free Operation: Touchless communication options for sanitary and safety purposes.
4. IP-Based Intercoms: Use Power over Ethernet (PoE) for simplified installation and integration with the existing network infrastructure.
5. Audio Quality: High-definition audio codes ensure clear voice transmission.

### Paging System:

1. Zoned Paging: Customizable zones (e.g., floors, departments, or buildings) enable targeted announcements, reducing unnecessary disruptions.
2. All-Call Capability: Allows facility-wide announcements for emergencies or general information.
3. Outdoor & Indoor Speakers: Weather-resistant speakers for external areas and ceiling or wall-mounted speakers for internal spaces ensure complete coverage.
4. Integration with Emergency Systems: Connects with fire alarms and emergency notification systems for coordinated responses.

### Clock System

1. Synchronized Clocks: Wireless (Battery Operated) analog clocks synchronized via Network Time Protocol (NTP) or GPS provide consistent and accurate time display across the facility.
2. Bell & Tone Scheduling: Integrated with the paging system for automated bell schedules in educational or industrial settings.
3. Centralized Management Software: Unified interface for managing intercom, paging, and clock systems, accessible from desktops, tablets, or mobile devices.
4. User Permissions: Role-based access control to prevent unauthorized use.

### Video Surveillance System

1. A video surveillance system comprises a camera, data transmission wiring, and a control station with associated equipment. Provide a surface-mounted data outlet above each camera location for all interior cameras. All interior cameras must be semi-recessed and installed on a Caddy ATA41 T-Grid mount. Flush-mounted cameras are not accepted. A surface-mounted data outlet must be provided within 12 inches of the thru-wall sleeve for exterior-mounted wall cameras. Parking lot pole-mounted cameras are not allowed.
2. Video Management System (VMS)
  - a. Centralized Video Monitoring: Security personnel can access live feeds and recorded footage via a unified control center.
  - b. Motion Detection & AI-Based Analytics: Triggers alerts based on motion, facial recognition, and unusual activity.
  - c. Automated Event Tagging: Smart indexing for quick retrieval of critical events.
  - d. Multi-User Access: Role-based permissions allow different levels of access for administrators, security staff, and IT personnel.
3. Network & Data Storage
  - a. Edge & Cloud Storage: Combination of local Network Video Recorders (NVRs), cloud-based storage, and redundant backup systems for data security.
  - b. RAID-Configured Servers: Redundant storage for failover protection against data loss.
  - c. Bandwidth Optimization: Efficient video compression (H.265/H.264) reduces network load while maintaining video quality.
4. Integration with Security Systems

- a. Access Control System Integration: Cameras monitor entry points, logging activity with door access systems.
- b. Alarm & Intrusion Detection: Video verification for triggered alarms to reduce false alerts.
5. Remote Monitoring
  - a. Mobile & Web Access: Security teams can monitor and manage video feeds remotely via secure mobile applications and web dashboards.

### Access Control and Intrusion Protection

1. The AC/IDS will be a smart, forward-thinking system that keeps the facility secure. It will manage who comes in and detects any unauthorized activity. By combining advanced security features like authentication, intrusion sensors, and real-time alerts with a central monitoring system, it allows you to be proactive about security. This ensures a rapid response to threats and helps you meet compliance standards, keeping your environment safe and controlled.
2. Intrusion Detection System (IDS)
  - a. Motion Sensors Detectors: Detect unauthorized movement and forced entry.
  - b. Door & Window Contact Sensors: Monitor doors, windows, and restricted entry points.
  - c. Tamper Detection Alerts: Sends real-time notifications for system tampering or disabled sensors.
  - d. Silent & Audible Alarms: Configurable alerting system for discreet or loud deterrence.
3. Centralized Monitoring & Control
  - a. Security Operations Software: Centralized dashboard for live monitoring of access points and intrusion events.
  - b. Real-Time Alerts & Notifications: Security teams receive instant alerts via mobile apps, email, and SMS.
  - c. Event Logging & Audit Trails: Tracks all access events, attempts, and security violations.

## BOWSKY PK-8 SCHOOL

### Fire Alarm Distributed Antenna System Infrastructure (FADAS)

1. A fire alarm distributed antenna system is not intended for the facility as it was not expressed in the design criteria as required.

### Cellular Distributed Antenna System Infrastructure (CDAS)

1. A CDAS system is not intended for the project.

## H. FIRE PROTECTION

### Fire Protection System Criteria

#### 1. Overview

- a. This Fire Safety Systems section of the Basis of Design document is intended to describe the fire suppression and fire / emergency alarm and signaling systems necessary to satisfy minimum fire protection code requirements and stakeholder objectives for the proposed construction.
- b. This building incorporates a standard automatic wet pipe sprinkler system design based on NFPA 13 requirements for building protection and life safety issues. This system shall be designed, installed and tested by a licensed fire protection contractor. The system shall comply with NFPA 13 requirements and shall be hydraulically calculated based on the building occupancy and area hazard/density designation. This building shall also be required to comply with NFPA 14 regulations for building standpipe installations. A fire pump will be required to maintain pressure and flow requirements based on the available site water pressure and the height of the building.
- c. The project includes the construction of classrooms, conference rooms, multipurpose spaces, offices, kitchen, media and other support spaces.
- d. Fire protection for the site shall be provided by an on-site UL-listed pumping system utilizing the on-site cistern storage. A electric-driven fire pump shall provide the pressure and flow needed to meet NFPA design requirements. A jockey pump shall be provided to limit the starting and stopping of the large fire protection pump.
- e. The fire pump shall be complete with system controllers.
- f. Site fire hydrants shall be pressurized by the on-site pumping system.
- g. Fire protection piping shall be HDPE approved for fire protection systems.
- h. Dry chemical system shall be provided to the kitchen grease hood.

### Fire Protection Building System Description

#### 1. Automatic Sprinkler Systems

- a. The proposed building will be protected throughout by an automatic sprinkler system designed in accordance with NFPA 13. Sprinklers will be provided in all areas required by NFPA 13, local code requirements in accordance with fully sprinklered buildings. Unless noted otherwise, building sprinkler systems will be automatic wet-pipe type.
- b. The sprinkler system shall be maintained in accordance with NFPA 25.
- c. The wet-pipe automatic sprinkler system will be zoned per floor via zone control assemblies each inclusive of indicating isolation valve, check valve, flow switch and combination test/drain valve.
- d. All automatic sprinkler systems shall be equipped with local water flow alarms (zoned in coordination with the fire alarm and smoke control zoning) and supply valve supervisory switches (tamper switches; one per valve). Activation of a water flow alarm will result in a full "FIRE ALARM" in the building resulting in evacuation of occupants and automatic notification to the local fire department. Closure of a sprinkler control valve shall result in a

“SUPERVISORY SIGNAL” being sent to the central building fire monitoring console in order to notify building maintenance of a potential problem (closed system valve).

- e. Sprinklers will be quick / fast response type throughout, unless not permitted by NFPA 13 (extra hazard occupancies) or otherwise not suitable for an application (high temperature spaces).
- f. The riser and associated fire pump shall be sized to provide 60 psi at the inlet side of the highest hose valve. Hydraulic calculations and pipe sizes for each standpipe shall be based on providing 250 gpm at the hydraulically most remote two hose connections on the most remote standpipe and at the top most outlet of each additional standpipe, not to exceed 1,000 gpm.

### Special Application Automatic Fire Suppression

1. Where the immediate application of fire suppression water represents a potential hazard to occupant safety or protected equipment, preaction sprinkler and / or alternative fire extinguishing systems may be used.

### Fire Department Connection

1. The building shall be served with one (1) fire department connections, located near pavement or sidewalk but shall not be installed behind shrubbery or planters. Each connection shall be identified with a reflective screen printed sign having symbols given in NFPA 170.

### Water Supply

1. The on-site non-potable water distribution network will supply the building fire sprinkler via an underground piping service entrance.
2. An 8-in underground fire services will supply the buildings.

### Fire Protection System Criteria

1. General
  - a. The project location is the United States Virgin Islands; and is subject to the requirements of the laws, regulations, ordinances, codes and referenced design standards as adopted and amended by the regulatory entities in authority.
  - b. The design of the fire protection system will comply with the applicable National Fire Protection Standards and International Building Codes established for the project.

## **I. STORM DRAIN AND STORM WATER MANAGEMENT**

The proposed stormwater management system for the project site will honor the existing stormwater flow patterns of the general area where the project is located. Stormwater runoff that is generated to the south of the site will be intercepted and directed to the east and west perimeter of the site via hard pipe with a connection to the off-site overflow concrete channel. Site stormwater runoff will be collected by precast concrete catch basins and conveyed to an on-site exfiltration gallery via concrete pipes. Stormwater runoff collected on the building roofs will be conveyed by PVC SDR35 rainwater leaders to concrete conveyance pipes which will convey the stormwater to a cistern.

## **J. PAVEMENTS**

All pavement requirements will be determined based on a soils report to be completed before the design phase.

At a minimum the asphalt pavement sections for parking, driveways and roads shall consist of a minimum of 2-inch asphalt, 8-inch rock base meeting minimum LBR 100 and compacted to 100% maximum density per AASHTO T-180 and 12-inch stabilized subgrade with minimum LBR 40 compacted to 98% maximum density per AASHTO T-180.

At a minimum the concrete sidewalks shall be 6-inch thick 3,000-psi concrete with broom finish over a 12-inch stabilized subgrade.

At a minimum concrete pavement shall be 6-inch thick with 4,000-psi concrete with welded wire mesh reinforcement over an 8-inch rock base meeting minimum LBR 100 and compacted to 100% maximum density per AASHTO T-180 with a 12-inch stabilized subgrade with minimum LBR 49 compacted to 98% maximum density per AASHTO T-180.

## **K. TRANSITIONAL STRUCTURES AND SPACES**

Based on current planning, no additional transitional structures and spaces are to be allowed in budget. The team is evaluating the existing availability and utilization of permanent and temporary facilities to develop a detailed phasing plan approach.

## 8.0 SAFETY / SECURITY

### A. SAFETY / SECURITY STANDARDS

#### Design Criteria

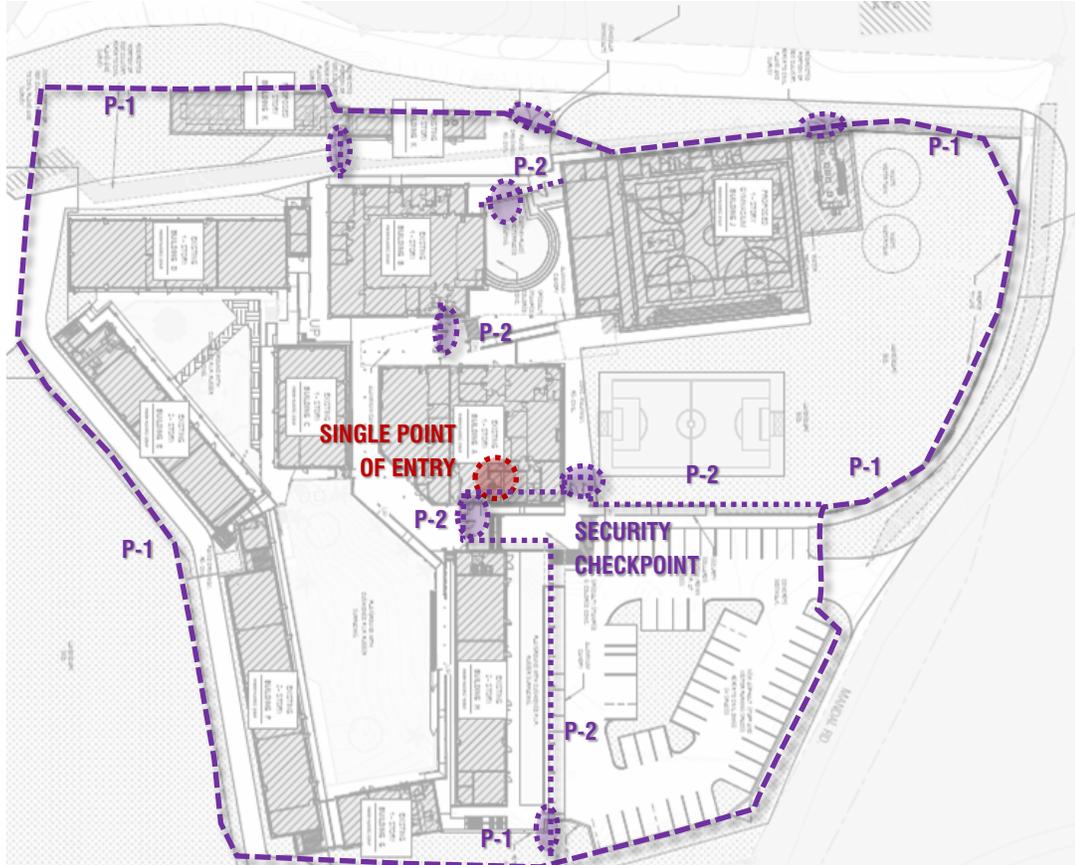
The design of the site and facilities will be performed in accordance with the standards listed below. In the case of conflict between these criteria, the most stringent requirement will govern. Further development of the design shall be held in compliance with these standards.

- NFPA Fire Codes            NFPA 101
- ICC500-202                Standard for the Design and construction of Storm Shelters
- FEMA P-361                FEMA Standard for Design of Safe Rooms for Tornadoes and Hurricanes
- IBC 2024                    International Building Code, 2024
- 2021 US Virgin Island Code, Title 29 - Public Planning and Development, Chapter 5- Building Code
- USVI Department of Education - VIDE FEMA Support, Telecom & Security Design Guide

#### Basis of Design

The proposed development is the expansion of an existing operating campus. The school is planned to be located within a secure perimeter (P-1). A secondary perimeter (P-2) will be located within the property to define the zone at which students are secure within the campus during operations. A single point of entry is defined at the Administration so to control the campus.

Refer to Site Safety / Security Diagram below:



# BOWSKY PK-8 SCHOOL

## Site Features:

Playground equipment will be located within the protective perimeter (P-2). All electrical and mechanical equipment, i.e., specify transformers, condensers, chillers, etc., as well as all trash containers and the respective enclosures will be located within a secure perimeter and away from schools and support buildings. Parking areas for schools and support buildings will be planned to be in an area of control and ease of visual supervision. Access gates will control access to the site as well as prevent access within the P-2 boundary during school operations.

Per ongoing design discussion, VIDE is implementing new metal detector access point controls and scanners. VIDE is to provide the new security standards and requirements for these systems in the next design phase. Designated locations are indicated for preliminary recommendations on the Site Safety / Security Diagram.

## Drive-Up / Drop-Off Roadways:

Barriers and Roadways will be provided to protect drive and drop off areas. Gates and controls will be placed to secure access accordingly. Passive barriers will be proposed in the design phase to limit ease of access for vehicles to designated drop off and building areas.

## Building and Vertical Construction Features:

### Electronic Physical Access Control Systems

The intent for the new planned expansion will reshape and re-position the administrative suite for the campus to create a new centralized single point of entry at the front of the school. This initial move will relocate the control point in compliance with VIDE's security requirements.

### Access Control – Locations

Access control to schools and support buildings will use a centralized system in coordination with VIDE standards.

### Access Control – Interior Doors

Based on the design configuration of the remodel and expansion to the school, it may be necessary to equip additional interior doors with controls. This item is to be evaluated and designed in accordance with VIDE standards.

### Smart Cards

The renovation and expansion areas planned shall use the Common Access Card as the identity credential for supporting interoperable access to the schools in accordance with the VIDE protection criteria.

### Smart Card Security Management Software

The expansion and renovation area of the school shall be designed to use a fully integrated access control solution to monitor and track who is always coming and going (when applicable), approved by VIDE personnel. The software shall allow the school and support buildings to grant access to

## BOWSKY PK-8 SCHOOL

VIDE personnel. The software is to be designed to include real-time messaging and cross platform communications to manage the access control system. The software will allow VIDE to terminate access.

### Intercom Requirements

The project delivery team shall make every effort to integrate security intercoms (e.g., public call stations) with remote door and remote gate release in accordance with the VIDE operational requirements. If not able to integrate into the existing, a new system shall be provided.

### Intercom System Functions

The new expansion and renovation areas planned shall have an intercom system to provide visitors and on occasion students and staff the means to communicate with the administrative suite for entry into the school or support buildings. By providing these types of systems, it alleviates students and staff from leaving doors propped open for convenience, enhancing force protection.

### Ai-Phone Intercom System Locations

The project delivery team will place the master station at a reception desk inside the administrative suite, central storage, receiving room, and kitchen office.

### Access Control Support Equipment

The new single point of entry and administration suite shall have installed the controls client enrollment workstation. The client enrollment workstation is to manage the access control system and issue temporary access badges to authorized visitors, volunteers, and contractors.

### Door Position Sensors

Door position sensors are recommended to be provided for all new and renovated areas to report the open or closed status of a door to the access control system, allowing it to engage locks, annunciate alarm conditions, and other actions that provide security integrity. This item shall be addressed in the design phase.

## 9.0 SUMMARY OF SCOPE CHANGES

### A. SCOPE DEVELOPMENT / DESIGN CHANGES

- RFI #008: Addition of a replacement wastewater treatment plant.
- RFI #009#021#10: Add new gymnasium, gymnasium to be a Safe room.
- RFI #010: Electrical installation to be designed for NetZero criteria. Provide 115% electricity demand with PV panels and 3-days battery backup.
- RFI #007: Confirmation of unavailability of any as built drawings of existing building.
- RFI #017: Change of code from IBC 2021 to 2024.
- RFI #022: Confirmation that all “semi-conditioned” areas as defined in bridging documents should air conditioned.
- RFI #036: Operable windows. Confirmed for Fixed Windows at all locations.
- Revision of program and capacity compared to bridging documents.
- ~~Loop road access required to enable emergency vehicle access. Loop road required by the Fire Department. (Loop Road not possible due to grading and land area within property.)~~
- Additional covered Drop Off areas at entry parking lot.
- ~~Additional parking areas available at new loop road. (Loop Road not possible due to grading and land area within property.)~~
- Security scanner (magnetic) check points for all entering the site (2).
- FEMA Hurricane Safe Room confirmed for Gymnasium.
- 

### B. POTENTIAL ADDITIONAL SCOPE IMPACTS (OPEN RFIs)

- RFI #024: Transformers and flume hood
- RFI #025: MEP criteria and basis of design documentation
- RFI #026: Energy modeling/microgrid criteria
- RFI #030: Fire truck specifications
- RFI #033: WAPA handbook
- RFI #034: Traffic study parameters
- RFI #035: VITEMA maintenance capacity

## **10.0 SPECIFICATIONS**

Please see Specification Index following.

**SECTION 00 0110**  
**TABLE OF CONTENTS**

| List of Specifications                 | Description                                    | Discipline                         | SD Sub.<br>10-2025 |
|--|--|------------------------------------|--------------------|
| <b>VOLUME 1 of 2 – Divisions 00-14</b> |  |                                    |                    |
| <b>INTRODUCTORY INFORMATION</b>        |  |                                    |                    |
| <b><u>DIVISION 00</u></b>              |  |                                    |                    |
| 00 0100                                | List of Professionals                          | Arch                               |                    |
| 00 0110                                | Table of Contents                              | Arch                               |                    |
| 00 3132                                | Geotechnical Report                            | Geo                                |                    |
| <b>SPECIFICATIONS</b>                  |  |                                    |                    |
| <b><u>DIVISION 01</u></b>              |  | <b><u>GENERAL REQUIREMENTS</u></b> |                    |
| 01 1000                                | Summary  | Arch                               |                    |
| 01 2000                                | Price and Payment Procedures                   | Arch                               |                    |
| 01 2500                                | Substitution Procedures                        | Arch                               |                    |
| 01 2500A                               | Substitution Request Form                      | Arch                               |                    |
| 01 3000                                | Administrative Requirements                    | Arch                               |                    |
| 01 4000                                | Quality Requirements                           | Arch                               |                    |
| 01 4100                                | Regulatory Requirements                        | Arch                               |                    |
| 01 4500                                | Structural Testing and Inspection              | Struct                             |                    |
| 01 5000                                | Temporary Facilities and Controls              | Arch                               |                    |
| 01 5719                                | Temporary Environmental Controls               | Arch                               |                    |
| 01 6000                                | Product Requirements                           | Arch                               |                    |
| 01 6116                                | Volatile Organic Compound Content Restrictions | Arch                               |                    |
| 01 7000                                | Execution and Closeout Requirements            | Arch                               |                    |
| 01 7419                                | Construction Waste Management and Disposal     | Arch                               |                    |
| 01 7800                                | Closeout Submittals                            | Arch                               |                    |
| 01 9113                                | General Commissioning Requirements             | Arch                               |                    |
| 01 9113.43                             | Exterior Enclosure Commissioning               | Arch                               |                    |
| 01 9113.44                             | Component Commissioning Requirements           | Arch                               |                    |
| <b><u>DIVISION 02</u></b>              |  | <b><u>EXISTING CONDITIONS</u></b>  |                    |
| 02 400                                 | Demolition                                     |                                    |                    |
| <b><u>DIVISION 03</u></b>              |  | <b><u>CONCRETE</u></b>             |                    |
| 03 0516                                | Underslab Vapor Retarder                       | Arch                               |                    |

| <b>List of Specifications</b> | <b>Description</b>                            | <b>Discipline</b> | <b>SD Sub. 10-2025</b> |
|-------------------------------|---|-------------------|------------------------|
| 03 1000                       | Concrete Formwork                             | Struct            |                        |
| 03 2000                       | Concrete Reinforcement                        | Struct            |                        |
| 03 3800                       | Cast-in-Place Concrete                        | Struct            |                        |
| 03 3511                       | Concrete Floor Finishes                       | Arch              |                        |
| 03 5400                       | Cast Underlayment                             | Arch              |                        |
| <b><u>DIVISION 04</u></b>     | <b><u>MASONRY</u></b>                         |                   |                        |
| 04 2000                       | Concrete Masonry Units                        | Struct            |                        |
| <b><u>DIVISION 05</u></b>     | <b><u>METALS</u></b>                          |                   |                        |
| 05 2000                       | Structural Steel                              | Struct            |                        |
| 05 1210                       | Structural Steel-Seismic                      | Struct            |                        |
| 05 1250                       | Architectural Exposed Structural Steel        | Struct            |                        |
| 05 2000                       | Steel Joists                                  | Struct            |                        |
| 05 3000                       | Steel Deck                                    | Struct            |                        |
| 05 4000                       | Cold Formed Metal Framing                     | Arch              |                        |
| 05 5000                       | Metal Fabrications                            | Arch              |                        |
| 05 5100                       | Metal Stairs                                  | Arch              |                        |
| 05 5213                       | Pipe and Tube Railings                        | Arch              |                        |
| <b><u>DIVISION 06</u></b>     | <b><u>WOOD, PLASTICS, AND COMPOSITES</u></b>  |                   |                        |
| 06 1000                       | Rough Carpentry                               | Arch              |                        |
| 06 4100                       | Architectural Wood Casework                   | Arch              |                        |
| <b><u>DIVISION 07</u></b>     | <b><u>THERMAL AND MOISTURE PROTECTION</u></b> |                   |                        |
| 07 1300                       | Below Grade Waterproofing                     | Arch              |                        |
| 07 1616                       | Crystalline Waterproofing                     | Arch              |                        |
| 07 1800                       | Waterproof Coatings (Exposed)                 | Arch              |                        |
| 07 19 16                      | Water Repellent Sealers                       | Arch              |                        |
| 07 2100                       | Thermal Insulation                            | Arch              |                        |
| 07 2117                       | Foamed In Place Insulation                    | Arch              |                        |
| 07 2129                       | Sprayed Insulation                            | Arch              |                        |
| 07 2700                       | Air Barriers                                  | Arch              |                        |
| 07 4113                       | Metal Roof Panels                             | Arch              |                        |
| 07 4213                       | Metal Wall Panels                             | Arch              |                        |
| 07 4243                       | Composite Wall Panels                         | Arch              |                        |

| <b>List of Specifications</b> | <b>Description</b>                           | <b>Discipline</b> | <b>SD Sub. 10-2025</b> |
|-------------------------------|--|-------------------|------------------------|
| 07 4246                       | Fiber-Cement Wall Panels                     | Arch              |                        |
| 07 5400                       | Thermoplastic Membrane Roofing               | Arch              |                        |
| 07 6200                       | Sheet Metal Flashing and Trim                | Arch              |                        |
| 07 5556                       | Fluid-Applied Protected Membrane Roofing     | Arch              |                        |
| 07 7100                       | Roof Specialties                             | Arch              |                        |
| 07 7200                       | Roof Accessories                             | Arch              |                        |
| 07 8400                       | Firestopping                                 | Arch              |                        |
| 07 9200                       | Joint Sealants                               | Arch              |                        |
| <b><u>DIVISION 08</u></b>     |  |                   |                        |
|                               | <b><u>OPENINGS</u></b>                       |                   |                        |
| 08 1113                       | Hollow Metal Doors and Frames                | Arch              |                        |
| 08 1416                       | Wood Doors                                   | Arch              |                        |
| 08 3100                       | Access Doors and Frames                      | Arch              |                        |
| 08 3323                       | Overhead Coiling Doors                       | Arch              |                        |
| 08 3500                       | Side Folding Grilles                         | Arch              |                        |
| 08 3513                       | Folding Doors                                | Arch              |                        |
| 08 3613                       | Sectional Doors                              | Arch              |                        |
| 08 4313                       | Aluminum Framed Storefronts                  | Arch              |                        |
| 08 4413                       | Glazed Aluminum Curtain Walls                | Arch              |                        |
| 08 4435                       | Fire Rated Storefronts                       | Arch              |                        |
| 08 4600                       | Glazed Interior Wall and Door Assemblies     | Arch              |                        |
| 08 5113                       | Aluminum Windows                             | Arch              |                        |
| 08 7100                       | Door Hardware                                | Arch              |                        |
| 08 8000                       | Glazing                                      | Arch              |                        |
| 08 8300                       | Mirrors                                      | Arch              |                        |
| 08 9100                       | Louvers                                      | Arch              |                        |
| <b><u>DIVISION 09</u></b>     |  |                   |                        |
|                               | <b><u>FINISHES</u></b>                       |                   |                        |
| 09 0561                       | Common Work Results for Flooring Preparation | Arch              |                        |
| 09 2116                       | Gypsum Board Assemblies                      | Arch              |                        |
| 09 2236                       | Lath and Accessories                         | Arch              |                        |
| 09 2400                       | Cement Plastering                            | Arch              |                        |
| 09 3000                       | Tiling                                       | Arch              |                        |
| 09 5100                       | Acoustical Ceilings                          | Arch              |                        |
| 09 5400                       | Metal Ceilings                               | Arch              |                        |
| 09 6400                       | Wood Flooring                                | Arch              |                        |

| <b>List of Specifications</b> | <b>Description</b>                     | <b>Discipline</b> | <b>SD Sub. 10-2025</b> |
|-------------------------------|--|-------------------|------------------------|
| 09 6500                       | Resilient Flooring                     | Arch              |                        |
| 09 6566                       | Resilient Athletic Flooring            | Arch              |                        |
| 09 6700                       | Fluid Applied Epoxy Flooring           | Arch              |                        |
| 09 6813                       | Tile Carpeting                         | Arch              |                        |
| 09 7200                       | Wall Coverings                         | Arch              |                        |
| 09 8430                       | Sound-Absorbing Wall and Ceiling Units | Arch              |                        |
| 09 9113                       | Exterior Painting                      | Arch              |                        |
| 09 9123                       | Interior Painting                      | Arch              |                        |
| <b><u>DIVISION 10</u></b>     |  |                   |                        |
| <b><u>SPECIALTIES</u></b>     |  |                   |                        |
| 10 1100                       | Visual Display Units                   | Arch              |                        |
| 10 1200                       | Display Cases                          | Arch              |                        |
| 10 1400                       | Signage                                | Arch              |                        |
| 10 1465                       | Marquee Sign                           | Arch              |                        |
| 10 2113                       | Toilet Compartments                    | Arch              |                        |
| 10 2123                       | Cubicle Curtain and Tracks             | Arch              |                        |
| 10 2239                       | Folding Panel Partitions               | Arch              |                        |
| 10 2601                       | Wall and Corner Guards                 | Arch              |                        |
| 10 2800                       | Toilet, Bath, and Laundry Accessories  | Arch              |                        |
| 10 4300                       | Emergency Aid Specialties              | Arch              |                        |
| 10 4400                       | Fire Protection Specialties            | Arch              |                        |
| 10 5129                       | Phenolic Lockers                       | Arch              |                        |
| 10 7113                       | Exterior Shutters                      | Arch              |                        |
| 10 7500                       | Flagpoles                              | Arch              |                        |
| <b><u>DIVISION 11</u></b>     |  |                   |                        |
| <b><u>EQUIPMENT</u></b>       |  |                   |                        |
| 11 3013                       | Residential and Commercial Appliances  | Arch              |                        |
| 11 4000                       | Food Service Equipment                 | Arch              |                        |
| 11 5213                       | Projection Screens                     | Arch              |                        |
| 11 6610                       | Outdoor Athletic Surfacing             | Arch              |                        |
| 11 6623                       | Gymnasium Equipment                    | Arch              |                        |
| 11 6800                       | Outdoor Athletic Equipment             | Arch              |                        |
| 11 6813                       | Playground Equipment                   | Arch              |                        |
| 11 9513                       | Kilns                                  | Arch              |                        |
| <b><u>DIVISION 12</u></b>     |  |                   |                        |
| <b><u>FURNISHINGS</u></b>     |  |                   |                        |
| 12 2400                       | Window Shades                          | Arch              |                        |

| <b>List of Specifications</b> | <b>Description</b>                   | <b>Discipline</b>                  | <b>SD Sub. 10-2025</b> |
|-------------------------------|--------------------------------------|------------------------------------|------------------------|
| 12 3600                       | Countertops                          | Arch                               |                        |
| 12 4813                       | Entrance Floor Mats                  | Arch                               |                        |
| 12 6613                       | Telescoping Bleachers                | Arch                               |                        |
| <b><u>DIVISION 13</u></b>     |                                      | <b><u>SPECIAL CONSTRUCTION</u></b> |                        |
|                               | Not Used                             |                                    |                        |
| <b><u>DIVISION 14</u></b>     |                                      | <b><u>CONVEYING SYSTEMS</u></b>    |                        |
| 14 2100                       | Machine-Room-Less Traction Elevators | Arch                               |                        |

**VOLUME 2 of 2 – Divisions 21-33**

|                           |  |                               |  |
|---------------------------|--|-------------------------------|--|
| <b><u>DIVISION 21</u></b> |  | <b><u>FIRE PROTECTION</u></b> |  |
| 21 0500                   | Common Work Results for Fire Suppression                       | Mech                          |  |
| 21 0517                   | Sleeves and Sleeve Seals for Fire-Suppression Piping           | Mech                          |  |
| 21 0518                   | Escutcheons for Fire-Suppression Piping                        | Mech                          |  |
| 21 0523                   | General-Duty Valve for Water-Based Fire-Suppression Piping     | Mech                          |  |
| 21 0529                   | Hangers and Supports for Fire-Suppression Piping and Equipment | Mech                          |  |
| 21 0553                   | Identification for Fire-Suppression Piping and Equipment       | Mech                          |  |
| 21 0800                   | Commissioning of Fire-Suppression                              | Mech                          |  |
| 21 1100                   | Facility Fire-Suppression Water-Service Piping                 | Mech                          |  |
| 21 1116                   | Facility Fire Hydrants   | Mech                          |  |
| 21 1119                   | Fire Department Connections                                    | Mech                          |  |
| 21 1313                   | Wet Pipe Sprinkler Systems                                     | Mech                          |  |
| 21 3113                   | Electric-Drive, Centrifugal Fire Pumps                         | Mech                          |  |
| <b><u>DIVISION 22</u></b> |  | <b><u>PLUMBING</u></b>        |  |
| 22 0510                   | Basic Requirements for Plumbing                                | Mech                          |  |
| 22 0517                   | Sleeves and Sleeve Seals for Plumbing Piping                   | Mech                          |  |
| 22 0519                   | Meters and Gages for Plumbing Piping                           | Mech                          |  |
| 22 0523                   | General Duty Valves for Plumbing Piping                        | Mech                          |  |

| <b>List of Specifications</b> | <b>Description</b>  | <b>Discipline</b> | <b>SD Sub. 10-2025</b> |
|-------------------------------|---|-------------------|------------------------|
| 22 0529                       | Hangers and Supports for Plumbing Piping and Equipment    | Mech              |                        |
| 22 0553                       | Plumbing Piping Valves and Equipment Identification       | Mech              |                        |
| 22 0719                       | Plumbing Piping Insulation                                | Mech              |                        |
| 22 0800                       | Commissioning of Plumbing                                 | Mech              |                        |
| 22 0801                       | Testing of Plumbing Piping                                | Mech              |                        |
| 22 1000                       | Plumbing Piping   | Mech              |                        |
| 22 1113                       | Facility Water Distribution Piping                        | Mech              |                        |
| 22 1116                       | Domestic Water Piping                                     | Mech              |                        |
| 22 1119                       | Domestic Water Piping Specialties                         | Mech              |                        |
| 22 1123                       | Domestic Water Pumps                                      | Mech              |                        |
| 22 1219                       | Facility Underground-Mounted, Potable-Water Storage Tanks | Mech              |                        |
| 22 1316                       | Sanitary Waste and Vent Piping                            | Mech              |                        |
| 22 1413                       | Facility Storm Drainage Piping                            | Mech              |                        |
| 22 1600                       | Plumbing Specialties                                      | Mech              |                        |
| 22 3010                       | Plumbing Equipment  | Mech              |                        |
| 22 3200                       | Domestic Water Filtration Equipment                       | Mech              |                        |
| 22 3300                       | Electric Domestic Water Heaters                           | Mech              |                        |
| 22 4000                       | Plumbing Fixtures   | Mech              |                        |
| <b><u>DIVISION 23</u></b>     | <b><u>HVAC</u></b>  |                   |                        |
| 23 0000                       | Basic Requirements for HVAC                               | Mech              |                        |
| 23 0500                       | Common Work Results for HVAC                              | Mech              |                        |
| 23 0513                       | Common Motor Requirements for HVAC Equipment              | Mech              |                        |
| 23 0514                       | Variable Frequency Motor Controllers                      | Mech              |                        |
| 23 0517                       | Sleeves and Sleeve Seals for HVAC Piping                  | Mech              |                        |
| 23 0528                       | Hangers and Supports for HVAC Piping and Equipment        | Mech              |                        |
| 23 0548                       | Vibration Controls for HVAC for HVAC Piping and Equipment | Mech              |                        |
| 23 0553                       | Identification for HVAC Piping and Equipment              | Mech              |                        |
| 23 0593                       | Testing, Adjusting and Balancing for HVAC                 | Mech              |                        |

| <b>List of Specifications</b> | <b>Description</b>                                | <b>Discipline</b> | <b>SD Sub. 10-2025</b> |
|-------------------------------|---|-------------------|------------------------|
| 23 0700                       | HVAC Insulation                                   | Mech              |                        |
| 23 0800                       | HVAC Systems Commissioning                        | Mech              |                        |
| 23 0923                       | Direct Digital Control System for HVAC            | Mech              |                        |
| 23 0995                       | Trending, Remote Monitoring, and Data Analytics   | Mech              |                        |
| 23 2113                       | Hydronic Piping                                   | Mech              |                        |
| 23 2113.13                    | Underground Hydronic Piping                       | Mech              |                        |
| 23 2116                       | Hydronic Piping Specialties                       | Mech              |                        |
| 23 2123                       | Hydronic Pumps                                    | Mech              |                        |
| 23 2300                       | Refrigerant Piping                                | Mech              |                        |
| 23 3113                       | Metal Ducts                                       | Mech              |                        |
| 23 3116                       | Nonmetal Ducts                                    | Mech              |                        |
| 23 3300                       | Air Duct Accessories                              | Mech              |                        |
| 23 3423                       | HVAC Power Ventilators                            | Mech              |                        |
| 23 3600                       | Air Terminal Units                                | Mech              |                        |
| 23 3713                       | Diffusers, Registers, and Grills                  | Mech              |                        |
| 23 6426                       | Rotary-Screw Water Chillers                       | Mech              |                        |
| 23 7200                       | Air-to-Air Energy Recovery Equipment              | Mech              |                        |
| 23 7313                       | Modular Indoor Central-Station Air-Handling Units | Mech              |                        |
| 23 8126                       | Split-System Air Conditioners                     | Mech              |                        |
| 23 8219                       | Fan Coil Units                                    | Mech              |                        |
| <b><u>DIVISION 26</u></b>     | <b><u>ELECTRICAL</u></b>                          |                   |                        |
| 26 0500                       | Common Work Results for Electrical                | Elec              |                        |
| 26 0513                       | Medium Voltage Cables                             | Elec              |                        |
| 26 0519                       | Building Wire and Cable                           | Elec              |                        |
| 26 0526                       | Grounding and Bonding for Electrical Systems      | Elect             |                        |
| 26 0529                       | Hangers and Supports for Electrical Systems       | Elect             |                        |
| 26 0533.13                    | Conduit and Raceways                              | Elec              |                        |
| 26 0533.16                    | Boxes   | Elec              |                        |
| 26 0533.23                    | Surface Raceways                                  | Elec              |                        |

| <b>List of Specifications</b> | <b>Description</b>                                    | <b>Discipline</b> | <b>SD Sub. 10-2025</b> |
|-------------------------------|---|-------------------|------------------------|
| 26 0539                       | Electrical In-floor Duct System                       | Elec              |                        |
| 26 0548                       | Vibration and Seismic Controls for Electrical Systems | Elec              |                        |
| 26 0553                       | Identification for Electrical Systems                 | Elec              |                        |
| 26 0573.19                    | Arc Flash Hazard Analysis                             | Elec              |                        |
| 28 0800                       | Commissioning of Electrical                           | Elec              |                        |
| 28 0900                       | Instrumentation and Control for Electrical Systems    | Elec              |                        |
| 28 0913                       | Electrical Power Monitoring and Control               | Elec              |                        |
| 28 0919                       | Contactors  | Elec              |                        |
| 26 0923                       | Lighting Control Devices                              | Elec              |                        |
| 26 1116.11                    | Secondary Unit Substations with Switchgear Secondary  | Elec              |                        |
| 26 1200                       | Medium Voltage Transformers                           | Elec              |                        |
| 26 2116                       | Service Entrance                                      | Elec              |                        |
| 26 2200                       | Low Voltage Transformers                              | Elec              |                        |
| 26 2413                       | Distribution Switchboards                             | Elec              |                        |
| 26 2416                       | Panelboards   | Elec              |                        |
| 26 2713                       | Electricity Metering                                  | Elec              |                        |
| 26 2716                       | Cabinets and Enclosures                               | Elec              |                        |
| 26 2726                       | Wiring Devices  | Elec              |                        |
| 26 2816                       | Disconnect Switches                                   | Elec              |                        |
| 26 3100                       | Photovoltaic Controllers                              | Elec              |                        |
| 26 3323                       | Central Battery Equipment                             | Elec              |                        |
| 26 3600                       | Transfer Switches                                     | Elec              |                        |
| 26 4100                       | Lightning Protection Systems                          | Elec              |                        |
| 26 4300                       | Surge Protective Devices                              | Elec              |                        |
| 26 4313                       | Surge Protectors for Data and Electronic Equipment    | Elec              |                        |
| 26 5100                       | Luminaires  | Elec              |                        |
| 26 5616                       | Site Lighting – Parking Perimeter Lighting            | Elec              |                        |
| <b><u>DIVISION 27</u></b>     |   |                   |                        |
| <b><u>COMMUNICATIONS</u></b>  |   |                   |                        |
| 27 0510                       | Basic Specialty System Requirements                   | Elec              |                        |

| <b>List of Specifications</b> | <b>Description</b>   | <b>Discipline</b>                            | <b>SD Sub. 10-2025</b> |
|-------------------------------|--|--|------------------------|
| 27 1000                       | Stuctured Cabling  | Elect  |                        |
| 27 1343                       | Telephone Service Entrance                                 | Elect  |                        |
| 27 4100                       | Audio Visual Systems                                       | Elect  |                        |
| 27 5113                       | Appendix A Programming Information Template                | Elect  |                        |
| 27 5113                       | Cellular Repeater System                                   | Elect  |                        |
| <b><u>DIVISION 28</u></b>     |  | <b><u>ELECTRICAL SAFETY AND SECURITY</u></b> |                        |
| 28 0537                       | Security Voice Communications - Distributed Antenna System | Elect  |                        |
| 28 1000                       | Access Control System                                      | Elect  |                        |
| 28 2000                       | Video Surveillance System                                  | Elect  |                        |
| 28 3000                       | Intrusion Detection System                                 | Elect  |                        |
| 28 4700                       | Voice Evacuation Fire Alarm and Smoke Detection Systems    | Elect  |                        |
| <b><u>DIVISION 31</u></b>     |  | <b><u>EARTHWORK</u></b>                      |                        |
| 31 3116                       | Termite Control  | Arch   |                        |
| 31 6100                       | Footings   | Struct                                       |                        |
|                               |  | <b><u>See Civil Drawings</u></b>             |                        |
| <b><u>DIVISION 32</u></b>     |  | <b><u>EXTERIOR IMPROVEMENTS</u></b>          |                        |
| 32 3113                       | Chain Link Fences and Gates                                | Arch   |                        |
| 32 3119                       | Estate Metal Fences and Gates                              | Arch   |                        |
| 32 3300                       | Site Furnishings   | Arch   |                        |
|                               |  | <b><u>See Civil Drawings</u></b>             |                        |
| <b><u>DIVISION 33</u></b>     |  | <b><u>UTILITIES</u></b>                      |                        |
|                               |  | <b><u>See Civil Drawings</u></b>             |                        |

**END OF SECTION**

**BOWSKY PK-8 SCHOOL**

**APPENDICES**

01- Code 2 Design Charrette Meeting Notes – July 2025 ..... 38

02- Educational Master Plan St Thomas School Facilities Map ..... 1

03- St Thomas Bundle Educational Master Plan Studies ..... 57

04- VIDE Facility Site Maps ..... 5

05- VIDE St Thomas Facilities Enrollment Summary ..... 1

06- Environmental Assessment Report (DRAFT) ..... 38



Yvonne E. Milliner-Bowsky



Jane E. Tuitt



Lockhart Family



Ivanna Eudora Kean



Emanuel Benjamin Oliver



Ulla F. Muller

# HONORING A LEGACY





RFQ 001-2024-STX/STT/STJ | *St. Thomas Schools Bundle 2*  
Rebuild USVI Construction Services

# Preconstruction Services Code 2 - Planning Charrette DAY FOUR

15-18 July 2025





# SCHEDULE

Jacobs UVI Office (St. Thomas, 48 Norre Gade, Charlotte Amalie, St Thomas 00804, U.S. Virgin Islands)

| LOCATION | Sunday<br>7/13/2025 | Monday<br>7/14/2025 | Tuesday<br>7/15/2025  | Wednesday<br>7/16/2025   | Thursday<br>7/17/2025  | Friday<br>7/18/2025  | Saturday<br>7/19/2025 |
|----------|---------------------|---------------------|---|--|--|--|-----------------------|
| 0800     |                     |                     | 0800-0900 On-Site Team Meeting / Set-Up   | 0800-0900 On-Site Team Meeting / Set-Up  | 0800-0900 On-Site Team Meeting / Set-Up  | 0800-0900 On-Site Team Meeting / Set-Up  |                       |
| 0900     |                     |                     | 0900-1030 Lockhart PK-8: Schematic Design Approach<br><i>Schematic Design / Confirmation (VIDE, Jacobs, McKissack, DLR)</i> | 0900-1000 Tuitt PK-1: Update<br><i>Site Confirmation / Concept Review (VIDE, Jacobs, McKissack, DLR)</i>                             | 0900-1100 OAC Meeting<br><i>Schematic Design / Confirmation (VIDE, Jacobs, McKissack, DLR)</i>                 | 0900-1000 Out Brief / Preliminary Delivery of Findings Action Items List/Due Outs<br><i>(VIDE, Jacobs, McKissack, DLR)</i> |                       |
| 1000     | 0800-1200           |                     | 1000-1200 Admin Center: Schematic Design Approach<br><i>Schematic Design / Confirmation (VIDE, Jacobs, McKissack, DLR)</i>  | 1000-1200 Bowsky PK-8: Schematic Design Approach<br><i>Schematic Design / Confirmation (VIDE, Jacobs, McKissack, DLR)</i>            | 1000-1100 OAC Meeting<br><i>Schematic Design / Confirmation (VIDE, Jacobs, McKissack, DLR)</i>                 | 1000-1200 Team Workshop Session / As Necessary   |                       |
| 1100     |                     |                     |   |  | 1100-1200 Muller PK-8: Code 0/3 Recap<br><i>Schematic Design / Confirmation (VIDE, Jacobs, McKissack, DLR)</i> |  |                       |
| 1200     | 1200-1300           |                     | 1200-1300 Lunch Break   | 1200-1300 Utility Coordination VIDE / WAPA<br><i>Utility Review (VIDE, Jacobs, McKissack, DLR)</i>                                   | 1200-1300 Lunch Break  |  |                       |
| 1300     |                     | TRAVEL              |   |  | 1300-1400 Admin Center: Design Recap<br><i>Schematic Design / Confirmation (VIDE, Jacobs, McKissack, DLR)</i>  |  |                       |
| 1400     |                     |                     | 1300-1600 Oliver PK-8: Schematic Design Approach<br><i>Schematic Design / Confirmation (VIDE, Jacobs, McKissack, DLR)</i>   | 1300-1700 Kean HS: Schematic Design / Civil Approach<br><i>Schematic Design / Confirmation (VIDE, Jacobs, McKissack, DLR)</i>        | 1400-1500 Oliver PK-8: Design Recap<br><i>Schematic Design / Confirmation (VIDE, Jacobs, McKissack, DLR)</i>   |  |                       |
| 1500     | 1300-1800           |                     |   |  | 1500-1600 Kean HS: Design Recap<br><i>Schematic Design / Confirmation (VIDE, Jacobs, McKissack, DLR)</i>       |  |                       |
| 1600     |                     |                     | 1600-1700 Muller PK-8: Code 0/3<br><i>Site Confirmation / Concept Review (VIDE, Jacobs, McKissack, DLR)</i>                 |  | 1600-1800 All: Civil Recap<br><i>Schematic Design / Confirmation (VIDE, Jacobs, McKissack, DLR)</i>            |  |                       |
| 1700     |                     |                     | 1700-1800 Wrap Up   | 1700-1800 Kean HS: Code 2 Review with Commissioner<br><i>Architectural Character / Concept Review (VIDE, Jacobs, McKissack, DLR)</i> |  |  |                       |
| 1800     |                     |                     |   |  |  | TRAVEL   |                       |





# PROGRAM & PLANNING VALIDATION

## CODE 0 PROGRAMMING CHARRETTE



# PROGRAM & PLANNING VALIDATION

## CODE 3 PLANNING CHARRETTE



# DESIGN APPROACH – DAY 2 OUTCOME

## CODE 2 DESIGN CHARRETTE

**CRITICAL STEP THIS WEEK**

|                     | CODE 0<br>PROGRAMMING CHARRETTE |                |                   | CODE 3<br>PLANNING CHARRETTE |                   |                  | CODE 2<br>DESIGN CHARRETTE |                         |                         |                    |
|---------------------|---------------------------------|----------------|-------------------|------------------------------|-------------------|------------------|----------------------------|-------------------------|-------------------------|--------------------|
|                     | SITE CONFIRMED                  | SITE CONFIRMED | PROGRAM CONFIRMED | CONCEPT PLAN CONFIRMED       | MASSING CONFIRMED | BUDGET CONFIRMED | PROGRAM / SCOPE FINALIZED  | HORIZONTAL CONTROL SITE | HORIZONTAL CONTROL PLAN | AESTHETIC APPROACH |
| LOCKHART PK-8       | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ✓                          | ✓                       | ✓                       | ✓                  |
| OLIVER PK-8         | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ✓                          | ✓                       | ✓                       | ✓                  |
| ADMIN / CONF CENTER | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ✓                          | ✓                       | ✓                       | ✓                  |
| BOWSKY PK-8         | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ☹️                         | ☹️                      | ✓                       | ✓                  |
| KEAN HS             | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | 😐                          | 😐                       | 😐                       | ✓                  |
| TUITT PK-1          | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ✓                          | ✓                       | ✓                       | ✓                  |
| MULLER PK-8         | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ✓                          | ✓                       | ✓                       | ✓                  |





Yvonne E. Milliner-Bowsky



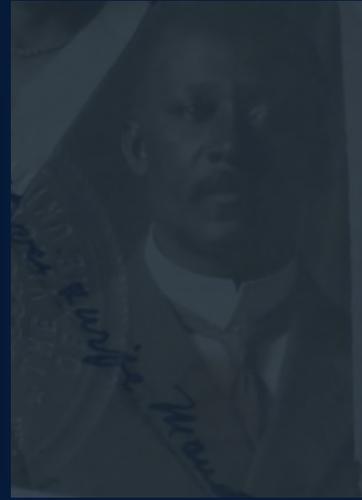
Jane E. Tuitt



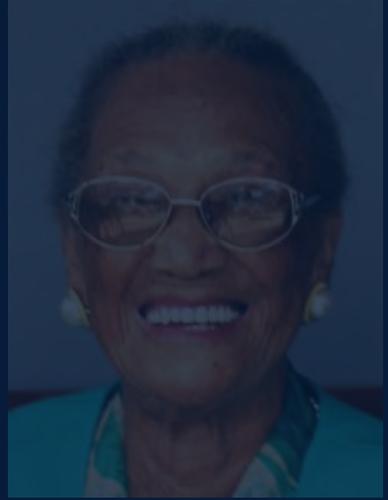
Lockhart Family



Ivanna Eudora Kean



Emanuel Benjamin Oliver



Ulla F. Muller

# YVONNE E. MILLINER BOWSKY PK-8

## HONORING A LEGACY







Responses

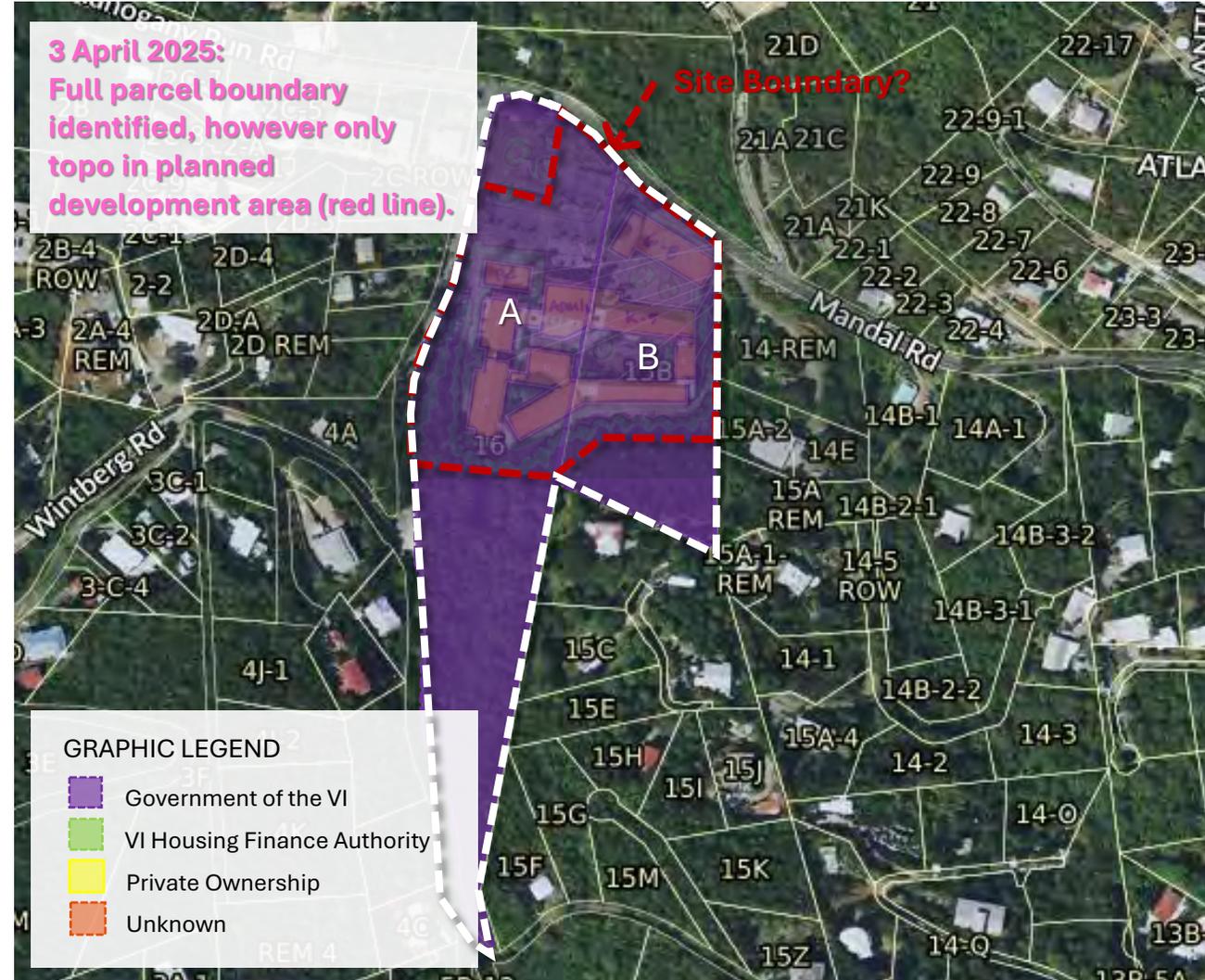
Erika Gulick  
April 8, 2025 at 7:40 PM

The general area identified by Suffolk within Parcel A and Parcel B is intended to be redeveloped as part of this project. Surveys should be conducted and any easement information, deeds, project boundary, legal descriptions and ownership should be confirmed by a registered land surveyor through Suffolk-CBNA with the Government of the Virgin Islands, including the Department of Property and Procurement, as soon as possible as part of its pre-construction services.

Attachments

PARCEL LEGEND

- A** Property ID 103103020100  
Address MANDAHL 16 GREAT NORTHSIDE QTR  
Owner GOVERNMENT OF THE V.I.  
Address 8100 Lindbergh Bay 61  
St Thomas VI 00802
- B** Property ID 103103020200  
Address MANDAHL 15B 1 GR NORTHSIDE QTR  
Owner GOVERNMENT OF THE V.I.  
Address 8100 Lindbergh Bay 61  
St Thomas VI 00802



**3 April 2025:**  
Full parcel boundary identified, however only topo in planned development area (red line).

**GRAPHIC LEGEND**

- Government of the VI
- VI Housing Finance Authority
- Private Ownership
- Unknown





SCOPE: Currently K-5 going to a PK-8. Add MS components, learning suites and activated outdoor environments.

## PreK-8 Case Study

June 3, 2024  
**Criteria Documents**  
 (3 of 6 from STT Education Bundle)

Bowsky PreK-8 will be renovated and expanded using the criteria that was developed throughout the FEMA funding and master plan process. The Lockhart documents will serve as precedence for the scope of work at Bowsky which will include renovation of the existing facilities as well as adding two story "small learning communities, for a total population of 750. Bowsky will house a student population of approximately 750 with an overall square footage of 113,978 gsf, existing 53,978, with 60,000 new construction. The current PreK-8 school sits on a sloped site that is oriented to the north facing Route 42. There is a substantial grade change of approximately 80' that needs to be considered when siting the new construction as well as the water runoff that starts above the property to the south of the school site. The building components will include two new two story "Small Learning Communities, plus renovation of the existing building to comply with all of the requirements of IBC 2021. These "kit of parts" are defined in the Lockhart Bridging Documents.

### General Information to be included in Progressive Design Build Package:

- Master Plan for USVI (including FFE)
- Design Guideline (FEMA Criteria)
- BBA
- Oct 3 + 5 "kit of Part" Diagrams from Oct 3 + 5 Community Meetings
- Diagram on structural requirements for appropriate risk category

### Specific for Bowsky:

- Program Summary for Bowsky indicates average square footages that were laid out in the Prek-8 documents.

| U.S. Virgin Islands PK-8 Planning Program                           |                    | Revised 10/25/2023 | 1,070 Target Capacity |
|---|--------------------|--------------------|-----------------------|
| <b>Program Area</b>   |                    |                    |                       |
| 1.3   | Administration     |                    | 6,880                 |
| 2.2   | Core Academic      |                    | 88,925                |
| 3.3   | Elective Spaces    |                    | 6,825                 |
| 4.3   | Media Center       |                    | 5,250                 |
| 5.0   | SPED Services      |                    |                       |
| 6.0   | Food Service       |                    | 12,125                |
| 7.0   | Physical Education |                    | 18,100                |
| 8.0   | Building Support   |                    | 1,778                 |
| <b>Total Usable Area (Net Square Feet - NSF)</b>                    |                    |                    | <b>115,650</b>        |
| General Building Area (Walls, Partitions, Mech, Elec., Circulation) |                    |                    | 25% of Net SF         |
|   |                    |                    | <b>28,913</b>         |
| <b>Total Building Area (Gross Square Feet - GSF)</b>                |                    |                    | <b>144,563</b>        |
| Maximal Covered Outdoor Learning Spaces                             |                    |                    | 10% of Net SF         |
|   |                    |                    | <b>11,665</b>         |
| <b>TOTAL BUILDING AREA WITH OUTDOOR LEARNING</b>                    |                    |                    | <b>156,128</b>        |

Student Capacity 1070  
 (25% of Gross)  
 \*Based on industry standards that include outdoor circulation

Existing Square Footage: 53,978  
 New Construction : 60,000  
**113,978**

**STUDENT STATIONS:**  
 Functional Capacity: 750  
 Program SF: 113,978 GSF  
 SF/SS: 151 SF



SCOPE: Currently K-5 going to a PK-8. Add MS components, learning suites and activated outdoor environments.

**STUDENT GRADE LEVELS:  
Pre-Kindergarten – Eight Grade**

St. Thomas

**Yvonne E. Milliner-Bowsky PreK-8**

Existing Building  
New Building  
Enrollment 390  
Actual student enrollment 201

**Functional Cap**

**Design Statement**

**Modernization at Existing Building**  
The modernization of the existing building will be renovation and conversion to make way for new learning.

**Program Deviations:**

- Small Group Learning
- Media Center is Sized
- No Outdoor Fields Exist

**Critical Cost Consideration**

- Elevator(s) to meet ADA
- Replacement of jalousie
- Renovated outdoor learning
- Improved site circulation
- HVAC upgrades
- Underground concrete
- Assume hip roofs at all locations
- Demolition of shuttered building
- Communications/IT and security
- Adding/updating perimeter

June 3, 2024  
**Criteria Documents**  
(3 of 6 from STT Education Bundle)

Bowsky PreK-8 will be renovated and expanded using the criteria that was the FEMA funding and master plan process. The Lockhart documents will include the scope of work at Bowsky which will include renovation of the existing two story "small learning communities, for a total population of 750. I to two story "small learning communities, for a total population of 750. I student population of approximately 750 with an overall square footage of 53,978, with 60,000 new construction. The current PreK-8 school site is oriented to the north facing Route 42. There is a substantial grade change above the property to the south of the school site. The building component needs to be considered when siting the new construction as well as the two story "Small Learning Communities, plus renovation of the existing of the requirements of IBC 2021. These "kit of parts" are defined in the Documents.

**General Information to be included in Progressive Design Build Phase**

- Master Plan for USVI (including FFE)
- Design Guideline (FEMA Criteria)
- BBA
- Oct 3 + 5 "kit of Part" Diagrams from Oct 3 + 5 Community Plan
- Diagram on structural requirements for appropriate risk category

**Specific for Bowsky:**

- Program Summary for Bowsky indicates average square footages that were laid out in the Prek-8 documents.

| U.S. Virgin Islands PK-8 Planning Program                                  |               | Revised 10/25/2023 | 1,070           |
|--|---------------|--------------------|-----------------|
| <b>Program Area</b>  |               |                    |                 |
| 1.0 Administration   |               | 6,800              |                 |
| 2.0 Core Academics   |               | 64,925             |                 |
| 3.0 Elective Spaces  |               | 6,825              |                 |
| 4.0 Media Center   |               | 5,250              |                 |
| 5.0 SPED Services  |               |                    |                 |
| 6.0 Small Group Learning   |               | 18,125             |                 |
| 7.0 Physical Education   |               | 18,100             |                 |
| 8.0 Building Support   |               | 1,775              |                 |
| <b>Total Usable Area (Net Square Feet: NSQ)</b>                            |               | <b>113,600</b>     |                 |
| <b>General Building Area (Walls, Partitions, Mech. Elec., Circulation)</b> |               |                    |                 |
|  | 25% of Net SF | 28,913             | (25% of Usable) |
| <b>Total Building Area (Gross Square Feet: GSF)</b>                        |               | <b>144,562</b>     |                 |
| <b>National Covered Outdoor Learning Spaces</b>                            |               |                    |                 |
|  | 15% of Net SF | 11,961             | (15% of Usable) |
| <b>TOTAL BUILDING AREA WITH OUTDOOR LEARNING</b>                           |               | <b>156,128</b>     |                 |

- Lockhart PDF of SD Report and "Bridging Documents" (to be used as precedence and specifications)

**Diagram of Potential Site Organization**



Existing Site Plan for Bowsky

Lockhart as Precedence

Diagram of Site Organization for Bowsky

**Specific for Bowsky:**

- Program Summary for Bowsky indicates average square footages that were laid out in the Prek-8 documents.

| U.S. Virgin Islands PK-8 Planning Program                                  |               | Revised 10/25/2023 | 1,070 Target Capacity |
|--|---------------|--------------------|-----------------------|
| <b>Program Area</b>  |               |                    |                       |
| 1.0 Administration   |               | 6,800              |                       |
| 2.0 Core Academics   |               | 64,925             |                       |
| 3.0 Elective Spaces  |               | 6,825              |                       |
| 4.0 Media Center   |               | 5,250              |                       |
| 5.0 SPED Services  |               |                    |                       |
| 6.0 Small Group Learning   |               | 18,125             |                       |
| 7.0 Physical Education   |               | 18,100             |                       |
| 8.0 Building Support   |               | 1,775              |                       |
| <b>Total Usable Area (Net Square Feet: NSQ)</b>                            |               | <b>113,600</b>     |                       |
| <b>General Building Area (Walls, Partitions, Mech. Elec., Circulation)</b> |               |                    |                       |
|  | 25% of Net SF | 28,913             | (25% of Usable)       |
| <b>Total Building Area (Gross Square Feet: GSF)</b>                        |               | <b>144,562</b>     |                       |
| <b>National Covered Outdoor Learning Spaces</b>                            |               |                    |                       |
|  | 15% of Net SF | 11,961             | (15% of Usable)       |
| <b>TOTAL BUILDING AREA WITH OUTDOOR LEARNING</b>                           |               | <b>156,128</b>     |                       |

Student Capacity 1070

\*Based on industry standards that include outdoor circulation

Existing Square Footage: 53,978  
New Construction: 60,000  
113,978

Yvonne E. Milliner-Bowsky Elementary School currently serves grades K-5. The campuses linear buildings create two courtyards with the addition of modular structures.

The new proposal will support grades PreK-8 in an expanded campus.

Features of modernization/expansion:  
New middle school learning suites, new gym & improvements for outdoor learning environments





SCOPE: Currently K-5 going to a PK-8. Add MS components, learning suites and activated outdoor environments.

Advancement Opportunities: Yvonne E. Milliner-Bowsky PreK-8

DISCLAIMER: Proposed modernization is contingent on confirmation that the existing structure either meets or can be modified to meet current structural code requirements.

Level 01

- LEGEND
- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PREK
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM



PreK-8 Case Study

St. Thomas

Yvonne E. Milliner-Bowsky PreK-8

Level 02

- LEGEND
- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PREK
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM



Advancement Opportunities: Yvonne E. Milliner-Bowsky PreK-8

Level 03

- LEGEND
- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PREK
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM

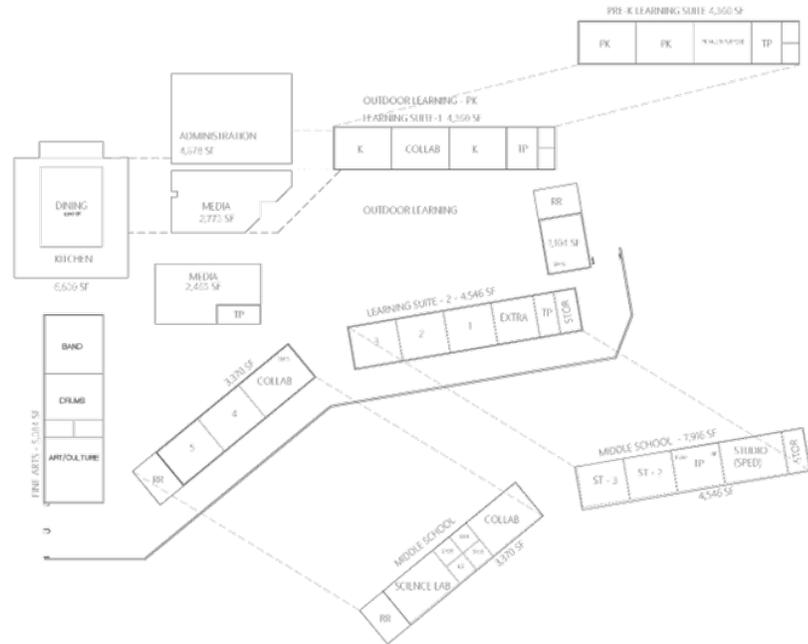


# VIDE Public Schools: Modernization / Expansion Projects on the Islands

## St. Thomas – Yvonne E. Milliner-Bowsky PreK-8 School – Modernization / Expansion



### TEST FIT



### LEGEND

- ADMINISTRATION
- DINING
- MEDIA CENTER
- GYMNASIUM / PHYSICAL ED
- SPECIALS
- SPECIAL ED
- PK
- K-5
- 6-8
- SUPPORT

#### EXISTING - GSF

ADMIN: 4,878 SF  
 CORE: 25,034 SF  
 FINE ARTS: 5,084 SF  
 MEDIA: 5,254 SF  
 FOOD: 6,600 SF

TOTAL 47,850 SF

GYM:

#### RFP - NSF

ADMIN: 5,000 SF  
 CORE: 22,870 SF  
 FINE ARTS: 2,550 SF  
 MEDIA: 4,000 SF  
 FOOD: 7,725 SF

TOTAL 42,145 SF 52,682 GSF

NEW GYM: 18,400 SF

**STUDENT STATIONS:**  
**Functional Capacity: 624**  
**Program SF: 83,020 GSF**  
**SF/SS: 133 SF**





# YVONNE MILLINER BOWSKY PREK-8

program (consider keeping same program of studies as Oliver for PreK-8)

U.S. Virgin Islands PK-8 Planning Program

Revised 9/17/2020

Program Area

## BOWSKY PK-8 PROGRAM ANALYSIS

| U.S. Virgin Islands PK-8 Planning Program                                    |                    | Revised 10/25/2023    |                        | 1,070 Target Capacity |  |
|--|--------------------|-----------------------|------------------------|-----------------------|--|
| DESIGN PARAMETERS  |                    |                       |                        |                       |  |
| Program Area Summary   |                    |                       |                        |                       |  |
| 1.0  | Administration     | 6,650                 | 0                      |                       |  |
| 2.0  | Core Academic      | 64,325                | 1,086                  |                       |  |
| 3.0  | Elective Spaces    | 6,025                 | 155                    |                       |  |
| 4.0  | Media Center       | 5,250                 | 0                      |                       |  |
| 5.0  | SPED Services      |                       | 0                      |                       |  |
| 6.0  | Food Service       | 12,125                | 0                      |                       |  |
| 7.0  | Physical Education | 10,100                | 30                     |                       |  |
| 8.0  | Building Support   | 1,175                 | 0                      |                       |  |
| <b>Total Usable Area (Net Square Feet- NSI)</b>                              |                    | <b>118,650</b>        | <b>1,271</b>           |                       |  |
| <b>General Building Area: Walls, Partitions, I</b>                           |                    | <b>28,313</b>         |                        |                       |  |
| <small>*Based on industry standards that include outdoor circulation</small> |                    |                       |                        |                       |  |
| <b>Total Building Area (Gross Square Feet- I)</b>                            |                    | <b>144,563</b>        |                        |                       |  |
| <small>Additional Covered Outdoor Learning Spaces</small>                    |                    | <small>11,565</small> | <small>10%</small>     |                       |  |
| <b>TOTAL BUILDING AREA WITH OUTDOOR LEARNING</b>                             |                    | <b>156,128</b>        | <b>STUDENT STATION</b> | <b>1,271</b>          |  |

| Revised 5/29/2025 |               | PROGRAM FROM RFP DRAWINGS |             | 469 Target Capacity     |             |
|-------------------|---------------|---------------------------|-------------|-------------------------|-------------|
|                   | 4,048         | -2,602                    | ####        | 0                       | 0           |
|                   | 25,512        | -33,233                   | -60.11%     | 439                     | 439         |
|                   | 5,094         | -1,731                    | ####        | 114                     | 114         |
|                   | 4,905         | -345                      | -6.57%      | 0                       | 0           |
|                   | 0             | 0                         | ####        | 0                       | 0           |
|                   | 5,534         | -6,531                    | ####        | 0                       | 0           |
|                   | 13,890        | -4,210                    | ####        | 30                      | 30          |
|                   | 1,500         | -275                      | -15.43%     | 0                       | 0           |
|                   | <b>60,483</b> | <b>-55,167</b>            | <b>####</b> | <b>583</b>              | <b>583</b>  |
|                   | <b>15,121</b> | <b>-13,792</b>            | <b>####</b> |                         |             |
|                   | <b>75,604</b> | <b>-60,359</b>            | <b>####</b> |                         |             |
|                   | <b>6,048</b>  |                           |             | <b>583</b>              | <b>-688</b> |
|                   | <b>81,652</b> | <b>-74,475</b>            | <b>####</b> | <b>STUDENT STATIONS</b> |             |

| Revised 7/15/2025 |               | PROGRAM FROM RFP DRAWINGS |             | 469 Target Capacity     |             |
|-------------------|---------------|---------------------------|-------------|-------------------------|-------------|
|                   | 4,048         | 4,048                     | ####        | 0                       | 0           |
|                   | 25,512        | 25,512                    | ####        | 439                     | 439         |
|                   | 5,094         | 5,094                     | ####        | 114                     | 114         |
|                   | 4,905         | 4,905                     | ####        | 0                       | 0           |
|                   | 0             | 0                         | ####        | 0                       | 0           |
|                   | 5,534         | 5,534                     | ####        | 0                       | 0           |
|                   | 13,290        | 13,290                    | ####        | 30                      | 30          |
|                   | 1,500         | 1,500                     | ####        | 0                       | 0           |
|                   | <b>59,883</b> | <b>59,883</b>             | <b>####</b> | <b>583</b>              | <b>583</b>  |
|                   | <b>14,571</b> | <b>14,971</b>             | <b>####</b> |                         |             |
|                   | <b>74,854</b> | <b>74,854</b>             | <b>####</b> |                         |             |
|                   | <b>5,060</b>  | <b>5,060</b>              | <b>####</b> | <b>583</b>              | <b>-688</b> |
|                   | <b>80,842</b> | <b>80,842</b>             | <b>####</b> | <b>STUDENT STATIONS</b> |             |

3. Delete "other electives spaces" for 2400sf.
4. Reduce commons by 3,000sf. Support areas by 1575sf.
5. Add wastewater treatment plant.
6. Add "safe room/gym. Existing gym becomes dining commons.



U.S. VIRGIN ISLANDS  
SCHEMATIC DESIGN

**PROGRAM CONFIRMED**

**STUDENT STATIONS:**  
Functional Capacity: 583  
Program SF: 80,842 GSF  
SF/SS: 138 SF





**LEGEND**

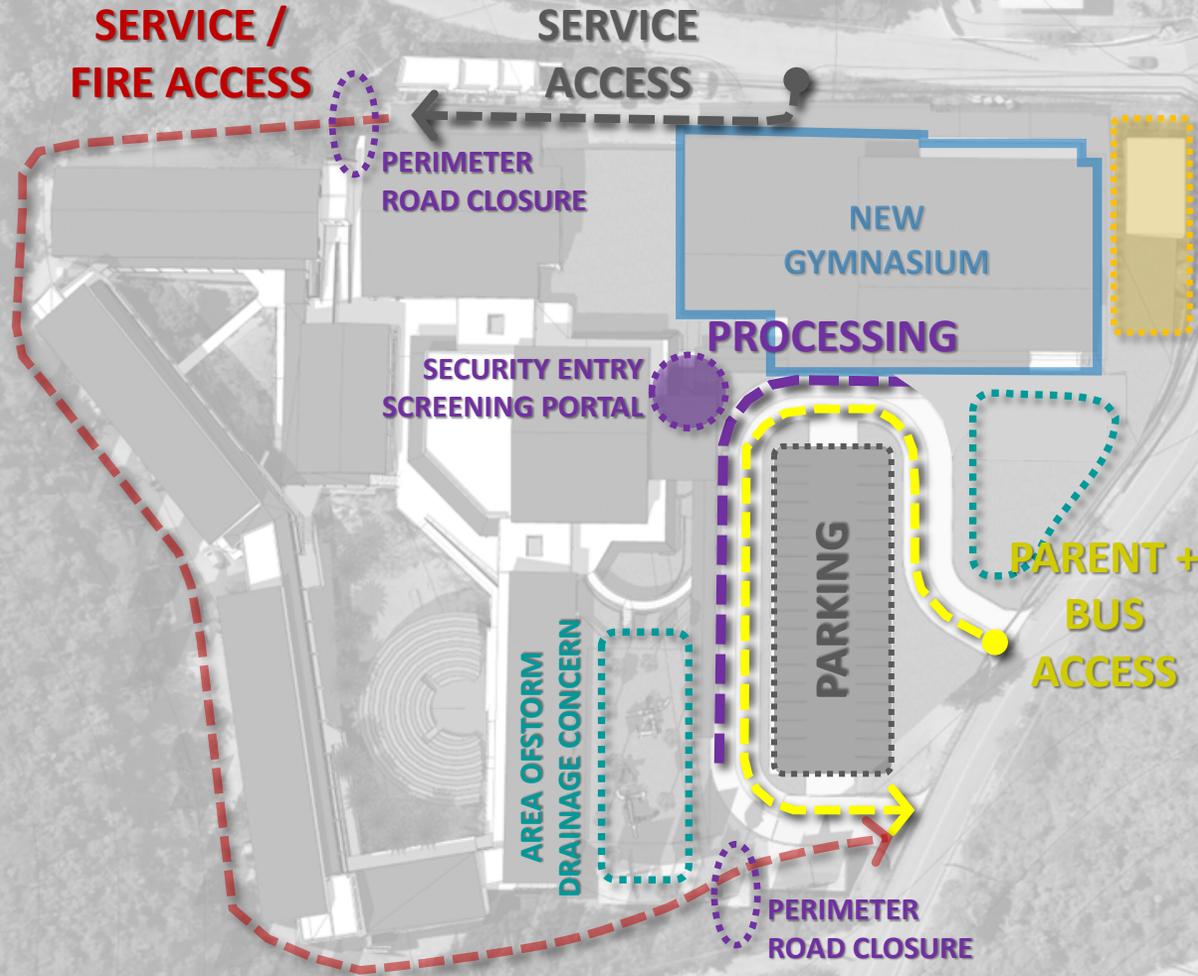
- ADMINISTRATION
- DINING
- MEDIA CENTER
- GYMNASIUM / PHYSICAL ED
- SPECIALS
- SPECIAL ED
- PK
- K-5
- 6-8
- SUPPORT

**CONCEPT FLOOR PLAN CONFIRMED**





# CONCEPT REVIEW



Per fire Department Review meeting, emergency vehicle access is to be maintained at full perimeter of this school site. This may allow for the design team to address existing storm drainage conditions at the interior courts and the existing PK classrooms.

Site access at the south side of the site (loop) may be reduced to 12' clear.

VIDE requested locations be indicated for access control / security screening for all students and visitors ate entry to the formal interior of the campus.

DCP requested evaluation of alternate site locations for the new waste-water treatment plant to be determined based on proximity to the storm water outfall on the campus. Alternate locations are under review.





## EXISTING SITE CONDITIONS



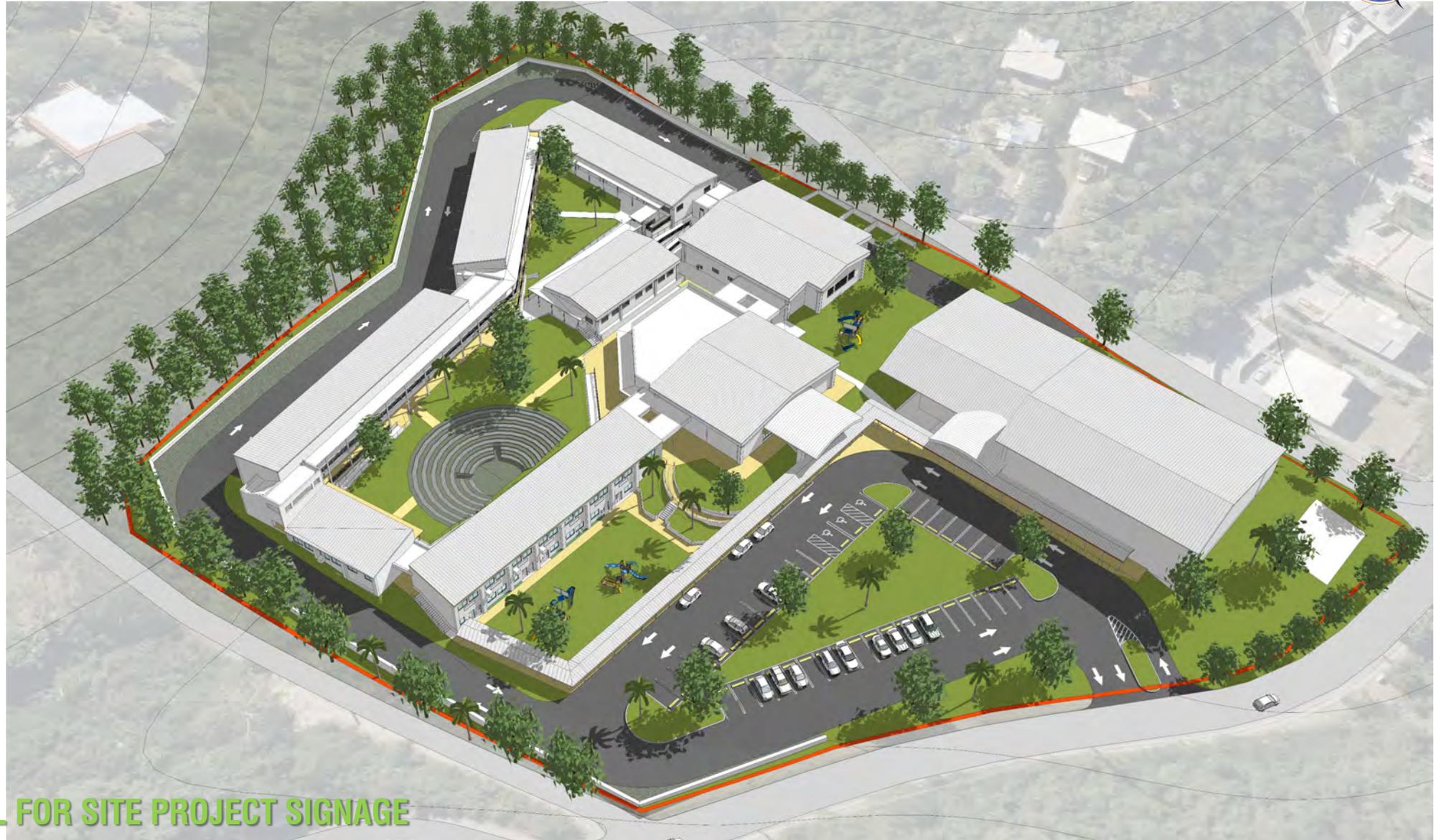


## EXISTING SITE CONDITIONS





# SITE PLAN

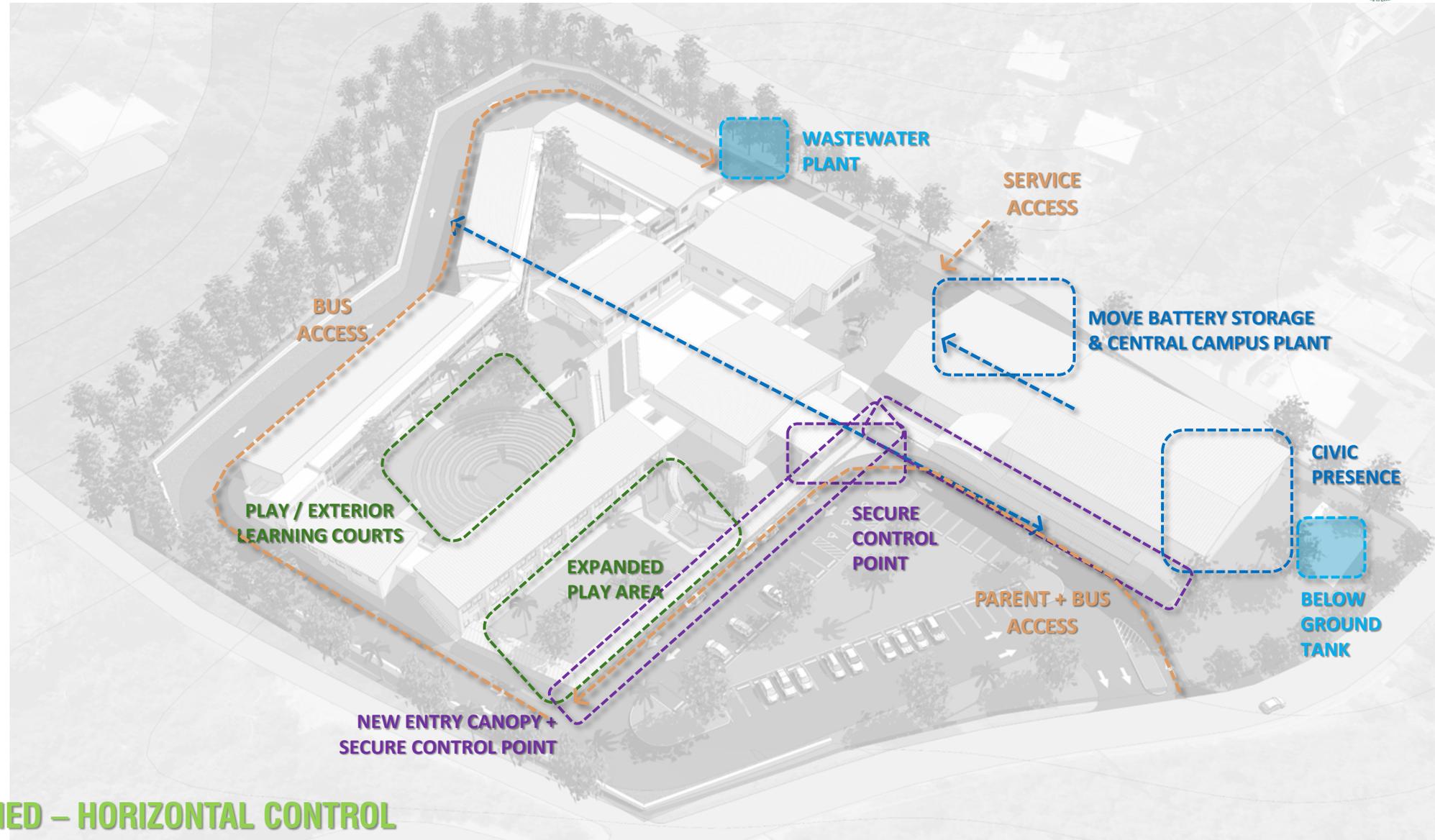


 **CONCEPT APPROVAL FOR SITE PROJECT SIGNAGE**





# SITE PLAN

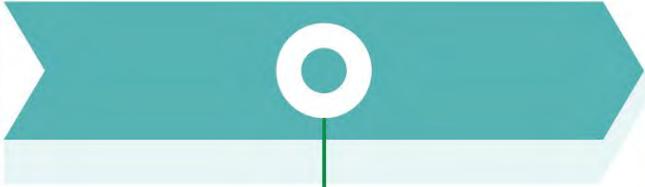


 **SITE PLAN CONFIRMED – HORIZONTAL CONTROL**

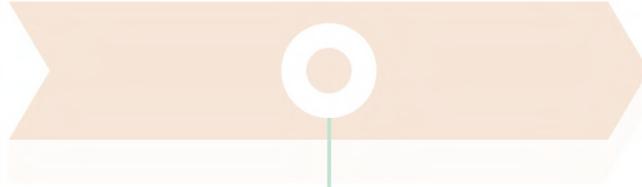


# CAMPUS ARCHITECTURE

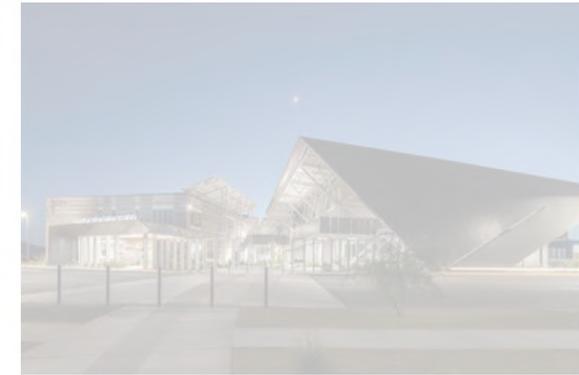
Interpretive / Revival



Transitional

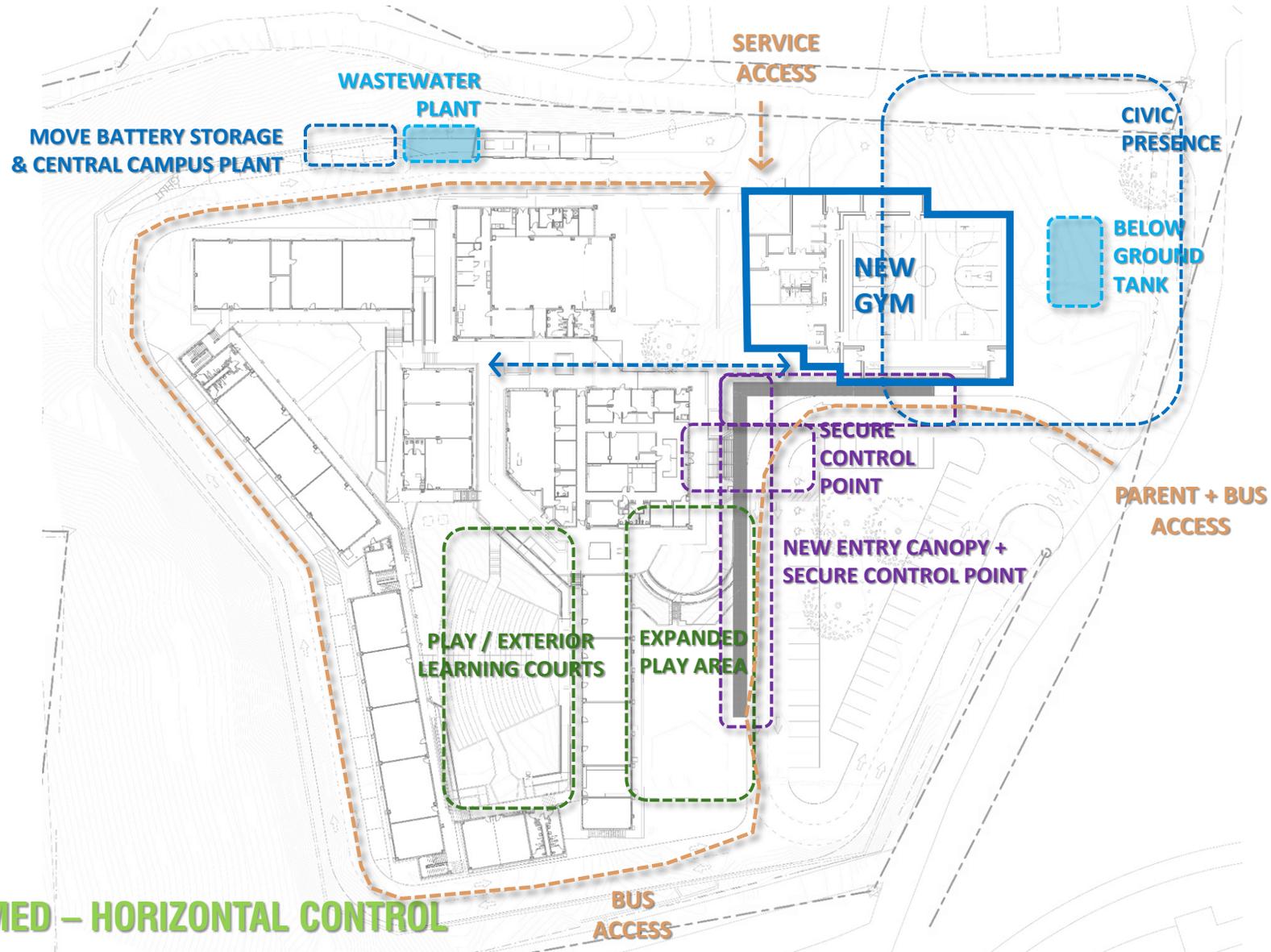


Contemporary





## CONCEPT REVIEW



 **SITE PLAN CONFIRMED – HORIZONTAL CONTROL**



# CONCEPT REVIEW EXISTING CONDITIONS



LIMITED ACCESS



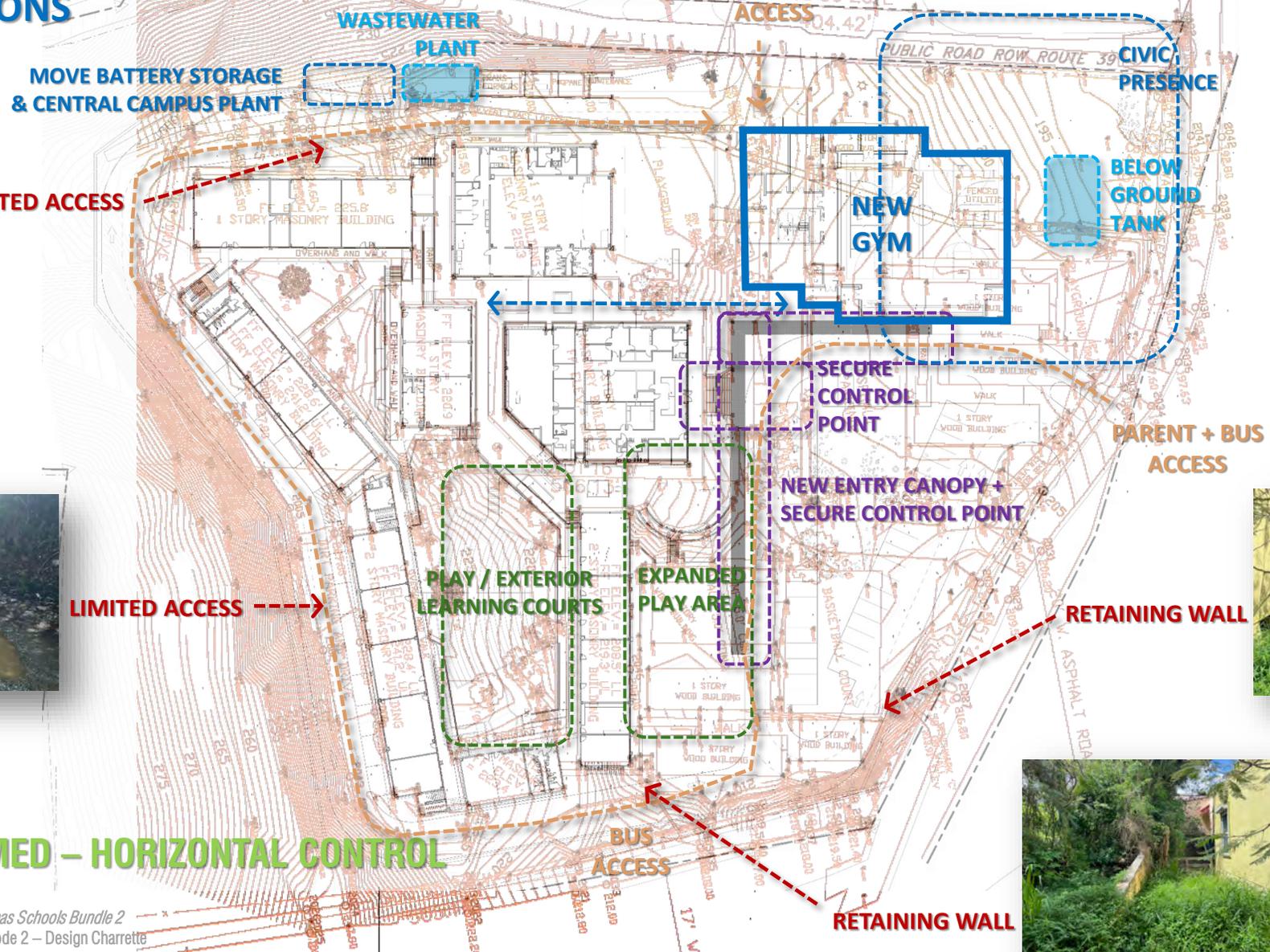
LIMITED ACCESS



RETAINING WALL



RETAINING WALL



MOVE BATTERY STORAGE & CENTRAL CAMPUS PLANT

WASTEWATER PLANT

SERVICE ACCESS

CIVIC PRESENCE

BELOW GROUND TANK

NEW GYM

SECURE CONTROL POINT

PARENT + BUS ACCESS

NEW ENTRY CANOPY + SECURE CONTROL POINT

PLAY / EXTERIOR LEARNING COURTS

EXPANDED PLAY AREA

 **SITE PLAN CONFIRMED – HORIZONTAL CONTROL**



# CONCEPT REVIEW

MOVE BATTERY STORAGE & CENTRAL CAMPUS PLANT

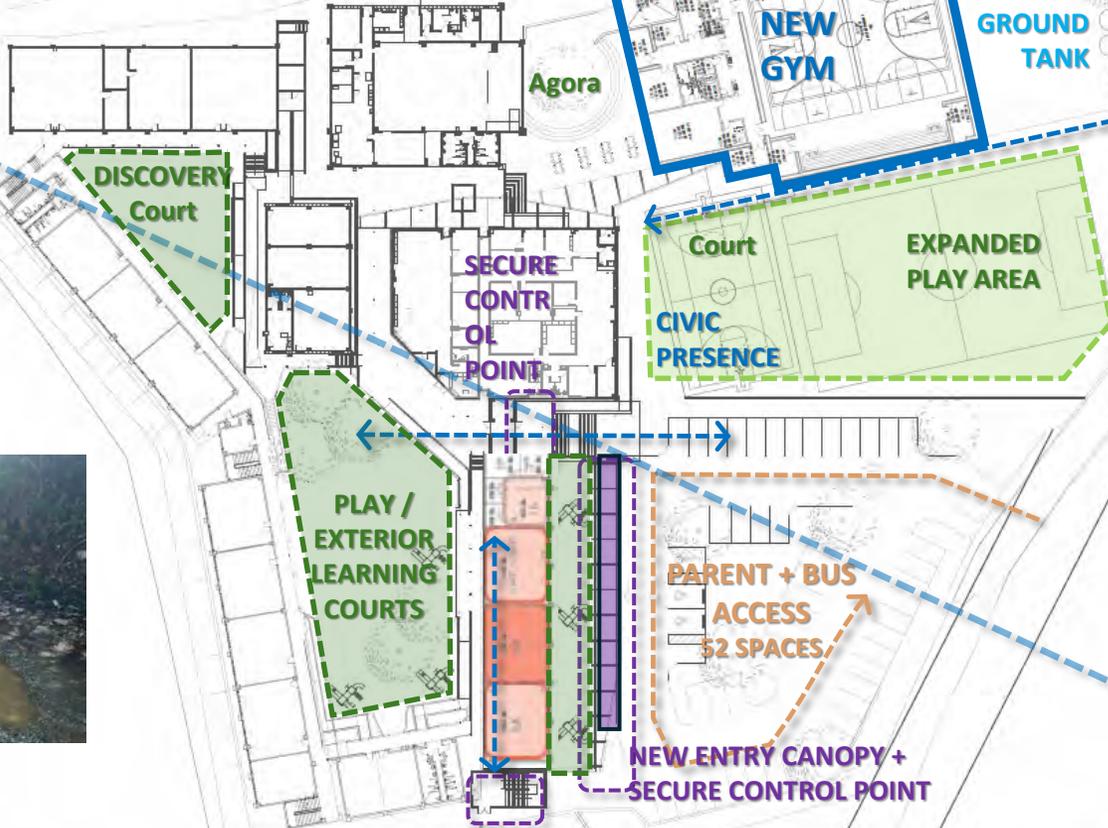


SERVICE TURN AROUND

SERVICE ACCESS



BELOW GROUND TANK WASTEWATER PLANT



EXPANDED PLAY AREA



SINGLE LANE & DRAIN

PARENT + BUS ACCESS 52 SPACES

NEW ENTRY CANOPY + SECURE CONTROL POINT

**SITE PLAN CONFIRMED – HORIZONTAL CONTROL – OPTION A**

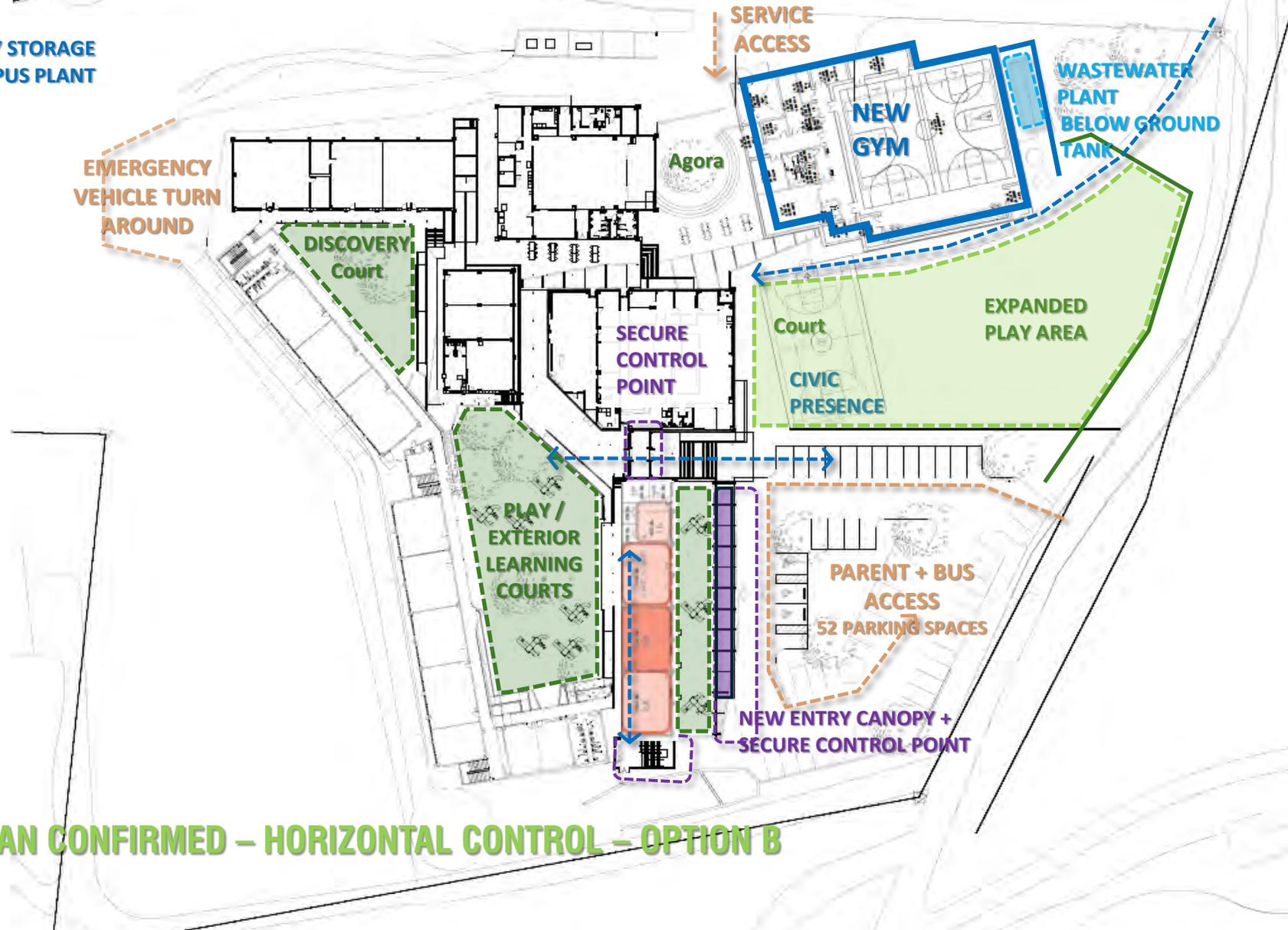
**OPTION NOT SELECTED**





# CONCEPT REVIEW

**MOVE BATTERY STORAGE & CENTRAL CAMPUS PLANT**



**SITE PLAN CONFIRMED – HORIZONTAL CONTROL – OPTION B**



RFQ 001-202:  
Rebuild USVI

# CONCEPT REVIEW



# CONCEPT REVIEW



## CONCEPT REVIEW



## CONCEPT REVIEW



# CONCEPT REVIEW



# MEETING NOTES



**Bowsky Pre-8**

| NO. | REVISION     | DATE | BY | CHKD |
|-----|--------------|------|----|------|
| 1   | ADD COMMENTS |      |    |      |
| 2   | ADD COMMENTS |      |    |      |
| 3   | ADD COMMENTS |      |    |      |
| 4   | ADD COMMENTS |      |    |      |
| 5   | ADD COMMENTS |      |    |      |
| 6   | ADD COMMENTS |      |    |      |
| 7   | ADD COMMENTS |      |    |      |
| 8   | ADD COMMENTS |      |    |      |
| 9   | ADD COMMENTS |      |    |      |
| 10  | ADD COMMENTS |      |    |      |
| 11  | ADD COMMENTS |      |    |      |
| 12  | ADD COMMENTS |      |    |      |
| 13  | ADD COMMENTS |      |    |      |
| 14  | ADD COMMENTS |      |    |      |
| 15  | ADD COMMENTS |      |    |      |
| 16  | ADD COMMENTS |      |    |      |
| 17  | ADD COMMENTS |      |    |      |
| 18  | ADD COMMENTS |      |    |      |
| 19  | ADD COMMENTS |      |    |      |
| 20  | ADD COMMENTS |      |    |      |
| 21  | ADD COMMENTS |      |    |      |
| 22  | ADD COMMENTS |      |    |      |
| 23  | ADD COMMENTS |      |    |      |
| 24  | ADD COMMENTS |      |    |      |
| 25  | ADD COMMENTS |      |    |      |
| 26  | ADD COMMENTS |      |    |      |
| 27  | ADD COMMENTS |      |    |      |
| 28  | ADD COMMENTS |      |    |      |
| 29  | ADD COMMENTS |      |    |      |
| 30  | ADD COMMENTS |      |    |      |
| 31  | ADD COMMENTS |      |    |      |
| 32  | ADD COMMENTS |      |    |      |
| 33  | ADD COMMENTS |      |    |      |
| 34  | ADD COMMENTS |      |    |      |
| 35  | ADD COMMENTS |      |    |      |
| 36  | ADD COMMENTS |      |    |      |
| 37  | ADD COMMENTS |      |    |      |
| 38  | ADD COMMENTS |      |    |      |
| 39  | ADD COMMENTS |      |    |      |
| 40  | ADD COMMENTS |      |    |      |
| 41  | ADD COMMENTS |      |    |      |
| 42  | ADD COMMENTS |      |    |      |
| 43  | ADD COMMENTS |      |    |      |
| 44  | ADD COMMENTS |      |    |      |
| 45  | ADD COMMENTS |      |    |      |
| 46  | ADD COMMENTS |      |    |      |
| 47  | ADD COMMENTS |      |    |      |
| 48  | ADD COMMENTS |      |    |      |
| 49  | ADD COMMENTS |      |    |      |
| 50  | ADD COMMENTS |      |    |      |
| 51  | ADD COMMENTS |      |    |      |
| 52  | ADD COMMENTS |      |    |      |
| 53  | ADD COMMENTS |      |    |      |
| 54  | ADD COMMENTS |      |    |      |
| 55  | ADD COMMENTS |      |    |      |
| 56  | ADD COMMENTS |      |    |      |
| 57  | ADD COMMENTS |      |    |      |
| 58  | ADD COMMENTS |      |    |      |
| 59  | ADD COMMENTS |      |    |      |
| 60  | ADD COMMENTS |      |    |      |
| 61  | ADD COMMENTS |      |    |      |
| 62  | ADD COMMENTS |      |    |      |
| 63  | ADD COMMENTS |      |    |      |
| 64  | ADD COMMENTS |      |    |      |
| 65  | ADD COMMENTS |      |    |      |
| 66  | ADD COMMENTS |      |    |      |
| 67  | ADD COMMENTS |      |    |      |
| 68  | ADD COMMENTS |      |    |      |
| 69  | ADD COMMENTS |      |    |      |
| 70  | ADD COMMENTS |      |    |      |
| 71  | ADD COMMENTS |      |    |      |
| 72  | ADD COMMENTS |      |    |      |
| 73  | ADD COMMENTS |      |    |      |
| 74  | ADD COMMENTS |      |    |      |
| 75  | ADD COMMENTS |      |    |      |
| 76  | ADD COMMENTS |      |    |      |
| 77  | ADD COMMENTS |      |    |      |
| 78  | ADD COMMENTS |      |    |      |
| 79  | ADD COMMENTS |      |    |      |
| 80  | ADD COMMENTS |      |    |      |
| 81  | ADD COMMENTS |      |    |      |
| 82  | ADD COMMENTS |      |    |      |
| 83  | ADD COMMENTS |      |    |      |
| 84  | ADD COMMENTS |      |    |      |
| 85  | ADD COMMENTS |      |    |      |
| 86  | ADD COMMENTS |      |    |      |
| 87  | ADD COMMENTS |      |    |      |
| 88  | ADD COMMENTS |      |    |      |
| 89  | ADD COMMENTS |      |    |      |
| 90  | ADD COMMENTS |      |    |      |
| 91  | ADD COMMENTS |      |    |      |
| 92  | ADD COMMENTS |      |    |      |
| 93  | ADD COMMENTS |      |    |      |
| 94  | ADD COMMENTS |      |    |      |
| 95  | ADD COMMENTS |      |    |      |
| 96  | ADD COMMENTS |      |    |      |
| 97  | ADD COMMENTS |      |    |      |
| 98  | ADD COMMENTS |      |    |      |
| 99  | ADD COMMENTS |      |    |      |
| 100 | ADD COMMENTS |      |    |      |

**Program Site** \* relocation of amphitheater to dining  
\* provide mini multipurpose play field

**Site Context** \* relocate parking to back  
\* remove debris from drainage ditch

**Plan Context** \* Explore location of lift station at Civic center?

**Adjacent Approach**

CONCEPTUAL PROJECT SITE RENDERING



## WORKING ACTION ITEM LIST

| Action Item   | Responsible | Target Date | Action   |
|---|-------------|-------------|--|
| Relocation of the New Amphitheater<br>(Design Phase Coordination)       | ZYS         | 7/25        | Develop Option to Relocate the Planned Amphitheater to the Area South of the Dining (with Stage) area for Indoor/Outdoor |
| Multipurpose Playfield<br>(Design Phase Coordination)                   | ZYS         | 7/25        | Develop Options for Multipurpose Play Field on site  |
| Relocate Parking to the Rear of the Site<br>(Design Phase Coordination) | ZYS         | 7/25        | Develop Options to Relocate Parking (Make Room for Fields)   |
| Confirm Fire Dept. Drive Extension<br>(Design Phase Coordination)       | ZYS         | 7/26        | Develop Alternate Options for the Full Perimeter Drive   |
| Investigate Condition of Existing Drainage System                       | JV          | 8/15        | Remove Debris from Existing Storm Drainage System<br>Investigate Existing Lines<br>Develop Mitigation Strategy           |
| Waste Water Plant Location (Civic Corner + Alt Site)                    | ZYS         | 7/26        | Develop Options for Concealing the Wastewater Treatment Plant  |

**PROGRAM SUMMARY**



**RFP  
SFBANK ACCOUNT**

**CODE 0/3  
SF ESCROW**

|                 | Capacity (students) |                          | GFA (SF)              |                                    |                |                | GFA (SF) AFTER CODE 3 CHARETTE |                      |                       |                | ! Grossing factor 25% as per RFP |  |
|-----------------|---------------------|--------------------------|-----------------------|------------------------------------|----------------|----------------|--------------------------------|----------------------|-----------------------|----------------|----------------------------------|--|
|                 | RFP Capacity        | Code 3 Charette Capacity | GFA (SF) RFP Criteria | GFA (SF) RFP ASSUMPTION 08.16.2024 |                |                | Renovation (1)                 | New Construction (2) | Area optimization (3) | Difference B-A |                                  | Comment                                    |
|                 |                     |                          |                       | A=(1)+(2)+(3)                      |                |                |                                |                      |                       |                |                                  |  |
| Tuitt PreK-1    | 469                 | 140                      | 69,794                | 62,815                             |                | 69,794         | (6,979)                        | 30,313               |                       | 30,313         | (32,502)                         |  |
| Oliver PreK-8   | 469                 | 608                      | 69,794                | 62,815                             |                | 69,794         | (6,979)                        | 74,231               |                       | 74,231         | 11,416                           | Correction deduct alternate SLC - 9 625 sf |
| Lockhart PreK-8 | 1070                | 1121                     | 144,563               | 144,563                            | 63,355         | 81,208         |                                | 140,314              | 63,355                | 76,959         | (4,249)                          |  |
| Bowsky PreK-8   | 750                 | 624                      | 113,978               | 109,238                            | 53,978         | 60,000         | (4,740)                        | 72,840               | 53,978                | 18,862         | (36,398)                         |  |
| Kean HS         | 1000                | 1159                     | 147,215               | 132,493                            |                | 147,215        | (14,722)                       | 163,980              |                       | 163,980        | 31,487                           |  |
| Admin Center    | 150                 | 177                      | 80,000                | 76,000                             |                | 80,000         | (4,000)                        | 44,940               |                       | 44,940         | (31,060)                         |  |
|                 | <b>3908</b>         | <b>3829</b>              | <b>625,344</b>        | <b>587,924</b>                     | <b>117,333</b> | <b>508,011</b> | <b>(37,420)</b>                | <b>526,618</b>       | <b>117,333</b>        | <b>409,285</b> | <b>(61,306)</b>                  |  |

**587,924 SF**

**(61,306 SF)**

**Code 2 Program Savings +/- (20,000 SF)**

**+/- (80,000 SF)**

**Muller PK-8 +/- 69,000 SF**



# DESIGN APPROACH – DAY 4 OUTCOME

## CODE 2 DESIGN CHARRETTE

**CRITICAL STEP THIS WEEK**

|                     | CODE 0<br>PROGRAMMING CHARRETTE |                |                   | CODE 3<br>PLANNING CHARRETTE |                   |                  | CODE 2<br>DESIGN CHARRETTE |                         |                         |                    |
|---------------------|---------------------------------|----------------|-------------------|------------------------------|-------------------|------------------|----------------------------|-------------------------|-------------------------|--------------------|
|                     | SITE CONFIRMED                  | SITE CONFIRMED | PROGRAM CONFIRMED | CONCEPT PLAN CONFIRMED       | MASSING CONFIRMED | BUDGET CONFIRMED | PROGRAM / SCOPE FINIALIZED | HORIZONTAL CONTROL SITE | HORIZONTAL CONTROL PLAN | AESTHETIC APPROACH |
| LOCKHART PK-8       | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ✓                          | ✓                       | ✓                       | ✓                  |
| OLIVER PK-8         | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ✓                          | ✓                       | ✓                       | ✓                  |
| ADMIN / CONF CENTER | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ✓                          | ✓                       | ✓                       | ✓                  |
| BOWSKY PK-8         | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ⊗                          | ⊗                       | ✓                       | ✓                  |
| KEAN HS             | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ⊗                          | ⊗                       | ⊗                       | ✓                  |
| TUITT PK-1          | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ✓                          | ✓                       | ✓                       | ✓                  |
| MULLER PK-8         | ✓                               | ✓              | ✓                 | ✓                            | ✓                 | ✓                | ✓                          | ✓                       | ✓                       | ✓                  |





# THANK YOU!



RFQ 001-2024-STX/STT/STJ | *St. Thomas Schools Bundle 2*  
Rebuild USVI Construction Services | Code 2 – Design Charrette



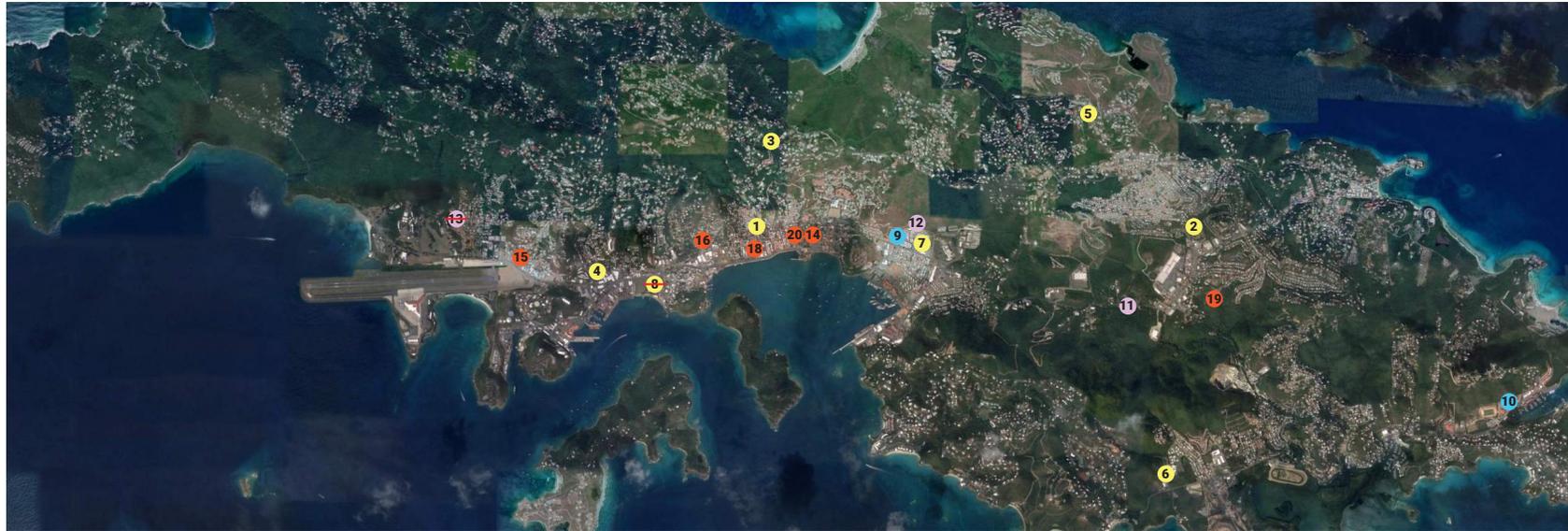
ZYSCOVICH



ZYSCOVICH

# All Facilities Map

## USVI Public Schools: St. Thomas



| Elementary / Middle Schools  |                       |                        | 3,278              | 3,870               |
|--|-----------------------|------------------------|--------------------|---------------------|
| School   | Current Configuration | Proposed Configuration | Current Enrollment | Functional Capacity |
| 1. Jane E. Tuitt Elementary School   | K-5                   | PreK-3                 | 226                | 132                 |
| 2. Joseph Gomez Elementary School  | K-5                   | Site of Opportunity    | 528                | N/A                 |
| 3. Joseph Sibilly Elementary School  | K-6                   | PreK-3                 | 237                | 132*                |
| 4. Ulla F. Muller Elementary School**  | K-6                   | PreK-8                 | 464                | 1,070               |
| 5. Yvonne E. Milliner-Bowsky Elementary School   | K-5                   | PreK-8                 | 390                | 895                 |
| 6. Bertha C. Boschulte Middle School   | 6-8                   | PreK-8                 | 566                | 895                 |
| 7. Lockhart Elementary School<br><small>Students currently in modulars on site</small>           | 6-8                   | PreK-8                 | 359                | 895                 |
| 8. Addelita Cancryn Junior High School<br><small>Students currently in Lockhart building</small> | 4-8                   | Merged                 | 756                | N/A                 |

**Key**  
 \*\* - New Build      \* - May be increased in the future with an addition      - Currently Closed

| High Schools                       |                       |                        | 1,705              | 1,950              |
|------------------------------------|-----------------------|------------------------|--------------------|--------------------|
| School                             | Current Configuration | Proposed Configuration | Current Enrollment | Projected Capacity |
| 9. Charotee Amalie High School**   | 9-12                  | 9-12                   | 1,019              | 1,350              |
| 10. Ivanna Eudora Kean High School | 9-12                  | 9-12                   | 686                | 768                |

| Adult Ed                                  |                       |                        |                    |                    |
|---|-----------------------|------------------------|--------------------|--------------------|
| School                                    | Current Configuration | Proposed Configuration | Current Enrollment | Projected Capacity |
| 11. Edith L. Williams Alternative Academy | Varies                | Varies                 | Varies             | Varies             |
| 12. Wheatley Skills Center                | CTE                   | Discovery Center       | Varies             | Varies             |
| 13. Gladys A. Abraham Elementary School   | Closed                | CTE                    | N/A                | Varies             |

| Support Buildings                        |   |  |
|--|---|--|
| 14. VIDE Headquarters                    | - services moving to Gomez  | - existing location for special training |
| 15. School Lunch/Procurement Warehouse   | - services moving to Cancryn  | - existing location to be closed         |
| 16. Marcelli Annex                       | - existing services to remain (non-profit organization/after school programs) |  |
| 17. Curriculum Center                    | - services moving to Gomez  | - existing location to be demolished     |
| 18. Leonard Dober Elementary School      | - current school is closed  | - to be used as cultural center          |
| 19. E. Benjamin Oliver Elementary School | - current school is closed  | - identified as a site of opportunity    |
| 20. Jarvis Annex                         | - identified as site of opportunity   | - services moving to Dober               |





# PreK-8

## **PREK-8 ADVANCEMENT OPPORTUNITIES** **294**

Program Summary **296**

Adjacency Strategies/Learning Suites **304**

**Recommendations** **308**

New Builds  
Modernizations/Expansions

# PreK-8 Advancement Opportunities

## PreK-8 Program Summary

The following program of spaces for the proposed new PreK-8 facilities was populated based on feedback gathered during programming workshops and from a cross reference of programs from various standards, including: North Carolina Public Schools Facilities Guidelines, Austin Public Schools Educational Specifications, and the Portland Public Schools Educational Specifications. It also draws from virtual tours and precedents such as Jefferson Terrace Academy and Capps Middle School.

Projects that are focused on modernizations/expansions are derivative of these programs to ensure equity between the new and existing schools.

The program of spaces is divided into eight main categories of square footage that are then combined to generate a total proposed square footage for a PreK-8 facility. There is also an addition of 20% net to gross area, based on industry standards as applied to the Virgin Islands.

These categories include: 1) administration, 2) core academics, 3) elective spaces, 4) media center, 5) SPED services, 6) food services, 7) physical education, and 8) building support. A ninth site category can also be found at the bottom of the program of spaces, but it does not account for any square footage and serves solely as a check-list of site elements that would potentially need to be considered on a PreK-8 campus.

Each campus is further broken down by age, through communities of elementary and middle school students. In order to provide appropriate collaboration space among age appropriate cohorts, there will be separate K-5 learning suites and 6-8 learning suites.

The optimum capacity for the PreK-8 has been calculated based on the learning suite layouts along with the maximum number of students per class within each grade level. The calculations are laid out in the following chart.

|               | 1 Section | 2 Sections | 3 Sections | 4 Sections | 5 Sections |
|---------------|-----------|------------|------------|------------|------------|
| Pre-K         | 17        | 17         | 17         | 17         | 17         |
| <b>TOTALS</b> | <b>17</b> | <b>34</b>  | <b>51</b>  | <b>68</b>  | <b>85</b>  |

|               |            |            |            |            |            |
|---------------|------------|------------|------------|------------|------------|
| K             | 25         | 25         | 25         | 25         | 25         |
| First         | 30         | 30         | 30         | 30         | 30         |
| Second        | 30         | 30         | 30         | 30         | 30         |
| Third         | 30         | 30         | 30         | 30         | 30         |
| Fourth        | 30         | 30         | 30         | 30         | 30         |
| Fifth         | 30         | 30         | 30         | 30         | 30         |
| <b>TOTALS</b> | <b>175</b> | <b>384</b> | <b>525</b> | <b>700</b> | <b>875</b> |

|               |           |            |            |            |            |
|---------------|-----------|------------|------------|------------|------------|
| Sixth         | 30        | 30         | 30         | 30         | 30         |
| Seventh       | 27        | 27         | 27         | 27         | 27         |
| Eighth        | 27        | 27         | 27         | 27         | 27         |
| <b>TOTALS</b> | <b>84</b> | <b>168</b> | <b>252</b> | <b>336</b> | <b>420</b> |

|              |             |  |  |  |  |
|--------------|-------------|--|--|--|--|
| <b>TOTAL</b> | <b>1070</b> |  |  |  |  |
|--------------|-------------|--|--|--|--|

*Capacity calculations*

**U.S. Virgin Islands PK-8 Planning Program**

**Revised 6/22/2020**

**1,070 Target Capacity**

**Program Area**

**Functional Capacity**

|     |                    |  |        |
|-----|--------------------|--|--------|
| 1.0 | Administration     |  | 6,630  |
| 2.0 | Core Academic      |  | 65,200 |
| 3.0 | Elective Spaces    |  | 6,400  |
| 4.0 | Media Center       |  | 4,850  |
| 5.0 | SPED Services      |  | 2,350  |
| 6.0 | Food Service       |  | 12,400 |
| 7.0 | Physical Education |  | 10,870 |
| 8.0 | Building Support   |  | 650    |

1,070

**Total Useable Area (Net Square Feet- NSF):** **109,350**

**1,070**

**General Building Area: Walls, Partitions, Mech. Elec., Circulation:** *25% of Net SF* **27,338**

*(20% of Gross)*

*\*Based on Industry standards that include outdoor circulation*

**Total Building Area (Gross Square Feet- GSF):** **136,688**

*\*Additional Covered Outdoor Learning Spaces* *5% of Net SF* *5,468*

**TOTAL BUILDING AREA WITH OUTDOOR LEARNING** **142,155**

*\*All new buids should be refined and reduced by 10% in order to meet budgetary requirements*

# PreK-8 Advancement Opportunities

| Description of Program, Department or Unit | Planning Program |                 |                              | Functional Capacity   |                                    |  | NOTES                                 |
|--|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--|---------------------------------------|
|  | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |                                       |
| <b>1.0 Administration</b>                  |                  |                 |                              |                       |                                    |  |                                       |
| <b>1.1 Administration Offices</b>          |                  |                 |                              |                       |                                    |  |                                       |
| Main School Lobby (w/ restrooms)           | 1                | 600             | 600                          |                       |                                    |  | This includes safe & secure vestibule |
| Reception                                  | 1                | 300             | 300                          |                       |                                    |  |                                       |
| Secretary/Bookkeeper Office                | 1                | 150             | 150                          |                       |                                    |  |                                       |
| Principal Office (w/ restroom)             | 1                | 250             | 250                          |                       |                                    |  |                                       |
| Assistant Principal Office                 | 2                | 150             | 300                          |                       |                                    |  |                                       |
| Conference Room                            | 1                | 200             | 200                          |                       |                                    |  |                                       |
| Staff Work/Mail                            | 1                | 400             | 400                          |                       |                                    |  |                                       |
| Faculty Lounge                             | 1                | 400             | 400                          |                       |                                    |  |                                       |
| SRO Office                                 | 1                | 150             | 150                          |                       |                                    |  |                                       |
| Monitors' Office                           | 1                | 150             | 150                          |                       |                                    |  |                                       |
| Supply Room                                | 1                | 75              | 75                           |                       |                                    |  |                                       |
| Toilet                                     | 2                | 50              | 100                          |                       |                                    |  |                                       |
| Mother's Room                              | 2                | 100             | 200                          |                       |                                    |  |                                       |
| Office Supply Storage                      | 1                | 75              | 75                           |                       |                                    |  |                                       |
| Parent Center                              | 1                | 400             | 400                          |                       |                                    |  |                                       |
| Subtotal                                   |                  |                 | 3,750                        |                       |                                    |  |                                       |
| <b>1.2 Student Services</b>                |                  |                 |                              |                       |                                    |  |                                       |
| Reception/Guidance Clerk                   | 1                | 150             | 150                          |                       |                                    |  |                                       |
| Counselor's Office                         | 2                | 120             | 240                          |                       |                                    |  |                                       |
| Registrar's Office                         | 1                | 120             | 120                          |                       |                                    |  |                                       |
| Time-Out/Tardy Room                        | 2                | 400             | 800                          |                       |                                    |  |                                       |
| Speech Therapy                             | 1                | 250             | 250                          |                       |                                    |  |                                       |
| Record's Room                              | 1                | 200             | 200                          |                       |                                    |  |                                       |
| Conference Room                            | 1                | 200             | 200                          |                       |                                    |  |                                       |
| Storage/Work Area                          | 1                | 120             | 120                          |                       |                                    |  |                                       |
| Subtotal                                   |                  |                 | 2,080                        |                       |                                    |  |                                       |
| <b>1.3 Health Clinic</b>                   |                  |                 |                              |                       |                                    |  |                                       |
| Exam/Cot                                   | 1                | 350             | 350                          |                       |                                    |  |                                       |
| Office                                     | 1                | 150             | 150                          |                       |                                    |  |                                       |
| Infirmary                                  | 1                | 200             | 200                          |                       |                                    |  |                                       |
| Toilet                                     | 1                | 100             | 100                          |                       |                                    |  | Include shower - ADA                  |
| Subtotal                                   |                  |                 | 800                          |                       |                                    |  |                                       |

| Description of Program, Department or Unit | Planning Program |                 |                              | Functional Capacity   |                                    |  | NOTES |
|--|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--|-------|
|  | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |       |

**2.0 Core Academic**

**2.1 Pre-K Core Academic**

|                                    |   |       |       |   |    |    |  |
|------------------------------------|---|-------|-------|---|----|----|--|
| Pre-K Learning Suite-- Studio w/RR | 2 | 1,200 | 2,400 | 2 | 17 | 34 |  |
| Outdoor Learning Space             |   |       |       |   |    |    |  |
| Subtotal                           |   |       | 2,400 |   |    | 34 |  |

**2.2 Elementary Core Academic**

|  |   |       |       |   |    |     |  |
|--|---|-------|-------|---|----|-----|--|
| <b>Learning Suite 1-- Studio w/RR (Kinder)</b> | 1 | 1,200 | 1,200 | 1 | 25 | 25  |  |
| <b>Learning Suite 1-- Studio (1st-5th)</b>     | 5 | 850   | 4,250 | 5 | 30 | 150 |  |
| Flex Studio                                    | 1 | 800   | 800   |   |    |     |  |
| Resource Studio                                |   |       |       |   |    |     |  |
| Open Collaboration Space                       | 1 | 1,000 | 1,000 |   |    |     |  |
| Maker Space                                    | 1 | 400   | 400   |   |    |     |  |
| Small Group Instruction                        | 2 | 200   | 400   |   |    |     |  |
| Teacher Planning                               | 1 | 600   | 600   |   |    |     |  |
| Learning Suite Storage                         | 1 | 400   | 400   |   |    |     |  |
| Student Restrooms                              | 2 | 300   | 600   |   |    |     |  |
| Staff Restroom                                 | 1 | 100   | 100   |   |    |     |  |
| Custodial                                      | 1 | 100   | 100   |   |    |     |  |
| <b>Shared Outdoor Learning Space #1</b>        |   |       |       |   |    |     |  |
| <b>Learning Suite 2-- Studio w/RR (Kinder)</b> | 1 | 1,200 | 1,200 | 1 | 25 | 25  |  |
| <b>Learning Suite 2-- Studio (1st-5th)</b>     | 5 | 850   | 4,250 | 5 | 30 | 150 |  |
| Flex Studio                                    | 1 | 800   | 800   |   |    |     |  |
| Resource Studio                                |   |       |       |   |    |     |  |
| Open Collaboration Space                       | 1 | 1,000 | 1,000 |   |    |     |  |
| Maker Space                                    | 1 | 400   | 400   |   |    |     |  |
| Small Group Instruction                        | 2 | 200   | 400   |   |    |     |  |
| Teacher Planning                               | 1 | 600   | 600   |   |    |     |  |
| Learning Suite Storage                         | 1 | 400   | 400   |   |    |     |  |
| Student Restrooms                              | 2 | 300   | 600   |   |    |     |  |
| Staff Restroom                                 | 1 | 100   | 100   |   |    |     |  |
| Custodial                                      | 1 | 100   | 100   |   |    |     |  |
| <b>Shared Outdoor Learning Space #2</b>        |   |       |       |   |    |     |  |
| <b>Learning Suite 3-- Studio w/RR (Kinder)</b> | 1 | 1,200 | 1,200 | 1 | 25 | 25  |  |
| <b>Learning Suite 3-- Studio (1st-5th)</b>     | 5 | 850   | 4,250 | 5 | 30 | 150 |  |
| Flex Studio                                    | 1 | 800   | 800   |   |    |     |  |
| Resource Studio                                |   |       |       |   |    |     |  |
| Open Collaboration Space                       | 1 | 1,000 | 1,000 |   |    |     |  |
| Maker Space                                    | 1 | 400   | 400   |   |    |     |  |
| Small Group Instruction                        | 2 | 200   | 400   |   |    |     |  |
| Teacher Planning                               | 1 | 600   | 600   |   |    |     |  |
| Learning Suite Storage                         | 1 | 400   | 400   |   |    |     |  |
| Student Restrooms                              | 2 | 300   | 600   |   |    |     |  |
| Staff Restroom                                 | 1 | 100   | 100   |   |    |     |  |
| Custodial                                      | 1 | 100   | 100   |   |    |     |  |

Includes two 50 sf Phone Rooms

Includes two 50 sf Phone Rooms

Waiting for district direction

Includes two 50 sf Phone Rooms

# PreK-8 Advancement Opportunities

| Description<br>of<br>Program, Department or Unit | Planning Program |                 |                              | Functional Capacity   |                                    |  | NOTES                          |
|--|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--|--------------------------------|
|  | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |                                |
| Learning Suite 4-- Studio w/RR (Kinder)          | 1                | 1,200           | 1,200                        | 1                     | 25                                 | 25                                     |                                |
| Learning Suite 4-- Studio (1st-5th)              | 5                | 850             | 4,250                        | 5                     | 30                                 | 150                                    |                                |
| Flex Studio                                      | 1                | 800             | 800                          |                       |                                    |  |                                |
| Resource Studio                                  |                  |                 |                              |                       |                                    |  |                                |
| Open Collaboration Space                         | 1                | 1,000           | 1,000                        |                       |                                    |  |                                |
| Maker Space                                      | 1                | 400             | 400                          |                       |                                    |  |                                |
| Small Group Instruction                          | 2                | 200             | 400                          |                       |                                    |  |                                |
| Teacher Planning                                 | 1                | 600             | 600                          |                       |                                    |  |                                |
| Learning Suite Storage                           | 1                | 400             | 400                          |                       |                                    |  |                                |
| Student Restrooms                                | 2                | 300             | 600                          |                       |                                    |  |                                |
| Staff Restroom                                   | 1                | 100             | 100                          |                       |                                    |  |                                |
| Custodial  | 1                | 100             | 100                          |                       |                                    |  |                                |
| Subtotal   |                  |                 | 39,400                       |                       |                                    | 700                                    | Includes two 50 sf Phone Rooms |
| <b>2.3 Middle School Core Academic</b>           |                  |                 |                              |                       |                                    |  |                                |
| 6th Grade Learning Suite-- Studio                | 3                | 850             | 2,550                        | 3                     | 30                                 | 90                                     |                                |
| 6th Grade Learning Suite-- Science Lab           | 1                | 1,000           | 1,000                        | 1                     | 30                                 | 30                                     |                                |
| Flex Studio                                      | 1                | 800             | 800                          |                       |                                    |  |                                |
| Resource Studio                                  |                  |                 |                              |                       |                                    |  |                                |
| Open Collaborative Space                         | 1                | 1,000           | 1,000                        |                       |                                    |  |                                |
| Maker Space                                      | 1                | 400             | 400                          |                       |                                    |  |                                |
| Small Group Instruction                          | 2                | 200             | 400                          |                       |                                    |  |                                |
| Teacher Planning                                 | 1                | 450             | 450                          |                       |                                    |  |                                |
| Learning Suite Storage                           | 1                | 400             | 400                          |                       |                                    |  |                                |
| Student Restrooms                                | 2                | 300             | 600                          |                       |                                    |  |                                |
| Staff Restroom                                   | 1                | 100             | 100                          |                       |                                    |  |                                |
| Custodial  | 1                | 100             | 100                          |                       |                                    |  |                                |
| 7th Grade Learning Suite-- Studio                | 3                | 850             | 2,550                        | 3                     | 27                                 | 81                                     |                                |
| 7th Grade Learning Suite-- Science Lab           | 1                | 1,000           | 1,000                        | 1                     | 27                                 | 27                                     |                                |
| Flex Studio                                      | 1                | 800             | 800                          |                       |                                    |  |                                |
| Resource Studio                                  |                  |                 |                              |                       |                                    |  |                                |
| Open Collaborative Space                         | 1                | 1,000           | 1,000                        |                       |                                    |  |                                |
| Maker Space                                      | 1                | 400             | 400                          |                       |                                    |  |                                |
| Small Group Instruction                          | 2                | 200             | 400                          |                       |                                    |  |                                |
| Teacher Planning                                 | 1                | 450             | 450                          |                       |                                    |  |                                |
| Learning Suite Storage                           | 1                | 400             | 400                          |                       |                                    |  |                                |
| Student Restrooms                                | 2                | 300             | 600                          |                       |                                    |  |                                |
| Staff Restroom                                   | 1                | 100             | 100                          |                       |                                    |  |                                |
| Custodial  | 1                | 100             | 100                          |                       |                                    |  |                                |
| 8th Grade Learning Suite-- Studio                | 3                | 850             | 2,550                        | 3                     | 27                                 | 81                                     |                                |
| 8th Grade Learning Suite-- Science Lab           | 1                | 1,000           | 1,000                        | 1                     | 27                                 | 27                                     |                                |
| Flex Studio                                      | 1                | 800             | 800                          |                       |                                    |  |                                |
| Resource Studio                                  |                  |                 |                              |                       |                                    |  |                                |
| Open Collaborative Space                         | 1                | 1,000           | 1,000                        |                       |                                    |  |                                |
| Maker Space                                      | 1                | 400             | 400                          |                       |                                    |  |                                |
| Small Group Instruction                          | 2                | 200             | 400                          |                       |                                    |  |                                |
| Teacher Planning                                 | 1                | 450             | 450                          |                       |                                    |  |                                |
| Learning Suite Storage                           | 1                | 400             | 400                          |                       |                                    |  |                                |
| Student Restrooms                                | 2                | 300             | 600                          |                       |                                    |  |                                |
| Staff Restroom                                   | 1                | 100             | 100                          |                       |                                    |  |                                |
| Custodial  | 1                | 100             | 100                          |                       |                                    |  |                                |
| Shared Outdoor Space for 6-8                     |                  |                 |                              |                       |                                    |  |                                |
| Subtotal   |                  |                 | 23,400                       |                       |                                    | 336                                    | Includes two 50 sf Phone Rooms |

| Description of Program, Department or Unit | Planning Program |                 |                              | Functional Capacity   |                                    |  | NOTES   |
|--|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--|---|
|  | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |   |
| <b>3.0 Elective Spaces</b>                 |                  |                 |                              |                       |                                    |  |   |
| <b>3.1 Fine Arts</b>                       |                  |                 |                              |                       |                                    |  |   |
|  |                  |                 |                              |                       |                                    |  | Combined Fine Arts Suite that is central to all Learning Suites   |
| Fine Arts Labs                             | 2                | 1,400           | 2,800                        |                       |                                    |  |   |
| Instrument Storage                         | 1                | 400             | 400                          |                       |                                    |  |   |
| Art Supply Storage                         | 1                | 200             | 200                          |                       |                                    |  |   |
| Outdoor Learning Space                     |                  |                 |                              |                       |                                    |  |   |
| Subtotal                                   |                  |                 | 3,400                        |                       |                                    |  |   |
| <b>3.2 Other Elective Spaces</b>           |                  |                 |                              |                       |                                    |  |   |
|  |                  |                 |                              |                       |                                    |  |   |
| Other Elective Spaces                      | 2                | 1,400           | 2,800                        |                       |                                    |  |   |
| Storage                                    | 1                | 200             | 200                          |                       |                                    |  |   |
| Subtotal                                   |                  |                 | 3,000                        |                       |                                    |  |   |
| <b>4.0 Media Center</b>                    |                  |                 |                              |                       |                                    |  |   |
| <b>4.1 Media Center</b>                    |                  |                 |                              |                       |                                    |  |   |
|  |                  |                 |                              |                       |                                    |  | Combined, but with ability to have different areas for PK-5 & 6-8 |
| Media Center                               | 1                | 4,300           | 4,300                        |                       |                                    |  |   |
| Book/General Storage                       | 1                | 200             | 200                          |                       |                                    |  |   |
| Office (w/ restroom)                       | 1                | 150             | 150                          |                       |                                    |  |   |
| Workroom (w/ sink)                         | 1                | 200             | 200                          |                       |                                    |  |   |
| Subtotal                                   |                  |                 | 4,850                        |                       |                                    |  |   |
| <b>5.0 Special Education Services</b>      |                  |                 |                              |                       |                                    |  |   |
| <b>5.1 Special Education Services</b>      |                  |                 |                              |                       |                                    |  |   |
|  |                  |                 |                              |                       |                                    |  |   |
| Self-Contained Studio                      | 2                | 1,000           | 2,000                        | 2                     | 15                                 | 30                                     |   |
| Shared Restroom                            | 1                | 150             | 150                          |                       |                                    |  | With Shower   |
| Shared Kitchenette/Laundry Room            | 1                | 200             | 200                          |                       |                                    |  |   |
| Subtotal                                   |                  |                 | 2,350                        |                       |                                    | 30                                     | *NOT COUNTED IN CURRENT CAPACITY                                  |

# PreK-8 Advancement Opportunities

| Description of Program, Department or Unit | Planning Program |                 |                              | Functional Capacity   |                                    |  | NOTES  |
|--|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--|--|
|  | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |  |
| <b>6.0 Food Service</b>                    |                  |                 |                              |                       |                                    |  |  |
| <b>6.1 Food Service</b>                    |                  |                 |                              |                       |                                    |  |  |
| PK-5 Dining Area                           | 1                | 4,300           | 4,300                        |                       |                                    |  | WILL ALSO BE COMMUNITY/MULT-PURPOSE ROOM; 706 (66% of student body) / 2 lunch periods = 353 students @ once; <b>353 students x 12 sf each = 4,300 sf</b> |
| PK-5 Outdoor Covered Dining/Play Area      |                  |                 |                              |                       |                                    |  |  |
| Shared Stage                               | 1                | 1,000           | 1,000                        |                       |                                    |  | Opens to both dining areas; Adjacency or proximity to Music Rooms<br>Store Outdoor furniture   |
| Chair Storage (300 chairs)                 | 1                | 200             | 200                          |                       |                                    |  |  |
| Boys Restroom w/ Changing Room             | 1                | 400             | 400                          |                       |                                    |  |  |
| Girls Restroom w/ Changing Room            | 1                | 400             | 400                          |                       |                                    |  |  |
| 6-8 Dining Area                            | 1                | 2,200           | 2,200                        |                       |                                    |  | 364 (34% of student body) / 2 lunch periods = 182 students @ once; <b>182 students x 12 sf each = 2,200 sf</b>   |
| 6-8 Outdoor Covered Dining/Play Area       |                  |                 |                              |                       |                                    |  |  |
| Serving Area                               | 1                | 1,200           | 1,200                        |                       |                                    |  | <b>20% of 6,000 sf dining space = 1,200 sf; Could be 2 separate serving areas</b>  |
| Kitchen                                    | 1                | 1,000           | 1,000                        |                       |                                    |  |  |
| Office (w/ restroom)                       | 1                | 150             | 150                          |                       |                                    |  |  |
| Dishwashing Room                           | 1                | 225             | 225                          |                       |                                    |  |  |
| Dry Storage                                | 1                | 300             | 300                          |                       |                                    |  |  |
| Cooler/Freezer                             | 1                | 600             | 600                          |                       |                                    |  |  |
| Restroom/Lockers                           | 1                | 200             | 200                          |                       |                                    |  |  |
| Locker Room (w/ restroom)                  | 1                | 125             | 125                          |                       |                                    |  |  |
| Laundry/Chemical Storage                   | 1                | 100             | 100                          |                       |                                    |  |  |
| Subtotal                                   |                  |                 | 12,400                       |                       |                                    |  |  |
| <b>7.0 Physical Education</b>              |                  |                 |                              |                       |                                    |  |  |
| <b>7.1 Physical Education</b>              |                  |                 |                              |                       |                                    |  |  |
| Gymnasium (seats 600)                      | 1                | 7,500           | 7,500                        |                       |                                    |  |  |
| Physical Education/Health Classroom        | 1                | 900             | 900                          |                       |                                    |  |  |
| Locker Room/Restroom                       | 2                | 800             | 1,600                        |                       |                                    |  |  |
| PE/Coach Office                            | 1                | 120             | 120                          |                       |                                    |  |  |
| PE Storage                                 | 1                | 250             | 250                          |                       |                                    |  |  |
| Indoor Exercise Room (Weight)              | 1                | 500             | 500                          |                       |                                    |  |  |
| Subtotal                                   |                  |                 | 10,870                       |                       |                                    |  |  |

| Description of Program, Department or Unit | Planning Program |                 |                              | Functional Capacity   |                                    |  | NOTES |
|--|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--|-------|
|  | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Learning Community Functional Capacity |       |
| <b>8.0 Building Support</b>                |                  |                 |                              |                       |                                    |  |       |
| <b>8.1 Maintenance &amp; Custodial</b>     |                  |                 |                              |                       |                                    |  |       |
| Receiving Storage/Locker Area              | 1                | 200             | 200                          |                       |                                    |  |       |
| Office/Planning Area                       | 1                | 100             | 100                          |                       |                                    |  |       |
| Custodial Equipment/Supply                 | 2                | 150             | 300                          |                       |                                    |  |       |
| Restroom                                   | 1                | 50              | 50                           |                       |                                    |  |       |
| Subtotal                                   |                  |                 | 650                          |                       |                                    |  |       |
| <b>9.0 Site</b>                            |                  |                 |                              |                       |                                    |  |       |
| <b>9.1 Site</b>                            |                  |                 |                              |                       |                                    |  |       |
| Shared PK & K Playground                   |                  |                 |                              |                       |                                    |  |       |
| 1-5 Playground                             |                  |                 |                              |                       |                                    |  |       |
| Multi-purpose field                        |                  |                 |                              |                       |                                    |  |       |
| Basketball Courts                          |                  |                 |                              |                       |                                    |  |       |
| Gardens                                    |                  |                 |                              |                       |                                    |  |       |
| Parking for XXX                            |                  |                 |                              |                       |                                    |  |       |

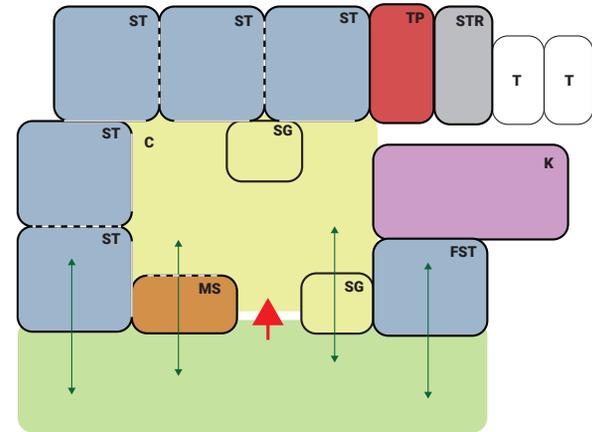
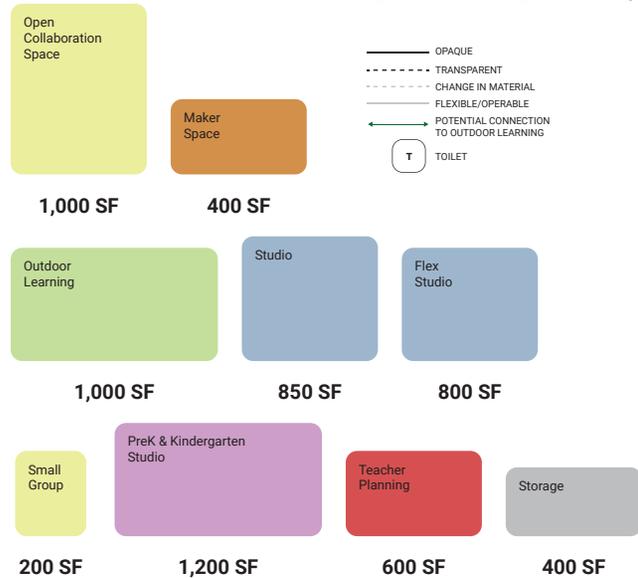
# PreK-8 Advancement Opportunities

## Adjacency Strategies/Learning Suites

Having a program of spaces is essential to identifying and further developing various space types, which ultimately serve as a kit of parts for a building.

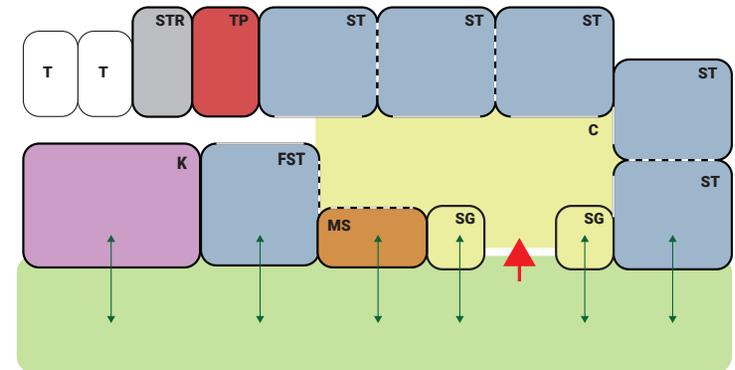
These space types can then be manipulated or arranged in various ways to generate different learning suite layout options that best fit the needs of future-facing learning practices in the USVI. Based on the key space types that were identified in the visioning process and informed by national benchmarks, learning suite solutions were created for various grade levels. The following layouts can be applied across modernizations/expansions and new builds.

### K-5 Learning Suite Program Key

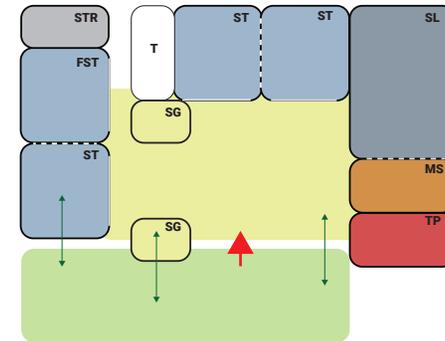


K-5 Learning suite Central program layout - total student capacity: 175

K-5 Learning suite Linear program layout - total student capacity: 175

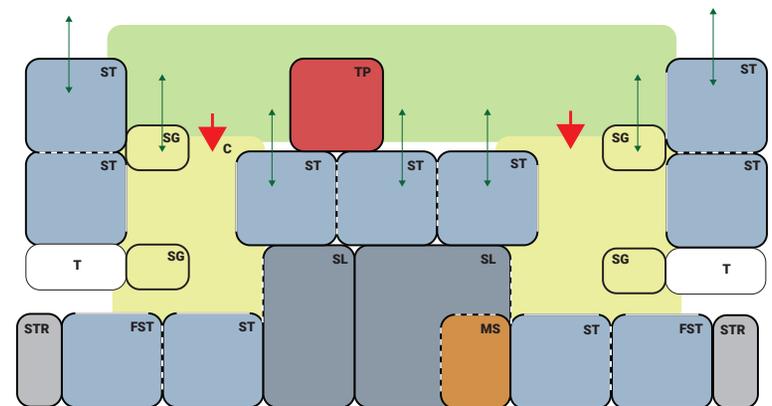


### 6-8 Learning Suite Program Key



6-8 Learning suite One grade level - total student capacity: 120

6-8 Middle school Grades 6-8 - total student capacity: 360



# PreK-8 Program Summary

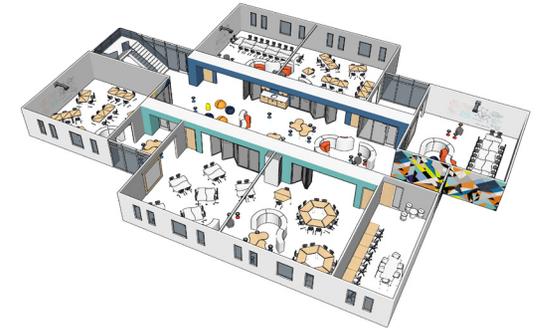
## Adjacency Strategies/Learning Suites Precedents

### Jefferson Terrace Academy

East Baton Rouge Parish School District I Baton Rouge, Louisiana

*Grade levels are paired together in learning communities to foster collaborative learning and vertical opportunities for students excelling past their grade level.*

The learning suite diagrams to the right illustrate three scenarios that were explored during design. The layout below illustrates the final iteration.



Option 03



Option 02



Option 01

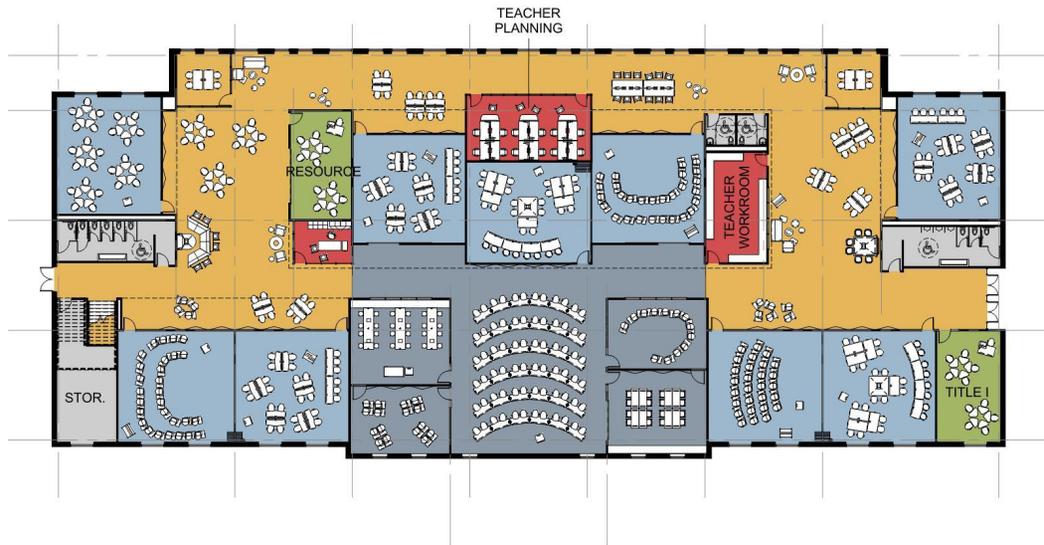


Final

**Capps Middle School**  
Putnam City Schools | Warr Acres, Oklahoma

The west portion of the building caters to the administrative, elective, and athletic programs for the facility, while the east serves as the learning communities for 6-8 grades. Connecting the two ends is a 200'+ media hub.

*Each learning center is planned around collaborative learning and teaching, with spaces to facilitate both student and teacher cross pollination.*



# PreK-8 Case Study

St. Thomas

## New Ulla F. Muller PreK-8

**\*POTENTIAL PRIMARY SHELTER**

**Existing Building Area** 39,682 SF

**New Building Area** ≈ 136,688 SF

**Enrollment** 464 Students

Actual student enrollment 2019/2020

**Functional Capacity** 1070 Students  **+606 Students**

### Design Statement

#### New Construction at Existing Site:

The new Ulla F. Muller PreK-8 requires demolition of the existing Ulla F. Muller Elementary School and construction of a new building on that site.

#### Program Deviations:

- No athletic fields provided on site

#### Critical Cost Considerations:

- Elevator(s) to meet ADA compliance
- New site circulation and drop-off
- New outdoor learning/play environments
- Assume 4000 SF of covered outdoor space
- Assume hip roofs at all buildings
- Demolition of existing buildings
- The entire site is in a floodplain and the building will need to be raised above ground level.
- Adding/updating perimeter fence

\*All construction shall be per the design guidelines included at the end of this section.



**Top** Existing Ulla F. Muller Elementary campus that will be demolished to make way for a new Ulla F. Muller PreK-8 building.

**Bottom** Existing Ulla F. Muller outdoor play area



Level 01

LEGEND

- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PRE-K
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM

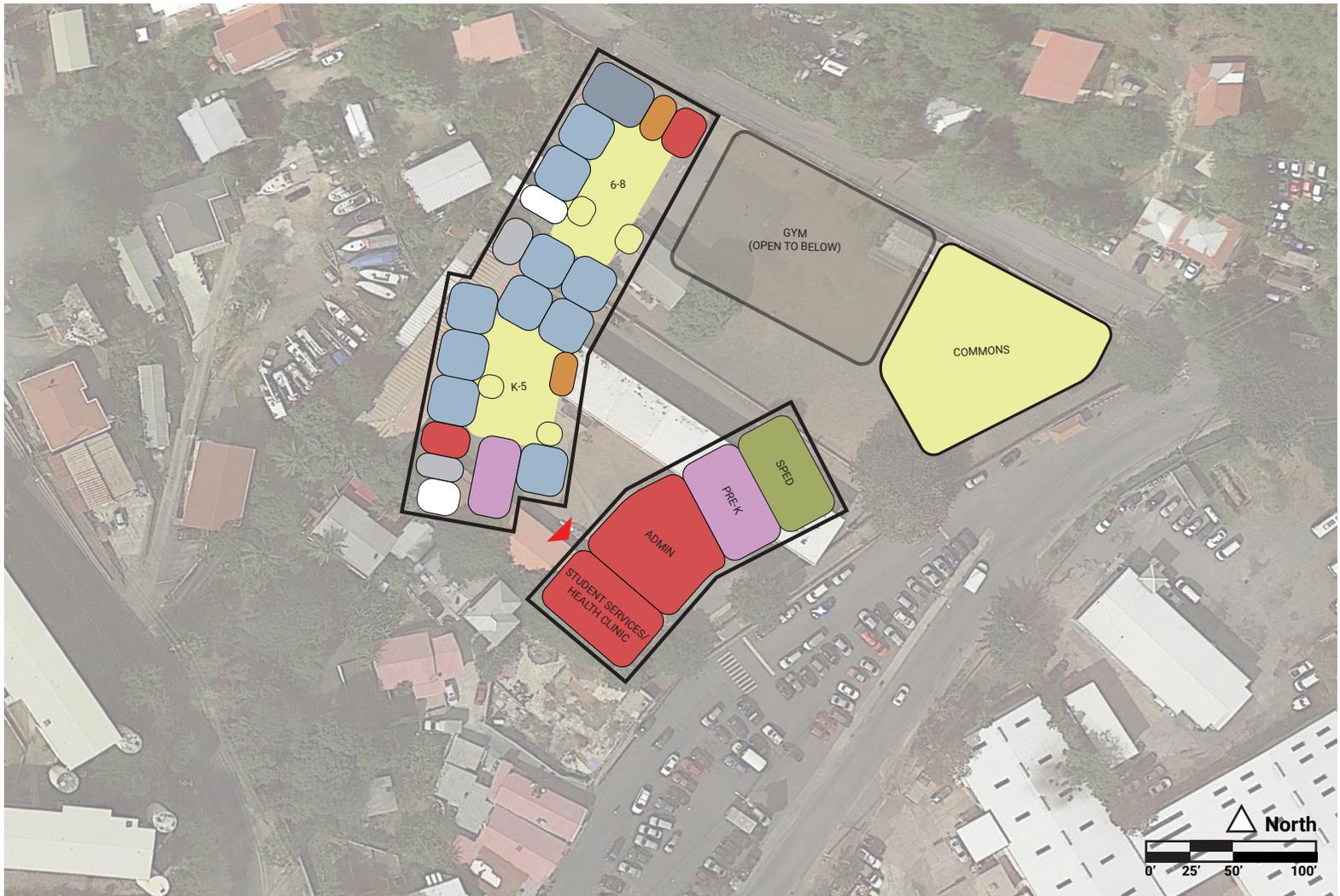


# PreK-8 Case Study

St. Thomas

Ulla F. Muller PreK-8

## Level 02



### LEGEND

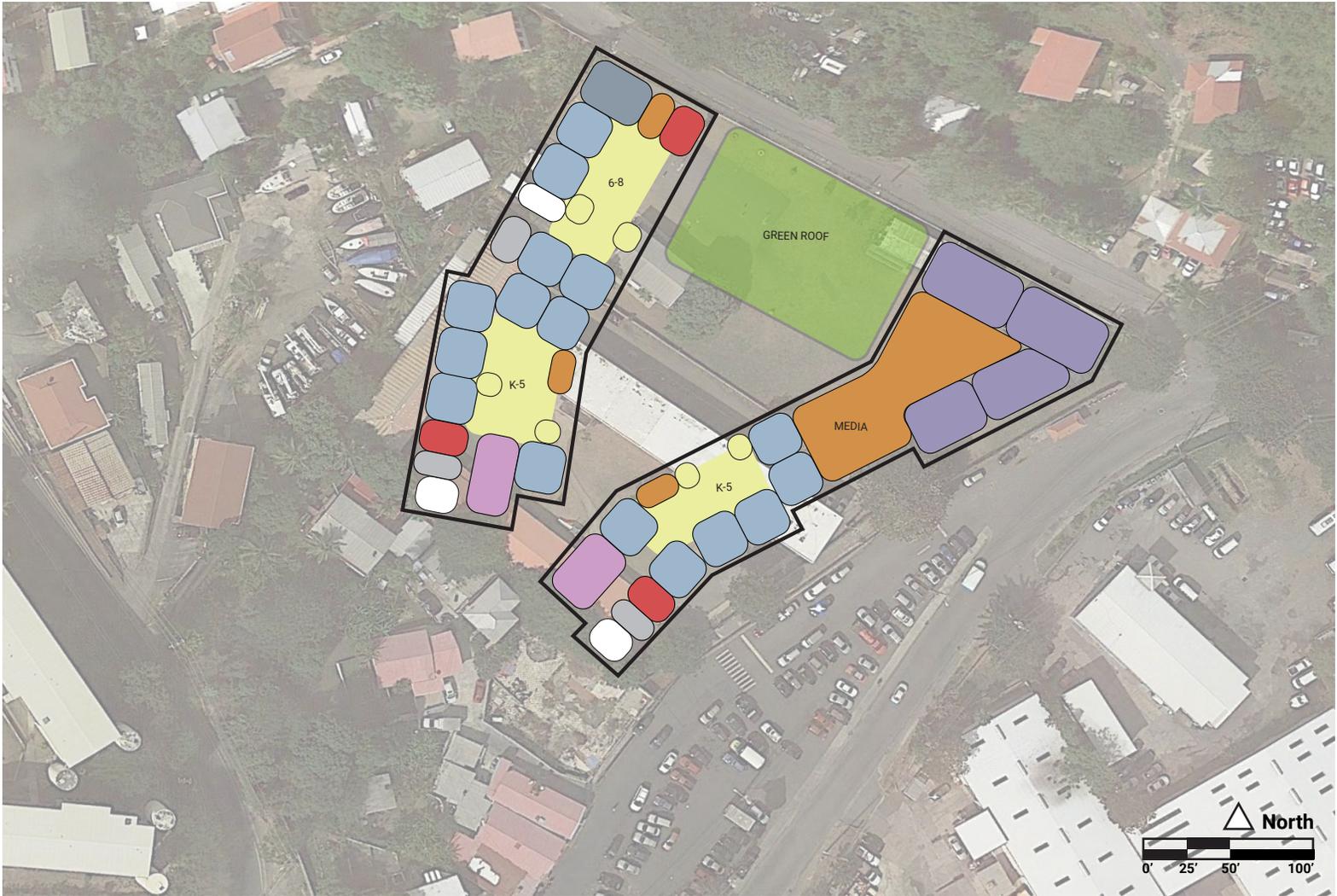
- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PRE-K
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM



Level 03

LEGEND

-  NEW
-  FUTURE PHASE
-  EXISTING
-  FLOODPLAIN
-  MAIN ENTRY
-  OUTDOOR
-  PARKING
-  ADMIN
-  COMMONS/COLAB
-  LEARNING STUDIO
-  KINDER/PRE-K
-  SCIENCE
-  MEDIA/MAKER
-  SPED
-  ELECTIVES
-  ATHLETICS
-  STORAGE
-  RESTROOM



# PreK-8 Case Study

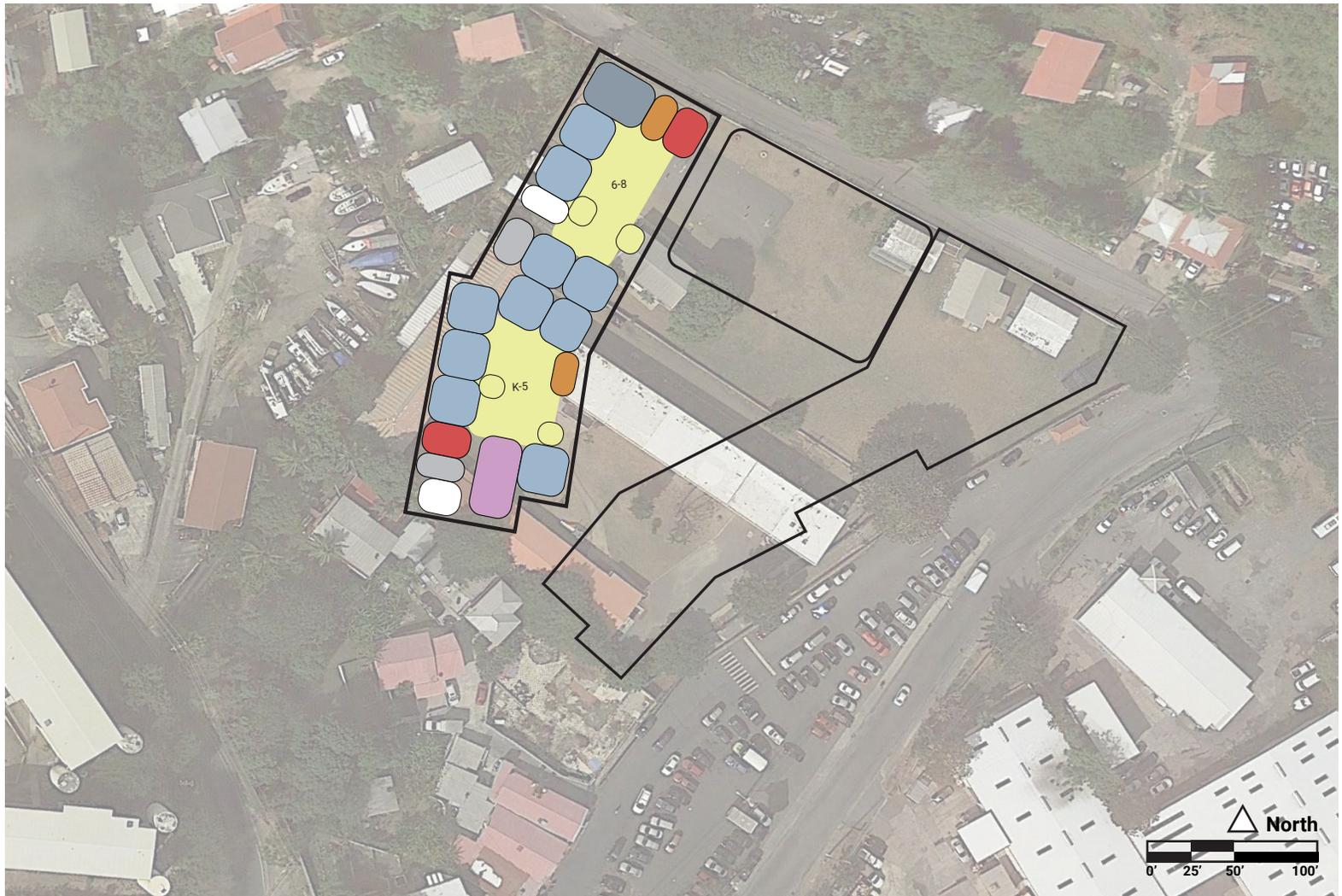
St. Thomas

Advancement Opportunities: Ulla F. Muller PreK-8

## Level 04

### LEGEND

-  NEW
-  FUTURE PHASE
-  EXISTING
-  FLOODPLAIN
-  MAIN ENTRY
-  OUTDOOR
-  PARKING
-  ADMIN
-  COMMONS/COLAB
-  LEARNING STUDIO
-  KINDER/PRE-K
-  SCIENCE
-  MEDIA/MAKER
-  SPED
-  ELECTIVES
-  ATHLETICS
-  STORAGE
-  RESTROOM



# PreK-3 Case Study

St. Thomas

## Jane E. Tuitt PreK-3

**Existing Building Area** 15,488 SF

**New Building Area** 15,488 SF

**Enrollment** 226 Students

Actual student enrollment 2019/2020

**Functional Capacity** 132 Students  **-94 Students**

### Design Statement

#### Modernization at Existing:

The modernization of Jane E. Tuitt requires converting a traditional K-5 elementary to a PreK-3. The overall campus planning remains the same, with modifications made to the buildings for new and different programs.

#### Program Deviations:

- Small group learning is covered outdoor space
- Electives, SPED, media, commons & administration SF are reduced per reduced population
- No gymnasium (existing condition)

#### Critical Cost Considerations:

- Elevator(s) to meet ADA compliance
- Replacement of jalousie windows
- Renovated outdoor learning/play environments
- Improved site circulation and parking
- HVAC upgrades
- Exterior facade renovations
- Communications/IT and security upgrades
- Adding/updating perimeter fence

\*All construction shall be per the design guidelines included at the end of this section.



**DISCLAIMER:** Proposed modernization is contingent on confirmation that the existing structure either meets or can be modified to meet current structural code requirements.

**Level 01**

**LEGEND**

- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PRE-K
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM



# PreK-3 Case Study

St. Thomas

Advancement Opportunities: Jane E. Tuitt PreK-3

## Level 02

### LEGEND

- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PRE-K
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM



# PreK-8 Case Study

St. Thomas

## Lockhart-Cancryn PreK-8

**\*IDENTIFIED AS PRIMARY SHELTER**

**Existing Building Area** 59,530 SF

**New Building Area** ≈ 114,000 SF

**Enrollment** 359 Students

Actual student enrollment 2019/2020

**Functional Capacity** 895 Students  **+536 Students**

### Design Statement

#### Modernization at Existing:

The modernization of Lockhart-Cancryn PreK-8 requires converting a traditional K-5 elementary to a PreK-8. The existing building will be restored to an elementary school with some modifications to accommodate new and different programs. A large new addition to the south is required to accommodate all of the middle school core learning and a new gym.

#### Program Deviations:

- Small Group Learning is Outside for All Elementary
- No Outdoor Fields Exist on This Campus

#### Critical Cost Considerations:

- Renovated outdoor learning/play environments
- Replacement of jalousie windows
- Improved site circulation and parking
- HVAC upgrades
- Assume 4000 SF of covered outdoor space
- Assume hip roofs at all locations of new construction
- Communications/IT and security upgrades
- Adding/updating perimeter fence

\*All construction shall be per the design guidelines included at the end of this section.



**DISCLAIMER:** Proposed modernization is contingent on confirmation that the existing structure either meets or can be modified to meet current structural code requirements.

**Level 01**

**LEGEND**

- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PRE-K
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM



# PreK-8 Case Study

St. Thomas

## Yvonne E. Milliner-Bowsky PreK-8

**Existing Building Area** 53,978 SF

**New Building Area** ≈ 116,700 SF

**Enrollment** 390 Students

Actual student enrollment 2019/2020

**Functional Capacity** 895 Students  **+505 Students**

### Design Statement

#### Modernization at Existing:

The modernization of Yvonne E. Milliner-Bowsky PreK-8 requires converting a traditional K-5 elementary to a PreK-8. One shuttered building will be renovated to accommodate the new central administration. The other shuttered building will be demolished to make way for new additions so accommodate the bulk of core learning.

#### Program Deviations:

- Small Group Learning is Outside at Existing Buildings
- Media Center is Sized Smaller Due to Existing Constraints
- No Outdoor Fields Exist on This Campus

#### Critical Cost Considerations:

- Elevator(s) to meet ADA compliance
- Replacement of jalousie windows
- Renovated outdoor learning/play environments
- Improved site circulation and parking
- HVAC upgrades
- Underground concrete box culvert under new building
- Assume hip roofs at all locations of new construction
- Demolition of shuttered buildings
- Communications/IT and security upgrades
- Adding/updating perimeter fence

\*All construction shall be per the design guidelines included at the end of this section.



**DISCLAIMER:** Proposed modernization is contingent on confirmation that the existing structure either meets or can be modified to meet current structural code requirements.

**Level 01**

**LEGEND**

- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PRE-K
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM



# PreK-8 Case Study

St. Thomas

Yvonne E. Milliner-Bowsky PreK-8

## Level 02

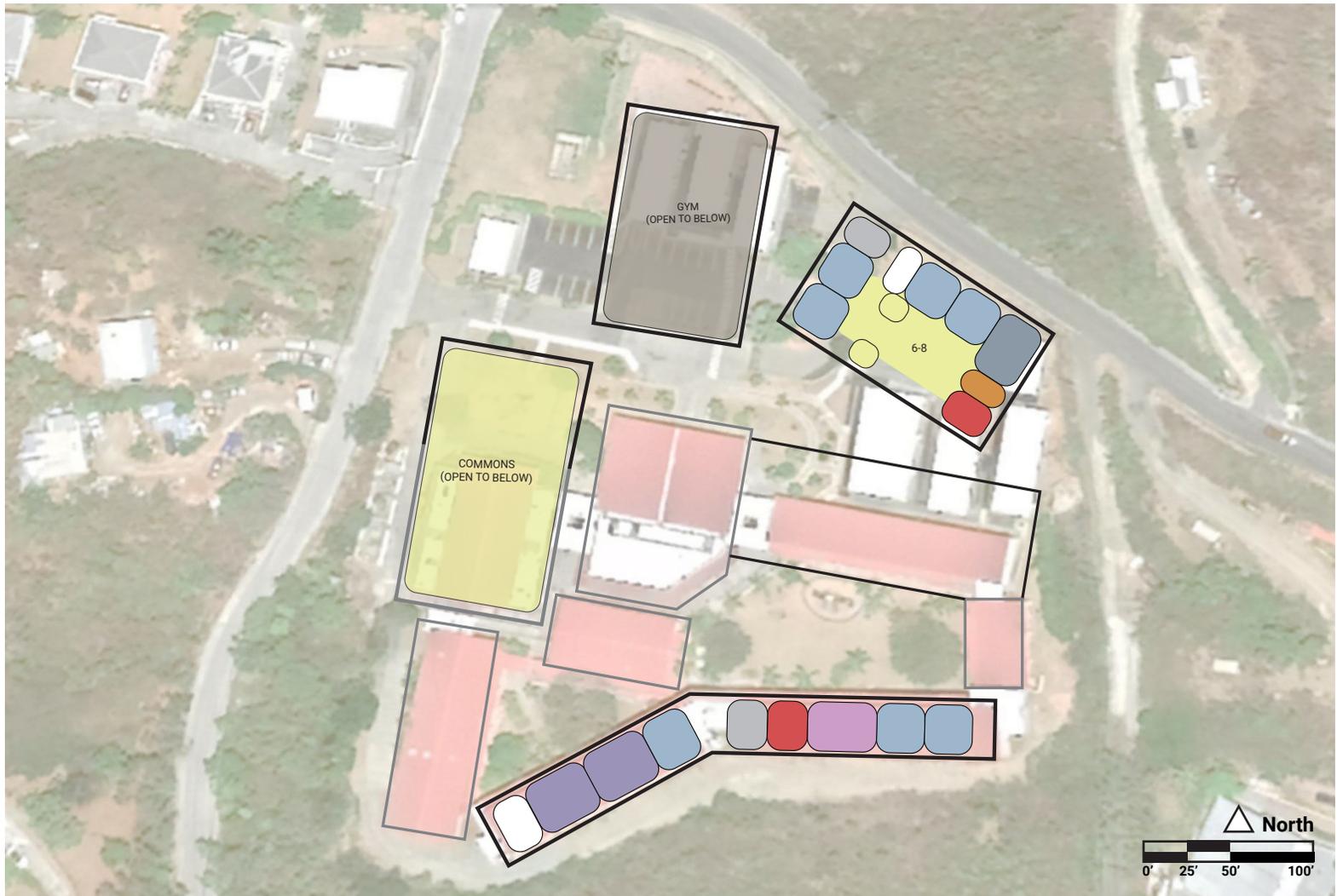


Design Guidelines: PreK-8 Case Study

Level 03

LEGEND

- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PRE-K
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM







# 9-12

## 9-12 ADVANCEMENT OPPORTUNITIES 350

Program Summary 352

Adjacency Strategies/Learning Suites 362

### Recommendations 366

New Builds  
Modernizations/Expansions

# 9-12 Advancement Opportunities

## 9-12 Program Summary

**The following Program of Spaces for the proposed new comprehensive 9-12 high school was populated based on feedback gathered during programming workshops and from a cross reference of programs from various standards, including: North Carolina Public Schools Facilities Guidelines, Austin Public Schools Educational Specifications, and the Portland Public Schools Educational Specifications. It also draws from virtual tours and precedents such as Canyon View High School.**

Projects that are focused on modernizations/expansions are derivative of these programs to ensure equity between the new and existing schools.

The program of spaces is divided into nine main categories of square footage that are then combined to generate a total proposed square footage for a high school facility. There is also an addition of 20% net to gross area based on industry standards as applicable to the Virgin Islands.

These categories include:

1) administration, 2) core academics, 3) elective spaces, 4) media center, 5) multi-purpose spaces; 6) SPED services, 7) food services, 8) physical education, and 9) building support.

A 10th site category can also be found at the bottom of the program of spaces, but it does not account for any square footage and serves solely as a check-list of site elements that would potentially need to be considered on a high school campus.

There are various line items in the program of spaces that are highlighted in light blue. These are all of the spaces that, while potentially dispersed throughout various areas of the building, would be directly tied to a CTE pathway.

The following program is indicative only of a comprehensive high school. St. Croix Central High School and Ivanna Eudora Kean High School have both been identified to house magnet programs which will be included adjacent to those school layouts.

# Charlotte Amalie High School - Comprehensive High School Program

**Virgin Islands High School Planning Program**

**Revised 3/27/2020**

**1,350 Target Capacity**

**Program Area**

|     |                    |        |
|-----|--------------------|--------|
| 1.0 | Administration     | 9,445  |
| 2.0 | Core Academic      | 51,400 |
| 3.0 | Elective Spaces    | 60,750 |
| 4.0 | Media Center       | 7,050  |
| 5.0 | Multi-Purpose Area | 9,400  |
| 6.0 | SPED Services      | 4,675  |
| 7.0 | Food Service       | 13,575 |
| 8.0 | Physical Education | 38,740 |
| 9.0 | Building Support   | 4,100  |

| Max Capacity | Functional Capacity | Utilization Factor |                           |
|--------------|---------------------|--------------------|---------------------------|
| 864          | 756                 | 87.5%              |                           |
| 453          | 340                 | 75%                | White Box @ 50%           |
| 189          | 135                 | 75%                | Digital Maker Space @ 50% |
| 24           | 24                  | 100%               |                           |
| 186          | 134                 | 75%                | Weight Room @ 50%         |

**Total Useable Area (Net Square Feet- NSF): 199,135**

|   |   |
|---|---|
| <b>1,716</b>                                | <b>1,388</b>                                |
| 1,500<br>Capacity with 3<br>Learning Suites | 1,199<br>Capacity with 3<br>Learning Suites |

**General Building Area: Walls, Partitions, Mech. Elec., Circulation: 25% of Net SF 49,784**

(20% of Gross SF)  
\*Based on Industry standards that include outdoor circulation

**Total Building Area (Gross Square Feet- GSF): 248,919**

*\*Additional Covered Outdoor Learning Spaces 5% of Net SF 9,957*

**TOTAL BUILDING AREA WITH OUTDOOR LEARNING 258,876**

\*All new buids should be refined and reduced by 10% in order to meet budgetary requirements

# 9-12 Advancement Opportunities

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES                                      |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|--|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |  |
| <b>1.0 Administration</b>                   |                  |                 |                              |                       |                                    |              |                     |  |
| <b>1.1 Administration Offices</b>           |                  |                 |                              |                       |                                    |              |                     |  |
| Main School Lobby                           | 1                | 642             | 642                          |                       |                                    |              |                     | This includes safe & secure vestibule      |
| Open Office Space                           | 1                | 778             | 778                          |                       |                                    |              |                     |  |
| Principal's Secretary Office                | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Principal Office                            | 1                | 250             | 250                          |                       |                                    |              |                     |  |
| Assistant Principal Office                  | 4                | 150             |                              |                       |                                    |              |                     |  |
| Principal's Conference Room                 | 1                | 300             | 300                          |                       |                                    |              |                     | Integrated in Learning Suites              |
| Conference Room                             | 1                | 450             | 450                          |                       |                                    |              |                     |  |
| Workroom                                    | 1                | 400             | 400                          |                       |                                    |              |                     |  |
| Break Room                                  | 1                | 400             | 400                          |                       |                                    |              |                     |  |
| SRO Office                                  | 1                | 125             | 125                          |                       |                                    |              |                     |  |
| Monitors' Office                            | 1                | 200             | 200                          |                       |                                    |              |                     | Multiple monitors will office out of space |
| ISS Room                                    | 1                | 600             | 600                          |                       |                                    |              |                     |  |
| ISS Restroom                                | 1                | 75              | 75                           |                       |                                    |              |                     |  |
| Toilet                                      | 2                | 75              | 150                          |                       |                                    |              |                     |  |
| Book Room                                   | 1                | 300             | 300                          |                       |                                    |              |                     |  |
| Security (Technology) Room                  | 1                | 75              | 75                           |                       |                                    |              |                     |  |
| IT Office                                   | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Mother's Room                               | 2                | 100             | 200                          |                       |                                    |              |                     |  |
| Parent Center                               | 1                | 400             | 400                          |                       |                                    |              |                     | Workroom/Welcome Center for Parents        |
| Subtotal                                    |                  |                 | 5,645                        |                       |                                    |              |                     |  |
| <b>1.2 Counselor Suite 1</b>                |                  |                 |                              |                       |                                    |              |                     |  |
| Reception/Waiting                           | 1                | 250             | 250                          |                       |                                    |              |                     |  |
| Counselors Office                           | 2                | 150             | 300                          |                       |                                    |              |                     |  |
| Clerk Office                                | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Registrar Office                            | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Vault/Records                               | 1                | 400             | 400                          |                       |                                    |              |                     |  |
| Conference Room                             | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Storage Room                                | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 1,550                        |                       |                                    |              |                     |  |
| <b>1.3 Counselor Suite 2</b>                |                  |                 |                              |                       |                                    |              |                     |  |
| Reception/Waiting/Clerk                     | 1                | 500             | 500                          |                       |                                    |              |                     |  |
| Counselors Office                           | 2                | 150             | 300                          |                       |                                    |              |                     |  |
| Registrar Office                            | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Conference Room                             | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Storage Room                                | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 1,250                        |                       |                                    |              |                     |  |

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES                                   |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|---|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |   |
| <b>1.4 Health Clinic</b>                    |                  |                 |                              |                       |                                    |              |                     |   |
| Waiting                                     | 1                | 200             | 200                          |                       |                                    |              |                     |   |
| Treatment/Cot Area                          | 1                | 350             | 350                          |                       |                                    |              |                     |   |
| Office                                      | 1                | 150             | 150                          |                       |                                    |              |                     |   |
| Exam Room                                   | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Storage                                     | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Toilet                                      | 1                | 100             | 100                          |                       |                                    |              |                     | Include shower - ADA                    |
| Subtotal                                    |                  |                 | 1,000                        |                       |                                    |              |                     |   |
| <b>2.0 Core Academic</b>                    |                  |                 |                              |                       |                                    |              |                     |   |
| <b>2.1 Learning Suites</b>                  |                  |                 |                              |                       |                                    |              |                     |   |
| <b>Learning Suite 1-- Studios</b>           | 5                | 950             | 4,750                        | 5                     | 27                                 | 135          | 118                 |   |
| <b>Learning Suite 1-- Science Lab</b>       | 2                | 1,200           | 2,400                        | 2                     | 27                                 | 54           | 47                  | 1 lab per LS is fume hood/chem equipped |
| Chem Prep Room                              | 1                | 300             | 300                          |                       |                                    |              |                     |   |
| Flex Studio                                 | 1                | 950             | 950                          | 1                     | 27                                 | 27           | 24                  |   |
| Resource Studio                             |                  |                 |                              |                       |                                    |              |                     |   |
| Open Collaboration Space/Maker Space        | 1                | 1,650           | 1,650                        |                       |                                    |              |                     |   |
| Small Group Instruction                     | 2                | 200             | 400                          |                       |                                    |              |                     | 1 combined or 2 separate                |
| Teacher Planning                            | 1                | 1,200           | 1,200                        |                       |                                    |              |                     | Includes two 50 sf Phone Rooms & 1 RR   |
| Learning Suite Storage                      | 1                | 250             | 250                          |                       |                                    |              |                     |   |
| Student Restrooms                           | 2                | 300             | 600                          |                       |                                    |              |                     |   |
| Staff Restroom                              | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Custodial Closet                            | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Assistant Principal Office                  | 1                | 150             | 150                          |                       |                                    |              |                     |   |
| Covered Outdoor Learning Space              |                  |                 |                              |                       |                                    |              |                     |   |
| <b>Learning Suite 2-- Studios</b>           | 5                | 950             | 4,750                        | 5                     | 27                                 | 135          | 118                 |   |
| <b>Learning Suite 2-- Science Lab</b>       | 2                | 1,200           | 2,400                        | 2                     | 27                                 | 54           | 47                  | 1 lab per LS is fume hood/chem equipped |
| Chem Prep Room                              | 1                | 300             | 300                          |                       |                                    |              |                     |   |
| Flex Studio                                 | 1                | 950             | 950                          | 1                     | 27                                 | 27           | 24                  |   |
| Resource Studio                             |                  |                 |                              |                       |                                    |              |                     |   |
| Open Collaboration Space/Maker Space        | 1                | 1,650           | 1,650                        |                       |                                    |              |                     |   |
| Small Group Instruction                     | 2                | 200             | 400                          |                       |                                    |              |                     | 1 combined or 2 separate                |
| Teacher Planning                            | 1                | 1,200           | 1,200                        |                       |                                    |              |                     | Includes two 50 sf Phone Rooms & 1 RR   |
| Learning Suite Storage                      | 1                | 250             | 250                          |                       |                                    |              |                     |   |
| Student Restrooms                           | 2                | 300             | 600                          |                       |                                    |              |                     |   |
| Staff Restroom                              | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Custodial Closet                            | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Assistant Principal Office                  | 1                | 150             | 150                          |                       |                                    |              |                     |   |
| Outdoor Learning Space                      |                  |                 |                              |                       |                                    |              |                     |   |

# 9-12 Advancement Opportunities

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES                                   |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|---|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |   |
| Learning Suite 3-- Studios                  | 5                | 950             | 4,750                        | 5                     | 27                                 | 135          | 118                 |   |
| Learning Suite 3-- Science Lab              | 2                | 1,200           | 2,400                        | 2                     | 27                                 | 54           | 47                  | 1 lab per LS is fume hood/chem equipped |
| Chem Prep Room                              | 1                | 300             | 300                          |                       |                                    |              |                     |   |
| Flex Studio                                 | 1                | 950             | 950                          | 1                     | 27                                 | 27           | 24                  |   |
| Resource Studio                             |                  |                 |                              |                       |                                    |              |                     |   |
| Open Collaboration Space/Maker Space        | 1                | 1,650           | 1,650                        |                       |                                    |              |                     |   |
| Small Group Instruction                     | 2                | 200             | 400                          |                       |                                    |              |                     | 1 combined or 2 separate                |
| Teacher Planning                            | 1                | 1,200           | 1,200                        |                       |                                    |              |                     | Includes two 50 sf Phone Rooms & 1 RR   |
| Learning Suite Storage                      | 1                | 250             | 250                          |                       |                                    |              |                     |   |
| Student Restrooms                           | 2                | 300             | 600                          |                       |                                    |              |                     |   |
| Staff Restroom                              | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Custodial Closet                            | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Assistant Principal Office                  | 1                | 150             | 150                          |                       |                                    |              |                     |   |
| Outdoor Learning Space                      |                  |                 |                              |                       |                                    |              |                     |   |
| Learning Suite 4-- Studios                  | 5                | 950             | 4,750                        | 5                     | 27                                 | 135          | 118                 |   |
| Learning Suite 4-- Science Lab              | 2                | 1,200           | 2,400                        | 2                     | 27                                 | 54           | 47                  | 1 lab per LS is fume hood/chem equipped |
| Chem Prep Room                              | 1                | 300             | 300                          |                       |                                    |              |                     |   |
| Flex Studio                                 | 1                | 950             | 950                          | 1                     | 27                                 | 27           | 24                  |   |
| Resource Studio                             |                  |                 |                              |                       |                                    |              |                     |   |
| Open Collaboration Space/Maker Space        | 1                | 1,650           | 1,650                        |                       |                                    |              |                     |   |
| Small Group Instruction                     | 2                | 200             | 400                          |                       |                                    |              |                     | 1 combined or 2 separate                |
| Teacher Planning                            | 1                | 1,200           | 1,200                        |                       |                                    |              |                     | Includes two 50 sf Phone Rooms & 1 RR   |
| Learning Suite Storage                      | 1                | 250             | 250                          |                       |                                    |              |                     |   |
| Student Restrooms                           | 2                | 300             | 600                          |                       |                                    |              |                     |   |
| Staff Restroom                              | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Custodial Closet                            | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Assistant Principal Office                  | 1                | 150             | 150                          |                       |                                    |              |                     |   |
| Outdoor Learning Space                      |                  |                 |                              |                       |                                    |              |                     |   |
| Subtotal                                    |                  |                 | 51,400                       |                       |                                    | 864          | 756                 |   |

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES  |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|--|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |  |
| <b>3.0 Elective Spaces</b>                  |                  |                 |                              |                       |                                    |              |                     |  |
| <b>3.1 Fine Arts</b>                        |                  |                 |                              |                       |                                    |              |                     |  |
| Multi-Purpose Room (White Box)              | 1                | 4,000           | 4,000                        | 1                     | 54                                 | 54           | 27                  | TO BECOME COMMUNITY GATHERING SPACE AND AUDITORIUM LOBBY |
| Outdoor & White Box Storage                 | 1                | 700             | 700                          |                       |                                    |              |                     |  |
| Broadcast/Media Classroom                   | 1                | 800             | 800                          | 1                     | 27                                 | 27           | 20                  | CTE PATHWAY  |
| Broadcast Studio                            | 1                | 450             | 450                          |                       |                                    |              |                     |  |
| Broadcast Control Room                      | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Auditorium                                  | 1                | 6,000           | 6,000                        |                       |                                    |              |                     | 500 seats (250 in back)                                  |
| Stage                                       | 1                | 3,000           | 3,000                        |                       |                                    |              |                     |  |
| Makeup/Green Room                           | 1                | 250             | 250                          |                       |                                    |              |                     |  |
| Costume Storage                             | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Scene Shop                                  | 1                | 1,400           | 1,400                        |                       |                                    |              |                     |  |
| Tool Storage                                | 1                | 300             | 300                          |                       |                                    |              |                     |  |
| Women's Dressing Room                       | 1                | 600             | 600                          |                       |                                    |              |                     |  |
| Men's Dressing Room                         | 1                | 600             | 600                          |                       |                                    |              |                     |  |
| Audience Restrooms                          | 2                | 400             | 800                          |                       |                                    |              |                     |  |
| Concessions                                 | 1                | 250             | 250                          |                       |                                    |              |                     |  |
| Theater Classroom                           | 1                | 1,600           | 1,600                        | 1                     | 27                                 | 27           | 20                  |  |
| Band Room                                   | 1                | 2,700           | 2,700                        | 1                     | 54                                 | 54           | 41                  |  |
| Choir Room                                  | 1                | 1,600           | 1,600                        | 1                     | 41                                 | 41           | 30                  |  |
| Piano Studio                                | 1                | 800             | 800                          | 1                     | 15                                 | 15           | 11                  | Piano/keyboard classes                                   |
| Instrument Storage                          | 1                | 700             | 700                          |                       |                                    |              |                     |  |
| Band Booster Storage                        | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Practice Room                               | 8                | 100             | 800                          |                       |                                    |              |                     |  |
| Shared Ensemble Room                        | 2                | 600             | 1,200                        | 1                     | 15                                 | 15           | 11                  | Steel Pan & Jazz or XYZ                                  |
| Band Office                                 | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Choir Office                                | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Piano Storage                               | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Shared Music Library                        | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Shared Costume/Robe Storage                 | 1                | 500             | 500                          |                       |                                    |              |                     |  |
| 2D Art Room                                 | 2                | 1,600           | 3,200                        | 2                     | 27                                 | 54           | 41                  |  |
| 2D Art Storage                              | 1                | 250             | 250                          |                       |                                    |              |                     |  |
| 3D Art Room                                 | 1                | 1,600           | 1,600                        | 1                     | 27                                 | 27           | 20                  |  |
| 3D Art Storage                              | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Kiln  | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Dance/Cheerleading                          | 1                | 2,800           | 2,800                        | 1                     | 41                                 | 41           | 30                  | Place between Fine Arts & Athletics                      |
| Mat Storage                                 | 1                | 300             | 300                          |                       |                                    |              |                     |  |
| Costume Storage                             | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 38,750                       |                       |                                    | 273          | 205                 |  |
| <b>3.2 CTE</b>                              |                  |                 |                              |                       |                                    |              |                     |  |
| Low Intensity Labs                          | 3                | 2,500           | 7,500                        | 3                     | 24                                 | 72           | 54                  | 3 CTE PATHWAYS   |
| High Intensity Labs                         | 2                | 5,000           | 10,000                       | 2                     | 24                                 | 48           | 36                  | 2 CTE PATHWAYS   |
| Subtotal                                    |                  |                 | 17,500                       |                       |                                    | 120          | 90                  |  |

# 9-12 Advancement Opportunities

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES  |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|--|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |  |
| <b>3.3 JROTC</b>                            |                  |                 |                              |                       |                                    |              |                     |  |
| JROTC Classroom                             | 2                | 1,000           | 2,000                        | 2                     | 30                                 | 60           | 45                  | 2 Classrooms could join to be shooting range |
| JROTC Armory                                | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| JROTC Uniform Storage                       | 1                | 800             | 800                          |                       |                                    |              |                     |  |
| JROTC Office                                | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| JROTC Dressing Rooms                        | 2                | 400             | 800                          |                       |                                    |              |                     |  |
| Student Restrooms                           | 2                | 250             | 500                          |                       |                                    |              |                     |  |
| Outdoor Drill Space                         |                  |                 |                              |                       |                                    |              |                     | Could be outdoor shooting range              |
| Subtotal                                    |                  |                 | 4,500                        |                       |                                    | 60           | 45                  |  |

## 4.0 Media Center

### 4.1 Media Center

|                                    |   |       |       |  |  |  |  |  |
|------------------------------------|---|-------|-------|--|--|--|--|--|
| Media Center                       | 1 | 5,100 | 5,100 |  |  |  |  | Media Center should be front & center of campus (Lee Elementary style) |
| Conference Room                    | 1 | 300   | 300   |  |  |  |  | 1,350 students x 4 sf = 5,400 sf                                       |
| Production/Publication/Print Space | 1 | 200   | 200   |  |  |  |  |  |
| Study Room                         | 2 | 200   | 400   |  |  |  |  | Flexibility to be 1 room @ 400 sf or 2 @ 200 sf                        |
| IT Help Desk                       | 1 | 150   | 150   |  |  |  |  |  |
| Book/Supply Storage                | 1 | 400   | 400   |  |  |  |  |  |
| Office                             | 1 | 150   | 150   |  |  |  |  |  |
| Staff Restroom                     | 1 | 75    | 75    |  |  |  |  |  |
| Student Restroom                   | 1 | 75    | 75    |  |  |  |  |  |
| Workroom (w/ sink)                 | 1 | 200   | 200   |  |  |  |  |  |
| Subtotal                           |   |       | 7,050 |  |  |  |  |  |

## 5.0 Multi-Purpose Area

### 5.1 Multi-Purpose

|                             |   |       |       |   |    |     |     |                                  |
|-----------------------------|---|-------|-------|---|----|-----|-----|----------------------------------|
| Flex Lab                    | 2 | 1,200 | 2,400 | 2 | 27 | 54  | 41  | PROXIMITY TO DIGITAL MAKER SPACE |
| Flex Studios                | 4 | 900   | 3,600 | 4 | 27 | 108 | 81  | PROXIMITY TO DIGITAL MAKER SPACE |
| Medium Group Rooms          | 1 | 600   | 600   |   |    |     |     | PROXIMITY TO DIGITAL MAKER SPACE |
| Small Group Rooms           | 2 | 450   | 900   |   |    |     |     | PROXIMITY TO DIGITAL MAKER SPACE |
| Digital Maker Space         | 1 | 800   | 800   | 1 | 27 | 27  | 14  | ADJACENT TO WHITE BOX            |
| Digital Maker Space Storage | 1 | 200   | 200   |   |    |     |     | ADJACENT TO DIGITAL MAKER SPACE  |
| Audio/Recording Space       | 1 | 200   | 200   |   |    |     |     | ADJACENT TO DIGITAL MAKER SPACE  |
| Career Center               | 1 | 700   | 700   |   |    |     |     | ADJACENT TO MEDIA CENTER         |
| Subtotal                    |   |       | 9,400 |   |    | 189 | 135 |                                  |

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES  |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|--|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |  |
| <b>6.0 Special Education Services</b>       |                  |                 |                              |                       |                                    |              |                     |  |
| <b>6.1 Special Education Services</b>       |                  |                 |                              |                       |                                    |              |                     |  |
| Self-Contained Studio                       | 2                | 950             | 1,900                        | 2                     | 12                                 | 24           | 24                  |  |
| Shared Kitchenette                          | 1                | 400             | 400                          |                       |                                    |              |                     |  |
| Kitchenette Pantry                          | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Shared Laundry Room                         | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Shared Restroom                             | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Small SPED Studio                           | 1                | 600             | 600                          |                       |                                    |              |                     |  |
| Small SPED Studio Storage                   | 1                | 50              | 50                           |                       |                                    |              |                     |  |
| Small SPED Studio Restroom                  | 1                | 75              | 75                           |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 3,425                        |                       |                                    | 24           | 24                  |  |
| <b>6.2 Special Education Support Suite</b>  |                  |                 |                              |                       |                                    |              |                     |  |
| SPED Clerk/Itenerant                        | 1                | 350             | 350                          |                       |                                    |              |                     |  |
| SPED Records Room                           | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| SPED Chair Office                           | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| SPED Office                                 | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Conference Room                             | 1                | 400             | 400                          |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 1,250                        |                       |                                    |              |                     |  |
| <b>7.0 Food Service</b>                     |                  |                 |                              |                       |                                    |              |                     |  |
| <b>7.1 Food Service</b>                     |                  |                 |                              |                       |                                    |              |                     |  |
| Cafeteria                                   | 1                | 6,300           | 6,300                        |                       |                                    |              |                     | 1,350 Students / 3 lunch periods = 450 students x 14 sf per student = 6,300 sf |
| Outdoor Eating Area                         |                  |                 |                              |                       |                                    |              |                     | Provide 450 seats outdoors   |
| Cafeteria Restrooms                         | 2                | 400             | 800                          |                       |                                    |              |                     |  |
| Serving Area                                | 1                | 800             | 800                          |                       |                                    |              |                     |  |
| Servery Storage                             | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Servery Custodial                           | 1                | 75              | 75                           |                       |                                    |              |                     |  |
| Grab & Go Serving Area                      | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Kitchen                                     | 1                | 5,000           | 5,000                        |                       |                                    |              |                     |  |
| Office (w/ restroom)                        |                  |                 |                              |                       |                                    |              |                     | Included in kitchen SF   |
| Dishwashing Room                            |                  |                 |                              |                       |                                    |              |                     | Included in kitchen SF   |
| Dry Storage                                 |                  |                 |                              |                       |                                    |              |                     | Included in kitchen SF   |
| Cooler/Freezer                              |                  |                 |                              |                       |                                    |              |                     | Included in kitchen SF   |
| Restroom/Lockers                            |                  |                 |                              |                       |                                    |              |                     | Included in kitchen SF   |
| Kitchen Receiving                           | 1                | 300             | 300                          |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 13,575                       |                       |                                    |              |                     |  |

# 9-12 Advancement Opportunities

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES   |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|---|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |   |
| <b>8.0 Physical Education</b>               |                  |                 |                              |                       |                                    |              |                     |   |
| <b>8.1 Physical Education</b>               |                  |                 |                              |                       |                                    |              |                     |   |
| <b>Anxillary Gym</b>                        | 1                | 8,000           | 8,000                        | 1                     | 54                                 | 54           | 41                  |   |
| PE Storage                                  | 1                | 700             | 700                          |                       |                                    |              |                     |   |
| General Athletics Storage                   | 1                | 700             | 700                          |                       |                                    |              |                     |   |
| Anxillary Gym/Athletics Restrooms           | 4                | 300             | 1,200                        |                       |                                    |              |                     |   |
| Shared Weight Room                          | 1                | 3,000           | 3,000                        | 1                     | 24                                 | 24           | 12                  |   |
| Training Room                               | 1                | 600             | 600                          |                       |                                    |              |                     |   |
| Health Classroom                            | 1                | 800             | 800                          | 1                     | 27                                 | 27           | 20                  | CTE PATHWAY AS NURSING (WITH NURSE)<br>OR SPORTS MEDICINE (WITH ATHLETICS)                            |
| Training Classroom                          | 1                | 800             | 800                          | 1                     | 27                                 | 27           | 20                  |   |
| Laundry Room                                | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| <b>Competition Gym</b>                      | 1                | 13,000          | 13,000                       | 1                     | 54                                 | 54           | 41                  | REQUESTED ARENA WOULD BE: 12,400 (2 side-by-side courts) + 8,000 (2,000 Seating Capacity) = 20,400 sf |
| Concessions                                 | 1                | 200             | 200                          |                       |                                    |              |                     |   |
| Spectator Restrooms                         | 2                | 500             | 1,000                        |                       |                                    |              |                     |   |
| Spectator Family Restroom                   | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| PE Storage                                  | 1                | 400             | 400                          |                       |                                    |              |                     |   |
| General Athletics Storage                   | 1                | 700             | 700                          |                       |                                    |              |                     |   |
| Womens Locker Room                          | 1                | 1,200           | 1,200                        |                       |                                    |              |                     |   |
| Womens Showers/Restrooms                    | 1                | 500             | 500                          |                       |                                    |              |                     |   |
| Womens Coaches Office                       | 1                | 150             | 150                          |                       |                                    |              |                     |   |
| Womens Coaches Restroom                     | 1                | 75              | 75                           |                       |                                    |              |                     |   |
| Mens Locker Room                            | 1                | 1,200           | 1,200                        |                       |                                    |              |                     |   |
| Mens Showers/Restrooms                      | 1                | 500             | 500                          |                       |                                    |              |                     |   |
| Mens Coaches Office                         | 1                | 150             | 150                          |                       |                                    |              |                     |   |
| Mens Coaches Restroom                       | 1                | 75              | 75                           |                       |                                    |              |                     |   |
| Subtotal                                    |                  |                 | 35,150                       |                       |                                    | 186          | 134                 |   |

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|-------|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |       |
| <b>8.2 Concessions &amp; Storage</b>        |                  |                 |                              |                       |                                    |              |                     |       |
| Concessions                                 | 1                | 800             | 800                          |                       |                                    |              |                     |       |
| Custodial Room                              | 1                | 60              | 60                           |                       |                                    |              |                     |       |
| Tickets/Store                               | 1                | 150             | 150                          |                       |                                    |              |                     |       |
| Pantry                                      | 1                | 60              | 60                           |                       |                                    |              |                     |       |
| Storage                                     | 1                | 500             | 500                          |                       |                                    |              |                     |       |
| Public Restrooms                            | 2                | 500             | 1,000                        |                       |                                    |              |                     |       |
| Public Family Restroom                      | 2                | 100             | 200                          |                       |                                    |              |                     |       |
| Cooler Wash Area                            | 1                | 120             | 120                          |                       |                                    |              |                     |       |
| Officials Locker Room                       | 1                | 100             | 100                          |                       |                                    |              |                     |       |
| Officials Restroom                          | 1                | 100             | 100                          |                       |                                    |              |                     |       |
| Field Storage                               | 1                | 500             | 500                          |                       |                                    |              |                     |       |
| Subtotal                                    |                  |                 | 3,590                        |                       |                                    |              |                     |       |

**9.0 Building Support**

**9.1 Maintenance & Custodial**

|                             |   |       |       |  |  |  |  |  |
|-----------------------------|---|-------|-------|--|--|--|--|--|
| Maintenance Receiving       | 1 | 400   | 400   |  |  |  |  |  |
| Equipment Storage           | 1 | 600   | 600   |  |  |  |  |  |
| Custodial Storage           | 1 | 200   | 200   |  |  |  |  |  |
| Outsource Custodial Storage | 1 | 200   | 200   |  |  |  |  |  |
| Water Heater Room           | 1 | 100   | 100   |  |  |  |  |  |
| Office                      | 1 | 200   | 200   |  |  |  |  |  |
| Break Room                  | 1 | 300   | 300   |  |  |  |  |  |
| Restroom                    | 1 | 100   | 100   |  |  |  |  |  |
| Maintenance Room            | 1 | 2,000 | 2,000 |  |  |  |  |  |
| Subtotal                    |   |       | 4,100 |  |  |  |  |  |

**10.0 Site**

**10.1 Site**

|                                 |   |  |  |  |  |  |  |  |
|---------------------------------|---|--|--|--|--|--|--|--|
| Parking for XXX                 |   |  |  |  |  |  |  |  |
| Staff & Visitor Parking for XXX |   |  |  |  |  |  |  |  |
| Greenhouses                     | 2 |  |  |  |  |  |  |  |
| Field with Track                |   |  |  |  |  |  |  |  |
| Subtotal                        |   |  |  |  |  |  |  |  |

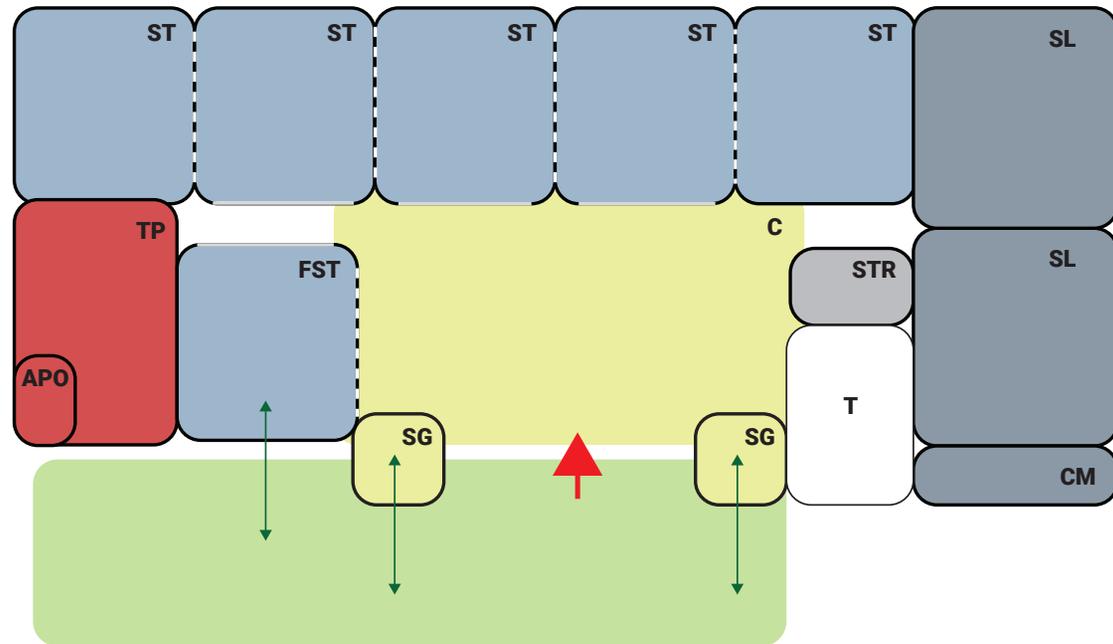
# 9-12 Advancement Opportunities

## Adjacency Strategies/Learning Suites

**Having a program of spaces is essential to identifying and further developing various space types, which ultimately serve as a kit of parts for a building.**

These space types can then be manipulated or arranged in various ways to generate different learning suite layout options that best fit the needs of future-facing learning practices in the USVI. Based on the key space types that were identified in the visioning process and informed by national benchmarks, learning suite solutions were created for various grade levels. The following layouts can be applied across modernizations/expansions and new builds.

9-12 Learning suite *Linear orientation*



9-12 Learning Suite Program Key

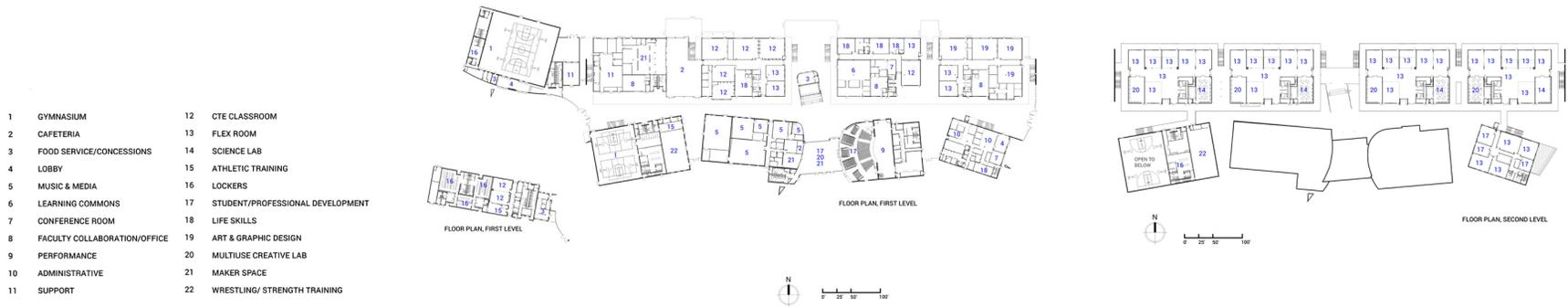
- OPAQUE
- - - - - TRANSPARENT
- · - · - CHANGE IN MATERIAL
- · - · - FLEXIBLE/OPERABLE
- ↔ POTENTIAL CONNECTION TO OUTDOOR LEARNING
- (T) TOILET



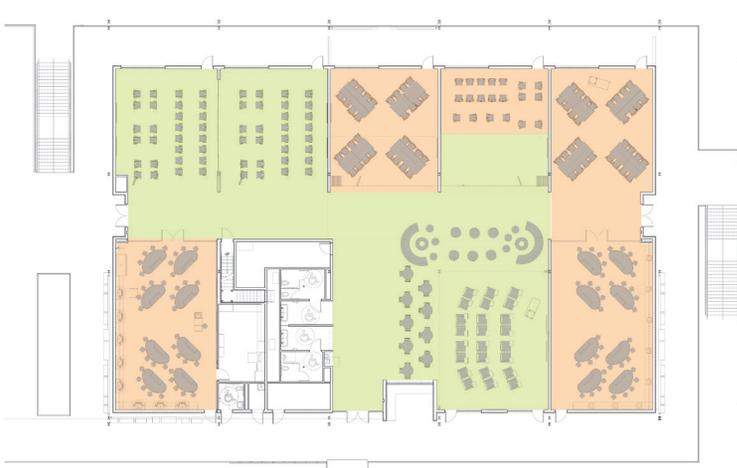
# 9-12 Advancement Opportunities

## Adjacency Strategies/Learning Suites Precedent

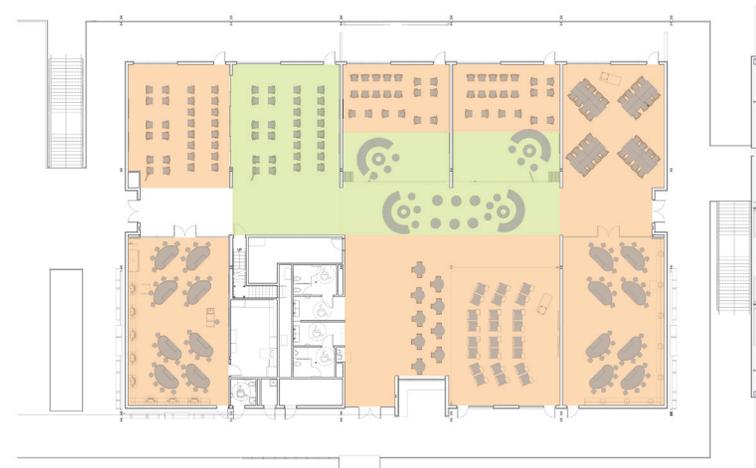
**Canyon View High School**  
 Agua Fria Union High School District I Waddell Arizona



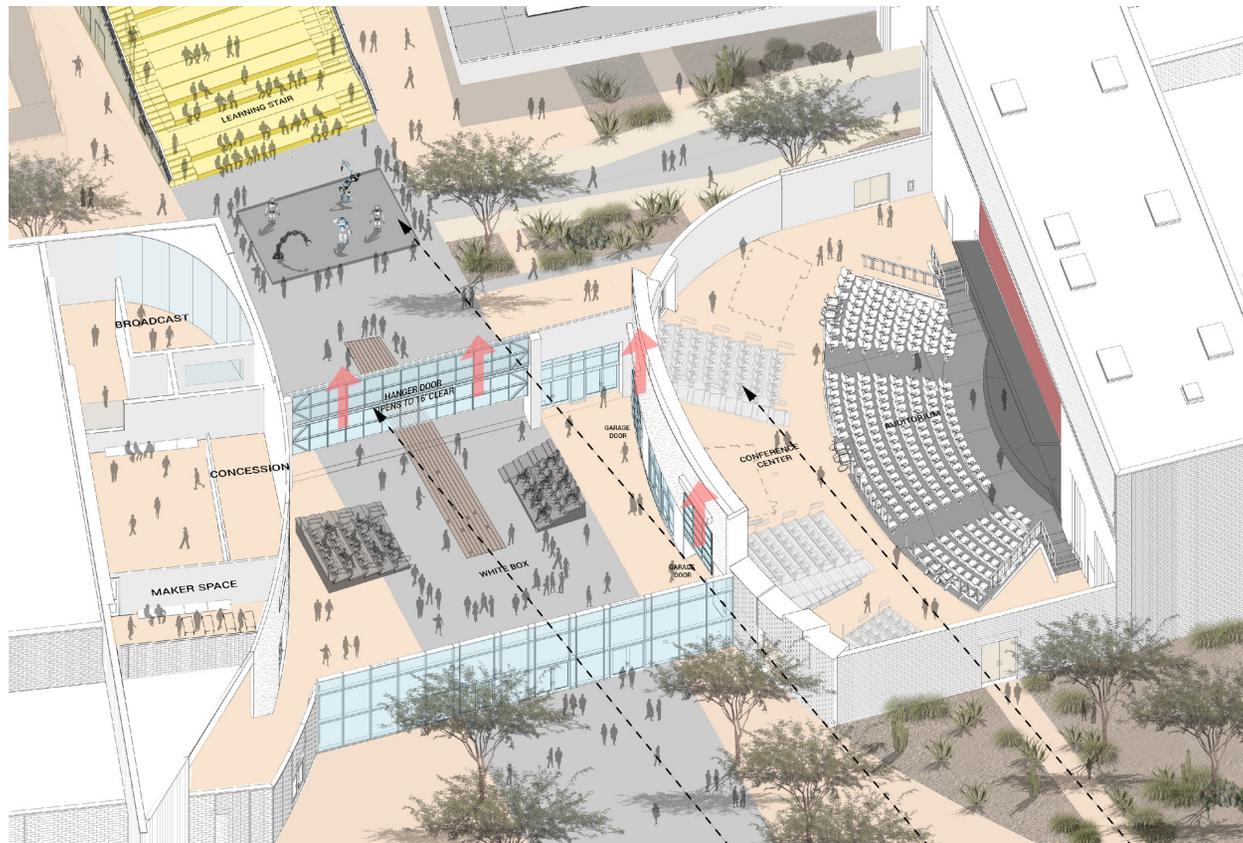
9-12 Advancement Opportunities



Learning fort



Learning fort



Vertical Sliding Door



Student Exhibition



Foldable Bleachers

# 9-12 Advancement Opportunities

## Ivanna Eudora Kean High School - CTE Magnet Program

**USVI CTE Magnet High School Planning Program**

**Revised 6/22/2020**

**600 Target Capacity**

**Program Area**

|     |                    |        |
|-----|--------------------|--------|
| 1.0 | Administration     | 6,225  |
| 2.0 | Core Academic      | 29,800 |
| 3.0 | Elective Spaces    | 33,550 |
| 4.0 | Media Center       | 7,050  |
| 5.0 | Multi-Purpose Area | 1,900  |
| 6.0 | SPED Services      | 3,400  |
| 7.0 | Food Service       | 7,775  |
| 8.0 | Physical Education | 25,140 |
| 9.0 | Building Support   | 3,145  |

| Max Capacity | Functional Capacity | Utilization Factor |                           |
|--------------|---------------------|--------------------|---------------------------|
| 540          | 474                 | 87.5%              |                           |
| 332          | 188                 | 75%                | White Box @ 50%           |
| 27           | 14                  | 75%                | Digital Maker Space @ 50% |
| 12           | 12                  | 100%               |                           |
| 108          | 81                  | 75%                | Weight Room @ 50%         |

**Total Useable Area (Net Square Feet- NSF): 117,985**

**1,019      768**

**General Building Area: Walls, Partitions, Mech. Elec., Circulation: 25% of Net SF 29,496**

(20% of Gross SF)  
\*Based on Industry standards that include outdoor circulation

**Total Building Area (Gross Square Feet- GSF): 147,481**

\*Additional Covered Outdoor Learning Spaces 5% of Net SF 5,899

**TOTAL BUILDING AREA WITH OUTDOOR LEARNING 153,381**

\*All new buids should be refined and reduced by 10% in order to meet budgetary requirements

Advancement Opportunities: Ivanna Eudora Kean High School Program

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES   |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|---|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |   |
| <b>1.0 Administration</b>                   |                  |                 |                              |                       |                                    |              |                     |   |
| <b>1.1 Administration Offices</b>           |                  |                 |                              |                       |                                    |              |                     |   |
| Main School Lobby                           | 1                | 400             | 400                          |                       |                                    |              |                     | This includes safe & secure vestibule                   |
| Principal's Secretary Office                | 1                | 150             | 150                          |                       |                                    |              |                     |   |
| Principal Office                            | 1                | 200             | 200                          |                       |                                    |              |                     |   |
| Assistant Principal Office                  | 2                | 150             | 300                          |                       |                                    |              |                     | Inegrated in Learning Suites                            |
| Principal's Conference Room                 | 1                | 250             | 250                          |                       |                                    |              |                     |   |
| Conference Room                             | 1                | 250             | 250                          |                       |                                    |              |                     |   |
| Workroom                                    | 1                | 300             | 300                          |                       |                                    |              |                     |   |
| Break Room                                  | 1                | 300             | 300                          |                       |                                    |              |                     |   |
| SRO Office                                  | 1                | 125             | 125                          |                       |                                    |              |                     |   |
| Monitors' Office                            | 1                | 200             | 200                          |                       |                                    |              |                     | Multiple monitors will office out of space              |
| ISS Room                                    | 1                | 400             | 400                          |                       |                                    |              |                     |   |
| ISS Restroom                                | 1                | 75              | 75                           |                       |                                    |              |                     |   |
| Toilet                                      | 2                | 75              | 150                          |                       |                                    |              |                     |   |
| Book Room                                   | 1                | 200             | 200                          |                       |                                    |              |                     |   |
| IT Office                                   | 1                | 150             | 150                          |                       |                                    |              |                     |   |
| Mother's Room                               | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Parent Center                               | 1                | 400             | 400                          |                       |                                    |              |                     | Workroom/Welcome Center for Parents                     |
| Subtotal                                    |                  |                 | 3,950                        |                       |                                    |              |                     |   |
| <b>1.2 Counselor Suite 1</b>                |                  |                 |                              |                       |                                    |              |                     |   |
| Reception/Waiting                           | 1                | 200             | 200                          |                       |                                    |              |                     |   |
| Counselors Office                           | 2                | 150             | 300                          |                       |                                    |              |                     |   |
| Clerk Office                                | 1                | 150             | 150                          |                       |                                    |              |                     |   |
| Registrar Office                            | 1                | 150             | 150                          |                       |                                    |              |                     |   |
| Vault/Records                               | 1                | 300             | 300                          |                       |                                    |              |                     |   |
| Conference Room                             | 1                | 200             | 200                          |                       |                                    |              |                     |   |
| Storage Room                                | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Subtotal                                    |                  |                 | 1,400                        |                       |                                    |              |                     |   |
| <b>1.4 Health Clinic</b>                    |                  |                 |                              |                       |                                    |              |                     |   |
| Waiting                                     | 1                | 200             | 200                          |                       |                                    |              |                     | Want clinic to serve as clinic for public/community use |
| Treatment/Cot Area                          | 1                | 250             | 250                          |                       |                                    |              |                     |   |
| Office                                      | 1                | 150             | 150                          |                       |                                    |              |                     |   |
| Exam Room                                   | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Storage                                     | 1                | 100             | 100                          |                       |                                    |              |                     |   |
| Toilet                                      | 1                | 75              | 75                           |                       |                                    |              |                     | Include shower - ADA                                    |
| Subtotal                                    |                  |                 | 875                          |                       |                                    |              |                     |   |

# 9-12 Advancement Opportunities

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES                                   |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|---|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |   |
| <b>2.0 Core Academic</b>                    |                  |                 |                              |                       |                                    |              |                     |   |
| <b>2.1 Learning Suites</b>                  |                  |                 |                              |                       |                                    |              |                     |   |
| <b>Learning Suite 1-- Studios</b>           | 3                | 850             | 2,550                        | 3                     | 27                                 | 81           | 71                  |   |
| <b>Learning Suite 1-- Science Lab</b>       | 1                | 1,200           | 1,200                        | 1                     | 27                                 | 27           | 24                  | 1 lab per LS is fume hood/chem equipped |
| Chem Prep Room                              | 1                | 200             | 200                          |                       |                                    |              |                     |   |
| Open Collaboration Space/Maker Space        | 1                | 1,400           | 1,400                        | 1                     | 24                                 | 27           | 24                  |   |
| Small Group Instruction                     | 2                | 200             | 400                          |                       |                                    |              |                     | 1 combined or 2 separate                |
| Teacher Planning                            | 1                | 1,000           | 1,000                        |                       |                                    |              |                     | Includes two 50 sf Phone Rooms & 1 RR   |
| Learning Suite Storage                      | 1                | 250             | 250                          |                       |                                    |              |                     |   |
| Student Restrooms                           | 2                | 150             | 300                          |                       |                                    |              |                     |   |
| Staff Restroom                              | 1                | 75              | 75                           |                       |                                    |              |                     |   |
| Custodial Closet                            | 1                | 75              | 75                           |                       |                                    |              |                     |   |
| Covered Outdoor Learning Space              |                  |                 |                              |                       |                                    |              |                     | How does FEMA treat them?               |
| <b>Learning Suite 2-- Studios</b>           | 3                | 850             | 2,550                        | 3                     | 27                                 | 81           | 71                  |   |
| <b>Learning Suite 2-- Science Lab</b>       | 1                | 1,200           | 1,200                        | 1                     | 27                                 | 27           | 24                  | 1 lab per LS is fume hood/chem equipped |
| Chem Prep Room                              | 1                | 200             | 200                          |                       |                                    |              |                     |   |
| Open Collaboration Space/Maker Space        | 1                | 1,400           | 1,400                        | 1                     | 24                                 | 27           | 24                  |   |
| Small Group Instruction                     | 2                | 200             | 400                          |                       |                                    |              |                     | 1 combined or 2 separate                |
| Teacher Planning                            | 1                | 1,000           | 1,000                        |                       |                                    |              |                     | Includes two 50 sf Phone Rooms & 1 RR   |
| Learning Suite Storage                      | 1                | 250             | 250                          |                       |                                    |              |                     |   |
| Student Restrooms                           | 2                | 150             | 300                          |                       |                                    |              |                     |   |
| Staff Restroom                              | 1                | 75              | 75                           |                       |                                    |              |                     |   |
| Custodial Closet                            | 1                | 75              | 75                           |                       |                                    |              |                     |   |
| Outdoor Learning Space                      |                  |                 |                              |                       |                                    |              |                     |   |
| <b>Learning Suite 3-- Studios</b>           | 3                | 850             | 2,550                        | 3                     | 27                                 | 81           | 71                  |   |
| <b>Learning Suite 3-- Science Lab</b>       | 1                | 1,200           | 1,200                        | 1                     | 27                                 | 27           | 24                  | 1 lab per LS is fume hood/chem equipped |
| Chem Prep Room                              | 1                | 200             | 200                          |                       |                                    |              |                     |   |
| Open Collaboration Space/Maker Space        | 1                | 1,400           | 1,400                        | 1                     | 24                                 | 27           | 24                  |   |
| Small Group Instruction                     | 2                | 200             | 400                          |                       |                                    |              |                     | 1 combined or 2 separate                |
| Teacher Planning                            | 1                | 1,000           | 1,000                        |                       |                                    |              |                     | Includes two 50 sf Phone Rooms & 1 RR   |
| Learning Suite Storage                      | 1                | 250             | 250                          |                       |                                    |              |                     |   |
| Student Restrooms                           | 2                | 150             | 300                          |                       |                                    |              |                     |   |
| Staff Restroom                              | 1                | 75              | 75                           |                       |                                    |              |                     |   |
| Custodial Closet                            | 1                | 75              | 75                           |                       |                                    |              |                     |   |
| Outdoor Learning Space                      |                  |                 |                              |                       |                                    |              |                     |   |
| <b>Learning Suite 4-- Studios</b>           | 3                | 850             | 2,550                        | 3                     | 27                                 | 81           | 71                  |   |
| <b>Learning Suite 4-- Science Lab</b>       | 1                | 1,200           | 1,200                        | 1                     | 27                                 | 27           | 24                  | 1 lab per LS is fume hood/chem equipped |
| Chem Prep Room                              | 1                | 200             | 200                          |                       |                                    |              |                     |   |
| Open Collaboration Space/Maker Space        | 1                | 1,400           | 1,400                        | 1                     | 24                                 | 27           | 24                  |   |
| Small Group Instruction                     | 2                | 200             | 400                          |                       |                                    |              |                     | 1 combined or 2 separate                |
| Teacher Planning                            | 1                | 1,000           | 1,000                        |                       |                                    |              |                     | Includes two 50 sf Phone Rooms & 1 RR   |
| Learning Suite Storage                      | 1                | 250             | 250                          |                       |                                    |              |                     |   |
| Student Restrooms                           | 2                | 150             | 300                          |                       |                                    |              |                     |   |
| Staff Restroom                              | 1                | 75              | 75                           |                       |                                    |              |                     |   |
| Custodial Closet                            | 1                | 75              | 75                           |                       |                                    |              |                     |   |
| Outdoor Learning Space                      |                  |                 |                              |                       |                                    |              |                     |   |
| <b>Subtotal</b>                             |                  |                 | <b>29,800</b>                |                       |                                    | <b>540</b>   | <b>474</b>          |   |

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES  |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|--|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |  |
| <b>3.0 Elective Spaces</b>                  |                  |                 |                              |                       |                                    |              |                     |  |
| <b>3.1 Fine Arts</b>                        |                  |                 |                              |                       |                                    |              |                     |  |
| Multi-Purpose Room (White Box)              | 1                | 4,000           | 4,000                        | 1                     | 54                                 | 54           | 27                  | TO BECOME COMMUNITY GATHERING SPACE AND AUDITORIUM LOBBY |
| Outdoor & White Box Storage                 | 1                | 700             | 700                          |                       |                                    |              |                     |  |
| Broadcast/Media Classroom                   | 1                | 800             | 800                          | 1                     | 27                                 | 27           | 20                  | CTE PATHWAY  |
| Broadcast Studio                            | 1                | 450             | 450                          |                       |                                    |              |                     |  |
| Broadcast Control Room                      | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Choir Room                                  | 1                | 1,600           | 1,600                        | 1                     | 41                                 | 41           | 30                  |  |
| Piano Studio                                | 1                | 800             | 800                          | 0                     | 15                                 | 0            | 0                   | Piano/keyboards classes                                  |
| Instrument Storage                          | 1                | 700             | 700                          |                       |                                    |              |                     |  |
| Band Booster Storage                        | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Practice Room                               | 4                | 100             | 400                          |                       |                                    |              |                     |  |
| Band Office                                 | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Choir Office                                | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Piano Storage                               | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Shared Music Library                        | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| 2D Art Room                                 | 1                | 1,600           | 1,600                        | 1                     | 27                                 | 27           | 20                  |  |
| 2D Art Storage                              | 1                | 250             | 250                          |                       |                                    |              |                     |  |
| 3D Art Room                                 | 1                | 1,600           | 1,600                        | 1                     | 27                                 | 27           | 20                  |  |
| 3D Art Storage                              | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Kiln  | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 14,050                       |                       |                                    | 175.5        | 71                  |  |
| <b>3.2 CTE</b>                              |                  |                 |                              |                       |                                    |              |                     |  |
| Low Intensity Labs                          | 2                | 2,500           | 5,000                        | 2                     | 24                                 | 48           | 36                  | 3 CTE PATHWAYS   |
| High Intensity Labs                         | 2                | 5,000           | 10,000                       | 2                     | 24                                 | 48           | 36                  | 2 CTE PATHWAYS   |
| Subtotal                                    |                  |                 | 15,000                       |                       |                                    | 96           | 72                  |  |
| <b>3.3 JROTC</b>                            |                  |                 |                              |                       |                                    |              |                     |  |
| JROTC Classroom                             | 2                | 1,000           | 2,000                        | 2                     | 30                                 | 60           | 45                  | 2 Classrooms could join to be shooting range             |
| JROTC Armory                                | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| JROTC Uniform Storage                       | 1                | 800             | 800                          |                       |                                    |              |                     |  |
| JROTC Office                                | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| JROTC Dressing Rooms                        | 2                | 400             | 800                          |                       |                                    |              |                     |  |
| Student Restrooms                           | 2                | 250             | 500                          |                       |                                    |              |                     |  |
| Outdoor Drill Space                         |                  |                 |                              |                       |                                    |              |                     | Could be outdoor shooting range                          |
| Subtotal                                    |                  |                 | 4,500                        |                       |                                    | 60           | 45                  |  |

# 9-12 Advancement Opportunities

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES  |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|--|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |  |
| <b>4.0 Media Center</b>                     |                  |                 |                              |                       |                                    |              |                     |  |
| <b>4.1 Media Center</b>                     |                  |                 |                              |                       |                                    |              |                     |  |
| Media Center                                | 1                | 5,100           | 5,100                        |                       |                                    |              |                     | Media Center should be front & center of campus (Lee Elementary style) |
| Conference Room                             | 1                | 300             | 300                          |                       |                                    |              |                     | 1,350 students x 4 sf = 5,400 sf                                       |
| Production/Publication/Print Space          | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Study Room                                  | 2                | 200             | 400                          |                       |                                    |              |                     | Flexibility to be 1 room @ 400 sf or 2 @ 200 sf                        |
| IT Help Desk                                | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Book/Supply Storage                         | 1                | 400             | 400                          |                       |                                    |              |                     |  |
| Office                                      | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Staff Restroom                              | 1                | 75              | 75                           |                       |                                    |              |                     |  |
| Student Restroom                            | 1                | 75              | 75                           |                       |                                    |              |                     |  |
| Workroom (w/ sink)                          | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 7,050                        |                       |                                    |              |                     |  |
| <b>5.0 Multi-Purpose Area</b>               |                  |                 |                              |                       |                                    |              |                     |  |
| <b>5.1 Multi-Purpose</b>                    |                  |                 |                              |                       |                                    |              |                     |  |
| Digital Maker Space                         | 1                | 800             | 800                          | 1                     | 27                                 | 27           | 14                  | ADJACENT TO WHITE BOX  |
| Digital Maker Space Storage                 | 1                | 200             | 200                          |                       |                                    |              |                     | AJDACENT TO DIGITAL MAKER SPACE  |
| Audio/Recording Space                       | 1                | 200             | 200                          |                       |                                    |              |                     | AJDACENT TO DIGITAL MAKER SPACE  |
| Career Center                               | 1                | 700             | 700                          |                       |                                    |              |                     | ADJACENT TO MEDIA CENTER   |
| Subtotal                                    |                  |                 | 1,900                        |                       |                                    | 27           | 14                  |  |

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES  |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|--|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |  |
| <b>6.0 Special Education Services</b>       |                  |                 |                              |                       |                                    |              |                     |  |
| <b>6.1 Special Education Services</b>       |                  |                 |                              |                       |                                    |              |                     |  |
| Self-Contained Studio                       | 1                | 950             | 950                          | 1                     | 12                                 | 12           | 12                  |  |
| Shared Kitchenette                          | 1                | 400             | 400                          |                       |                                    |              |                     |  |
| Kitchenette Pantry                          | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Shared Laundry Room                         | 1                | 75              | 75                           |                       |                                    |              |                     |  |
| Shared Restroom                             | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Small SPED Studio                           | 1                | 600             | 600                          |                       |                                    |              |                     |  |
| Small SPED Studio Storage                   | 1                | 50              | 50                           |                       |                                    |              |                     |  |
| Small SPED Studio Restroom                  | 1                | 75              | 75                           |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 2,350                        |                       |                                    | 12           | 12                  |  |
| <b>6.2 Special Education Support Suite</b>  |                  |                 |                              |                       |                                    |              |                     |  |
| SPED Clerk/Itinerant                        | 1                | 350             | 350                          |                       |                                    |              |                     |  |
| SPED Records Room                           | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| SPED Chair Office                           | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| SPED Office                                 | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Conference Room                             | 1                | 250             | 250                          |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 1,050                        |                       |                                    |              |                     |  |
| <b>7.0 Food Service</b>                     |                  |                 |                              |                       |                                    |              |                     |  |
| <b>7.1 Food Service</b>                     |                  |                 |                              |                       |                                    |              |                     |  |
| Cafeteria                                   | 1                | 3,000           | 3,000                        |                       |                                    |              |                     | 1,350 Students / 3 lunch periods = 450 students x 14 sf per student = 6,300 sf |
| Outdoor Eating Area                         |                  |                 |                              |                       |                                    |              |                     | Provide 450 seats outdoors   |
| Cafeteria Restrooms                         | 2                | 150             | 300                          |                       |                                    |              |                     |  |
| Serving Area                                | 1                | 800             | 800                          |                       |                                    |              |                     |  |
| Servery Storage                             | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Servery Custodial                           | 1                | 75              | 75                           |                       |                                    |              |                     |  |
| Grab & Go Serving Area                      | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Kitchen                                     | 1                | 3,000           | 3,000                        |                       |                                    |              |                     |  |
| Office (w/ restroom)                        |                  |                 |                              |                       |                                    |              |                     | Included in kitchen SF   |
| Dishwashing Room                            |                  |                 |                              |                       |                                    |              |                     | Included in kitchen SF   |
| Dry Storage                                 |                  |                 |                              |                       |                                    |              |                     | Included in kitchen SF   |
| Cooler/Freezer                              |                  |                 |                              |                       |                                    |              |                     | Included in kitchen SF   |
| Restroom/Lockers                            |                  |                 |                              |                       |                                    |              |                     | Included in kitchen SF   |
| Kitchen Receiving                           | 1                | 300             | 300                          |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 7,775                        |                       |                                    |              |                     |  |

# 9-12 Advancement Opportunities

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES  |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|--|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |  |
| <b>8.0 Physical Education</b>               |                  |                 |                              |                       |                                    |              |                     |  |
| <b>8.1 Physical Education</b>               |                  |                 |                              |                       |                                    |              |                     |  |
| Training Room                               | 1                | 600             | 600                          |                       |                                    |              |                     |  |
| Health Classroom                            | 1                | 800             | 800                          | 1                     | 27                                 | 27           | 20                  | CTE PATHWAY AS NURSING (WITH NURSE)<br>OR SPORTS MEDICINE (WITH ATHLETICS)                                   |
| Training Classroom                          | 1                | 800             | 800                          | 1                     | 27                                 | 27           | 20                  |  |
| Laundry Room                                | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| <b>Competition Gym</b>                      | <b>1</b>         | <b>13,000</b>   | <b>13,000</b>                | <b>1</b>              | <b>54</b>                          | <b>54</b>    | <b>41</b>           | <b>REQUESTED ARENA WOULD BE: 12,400 (2 side-by-side courts) + 8,000 (2,000 Seating Capacity) = 20,400 sf</b> |
| Concessions                                 | 1                | 200             | 200                          |                       |                                    |              |                     |  |
| Spectator Restrooms                         | 2                | 500             | 1,000                        |                       |                                    |              |                     |  |
| Spectator Family Restroom                   | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| PE Storage                                  | 1                | 400             | 400                          |                       |                                    |              |                     |  |
| General Athletics Storage                   | 1                | 700             | 700                          |                       |                                    |              |                     |  |
| Womens Locker Room                          | 1                | 1,200           | 1,200                        |                       |                                    |              |                     |  |
| Womens Showers/Restrooms                    | 1                | 500             | 500                          |                       |                                    |              |                     |  |
| Womens Coaches Office                       | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Womens Coaches Restroom                     | 1                | 75              | 75                           |                       |                                    |              |                     |  |
| Mens Locker Room                            | 1                | 1,200           | 1,200                        |                       |                                    |              |                     |  |
| Mens Showers/Restrooms                      | 1                | 500             | 500                          |                       |                                    |              |                     |  |
| Mens Coaches Office                         | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Mens Coaches Restroom                       | 1                | 75              | 75                           |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 21,550                       |                       |                                    | 108          | 81                  |  |
| <b>8.2 Concessions &amp; Storage</b>        |                  |                 |                              |                       |                                    |              |                     |  |
| <b>Concessions</b>                          | <b>1</b>         | <b>800</b>      | <b>800</b>                   |                       |                                    |              |                     |  |
| Custodial Room                              | 1                | 60              | 60                           |                       |                                    |              |                     |  |
| Tickets/Store                               | 1                | 150             | 150                          |                       |                                    |              |                     |  |
| Pantry                                      | 1                | 60              | 60                           |                       |                                    |              |                     |  |
| Storage                                     | 1                | 500             | 500                          |                       |                                    |              |                     |  |
| Public Restrooms                            | 2                | 500             | 1,000                        |                       |                                    |              |                     |  |
| Public Family Restroom                      | 2                | 100             | 200                          |                       |                                    |              |                     |  |
| Cooler Wash Area                            | 1                | 120             | 120                          |                       |                                    |              |                     |  |
| Officials Locker Room                       | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Officials Restroom                          | 1                | 100             | 100                          |                       |                                    |              |                     |  |
| Field Storage                               | 1                | 500             | 500                          |                       |                                    |              |                     |  |
| Subtotal                                    |                  |                 | 3,590                        |                       |                                    |              |                     |  |

| Description of Department, Program, or Unit | Planning Program |                 |                              | Capacity              |                                    |              |                     | NOTES |
|---|------------------|-----------------|------------------------------|-----------------------|------------------------------------|--------------|---------------------|-------|
|   | # of Units       | Unit Area (nsf) | Total Area (nsf) Requirement | # of Teacher Stations | # of Students per Teaching Station | Max Capacity | Functional Capacity |       |
| <b>9.0 Building Support</b>                 |                  |                 |                              |                       |                                    |              |                     |       |
| <b>9.1 Maintenance &amp; Custodial</b>      |                  |                 |                              |                       |                                    |              |                     |       |
| Maintenance Receiving                       | 1                | 320             | 320                          |                       |                                    |              |                     |       |
| Equipment Storage                           | 1                | 480             | 480                          |                       |                                    |              |                     |       |
| Custodial Storage                           | 1                | 160             | 160                          |                       |                                    |              |                     |       |
| Outsource Custodial Storage                 | 1                | 160             | 160                          |                       |                                    |              |                     |       |
| Water Heater Room                           | 1                | 100             | 100                          |                       |                                    |              |                     |       |
| Office                                      | 1                | 150             | 150                          |                       |                                    |              |                     |       |
| Break Room                                  | 1                | 200             | 200                          |                       |                                    |              |                     |       |
| Restroom                                    | 1                | 75              | 75                           |                       |                                    |              |                     |       |
| Maintenance Room                            | 1                | 1,500           | 1,500                        |                       |                                    |              |                     |       |
| Subtotal                                    |                  |                 | 3,145                        |                       |                                    |              |                     |       |
| <b>10.0 Site</b>                            |                  |                 |                              |                       |                                    |              |                     |       |
| <b>10.1 Site</b>                            |                  |                 |                              |                       |                                    |              |                     |       |
| Parking for XXX                             |                  |                 |                              |                       |                                    |              |                     |       |
| Staff & Visitor Parking for XXX             |                  |                 |                              |                       |                                    |              |                     |       |
| Greenhouses                                 | 2                |                 |                              |                       |                                    |              |                     |       |
| Field with Track                            |                  |                 |                              |                       |                                    |              |                     |       |
|   |                  |                 |                              |                       |                                    |              |                     |       |
|   |                  |                 |                              |                       |                                    |              |                     |       |

# 9-12 Case Study

St. Thomas

## Ivanna Eudora Kean High School

**Existing Building Area** 134,313 SF

**New Building Area** ≈ 118,760 SF

**Enrollment** 686 Students

Actual student enrollment 2019/2020

**Functional Capacity** 768 Students  -86 Students

### Design Statement

#### Modernization at Existing:

The modernization of Ivanna Eudora Kean High School requires renovation of existing classrooms space to create small learning communities. The central administration/commons building will be demolished to make room for a more adequate structure to house those functions.

#### Program Deviations:

- Small group learning is outside at existing buildings
- Program is scaled to a 600 student magnet school in lieu of a 1350+ comprehensive high school.

#### Critical Cost Considerations:

- Elevator(s) to meet ADA compliance
- Replacement of jalousie windows
- Renovated outdoor learning/play environments
- Improved site circulation and parking
- HVAC upgrades
- Assume 4000 SF of covered outdoor space
- Assume hip roofs at all locations of new construction
- Communications/IT and security upgrades
- Adding/updating perimeter fence

\*All construction shall be per the design guidelines included at the end of this section.



**DISCLAIMER:** Proposed modernization is contingent on confirmation that the existing structure either meets or can be modified to meet current structural code requirements.

**Level 01**

**LEGEND**

- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PRE-K
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM



# 9-12 Case Study

St. Thomas

Ivanna Eudora Kean High School

## Level 02



### LEGEND

- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PRE-K
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM

Design Guidelines: 9-12 Case Study

Level 03

LEGEND

- NEW
- FUTURE PHASE
- EXISTING
- FLOODPLAIN
- MAIN ENTRY
- OUTDOOR
- PARKING
- ADMIN
- COMMONS/COLAB
- LEARNING STUDIO
- KINDER/PRE-K
- SCIENCE
- MEDIA/MAKER
- SPED
- ELECTIVES
- ATHLETICS
- STORAGE
- RESTROOM

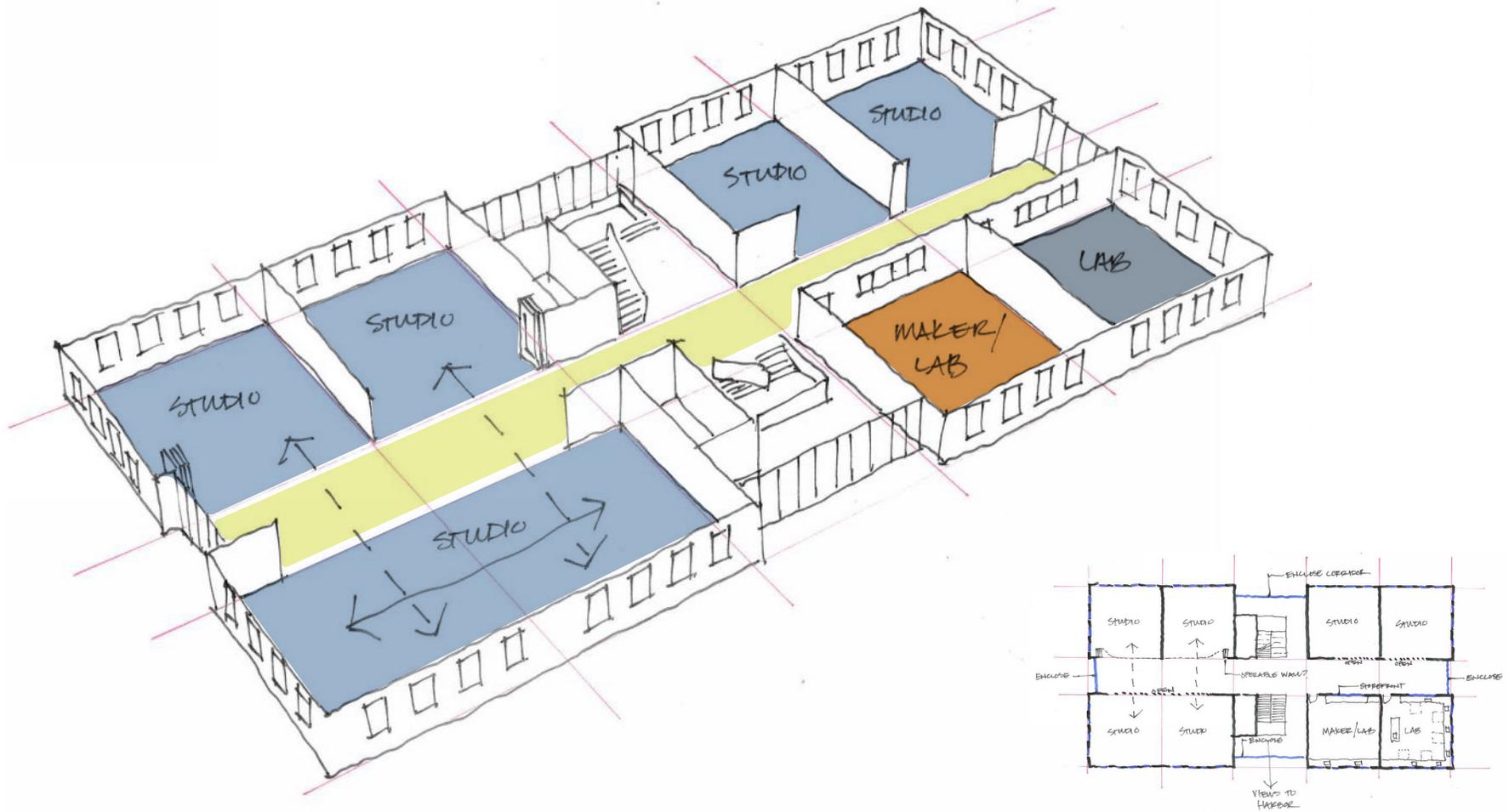


# 9-12 Case Study

St. Thomas

Ivanna Eudora Kean High School

## Kean Learning Suite Modernization Concept

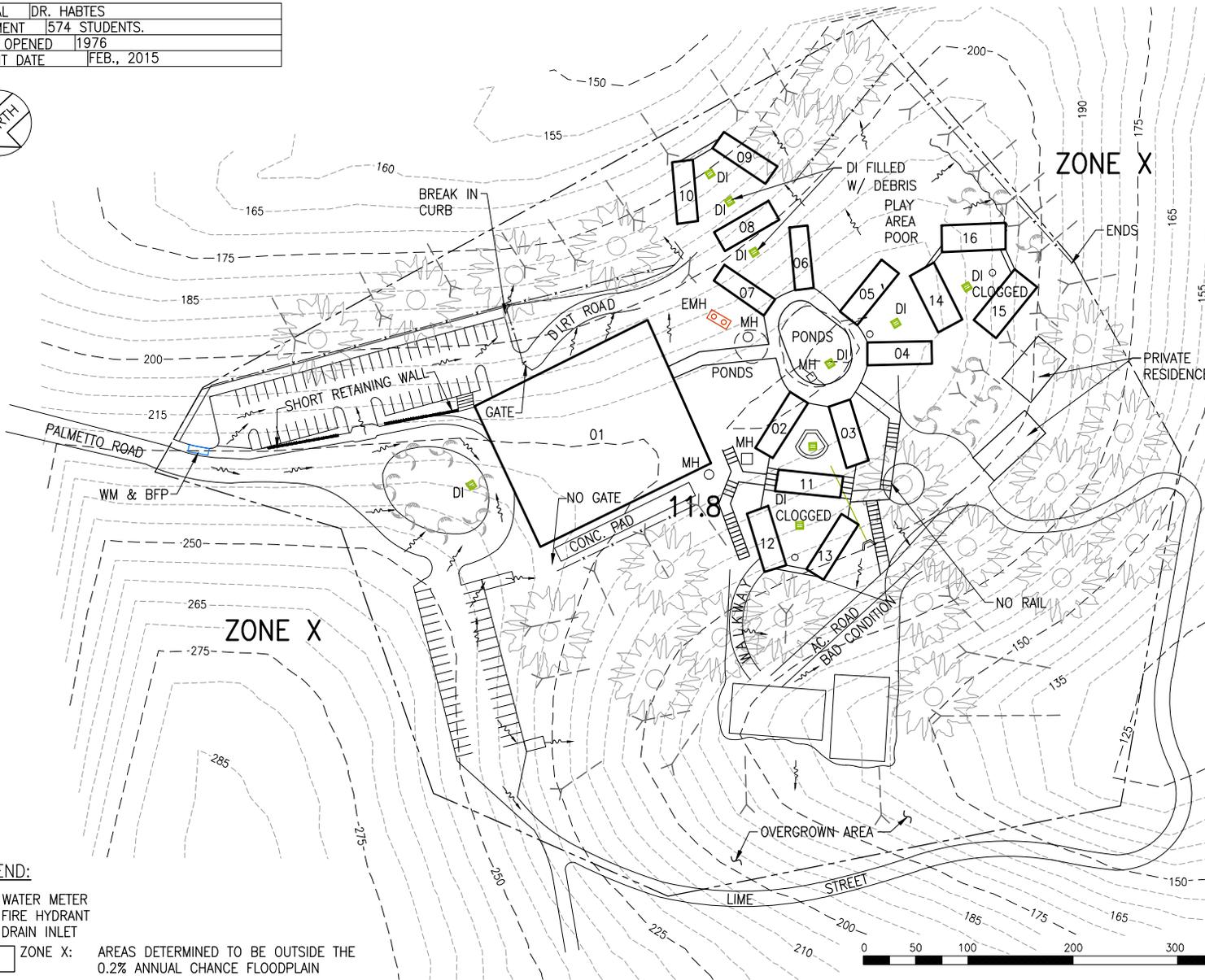


|                 |               |
|-----------------|---------------|
| PRINCIPAL       | DR. HABTES    |
| ENROLLMENT      | 574 STUDENTS. |
| SCHOOL OPENED   | 1976          |
| SITE VISIT DATE | FEB., 2015    |



**NOTE:**

- HAVE TO PAY FOR BAIT TRAPS, RODENT PROBLEMS.
- ASPHALT WEARING AND CRACKING
- FENCE IN POOR SHAPE. NO SECURITY FENCE, GATED.
- SITE IS ROCKY, NOT MUCH GRASS
- SIGNS OF SOIL EROSION, SIDEWALK NOT LEVEL WITH ADJACENT GROUND.
- OUTSIDE SIDEWALK OKAY, SOME CRACKING
- COULD NOT LOCATE GREASE TRAP.
- CAN'T LOCK GATES, HOME ACCESS IS THROUGH SCHOOL.
- PONDING AREAS, NO INFILTRATION
- CISTERN OVERFLOWS INTO ADJACENT PROPERTY.
- WATER IS CONNECTED TO CITY SYSTEM.
- PROBLEMS W/ WATER BEING TURNED OFF, WATER PRESSURE OKAY
- PLAYGROUND IS RUN DOWN, NOT ENOUGH SAND IN PLAY AREA.
- NO FIRE HYDRANT.
- KITCHEN FIRE SYSTEM NEEDS TO BE REPLACED
- GREASE TRAP BY KITCHEN PUMPED EVERY SO OFTEN. DRAIN IN THE KITCHEN.
- MOST KIDS BUSED, NO ISSUES W/ DROP OFF AND PICKUP.
- ENOUGH PARKING FOR DAY TO DAY OPERATIONS.
- SIDEWALK CONNECTION JOINT FILLER DEGRADING AND NEEDS TO BE REPLACED AS WELL AS REMOVE TOP LAYER OF SIDEWALK



**LEGEND:**

- WM: WATER METER
- FH: FIRE HYDRANT
- DI: DRAIN INLET

**ZONE X:** AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN



OIA – ASSESSMENT OF BUILDINGS AND CLASSROOMS  
US VIRGIN ISLANDS – ST. THOMAS



FIGURE

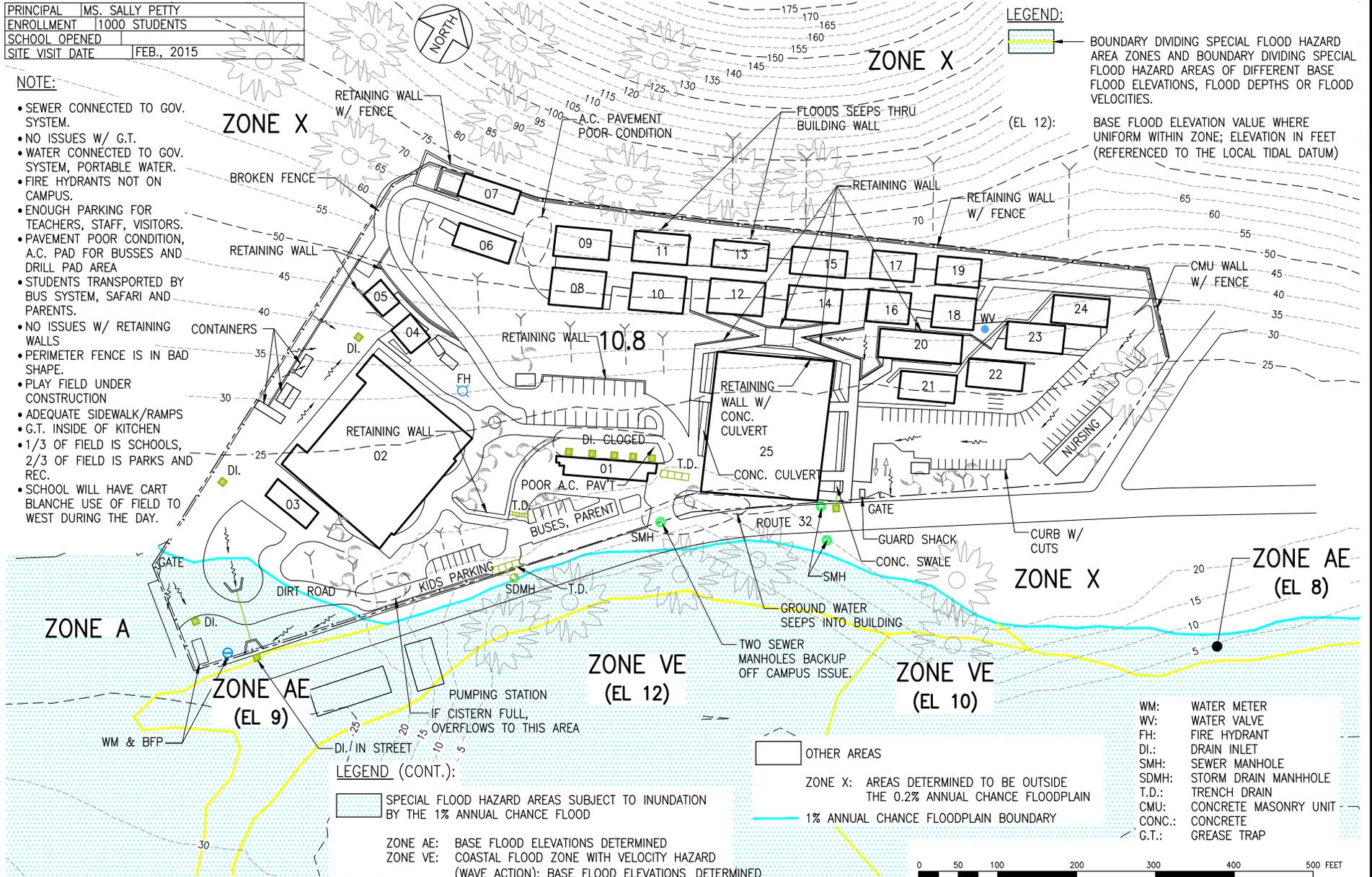
**E. BENJAMIN OLIVER ELEMENTARY SCHOOL**

**04**

|                 |                 |
|-----------------|-----------------|
| PRINCIPAL       | MS. SALLY PETTY |
| ENROLLMENT      | 1000 STUDENTS   |
| SCHOOL OPENED   |                 |
| SITE VISIT DATE | FEB., 2015      |

**NOTE:**

- SEWER CONNECTED TO GOV. SYSTEM.
- NO ISSUES W/ G.T.
- WATER CONNECTED TO GOV. SYSTEM, PORTABLE WATER.
- FIRE HYDRANTS NOT ON CAMPUS.
- ENOUGH PARKING FOR TEACHERS, STAFF, VISITORS.
- PAVEMENT POOR CONDITION, A.C. PAD FOR BUSES AND DRILL PAD AREA
- STUDENTS TRANSPORTED BY BUS SYSTEM, SAFARI AND PARENTS.
- NO ISSUES W/ RETAINING WALLS
- PERIMETER FENCE IS IN BAD SHAPE.
- PLAY FIELD UNDER CONSTRUCTION
- ADEQUATE SIDEWALK/RAMPS
- G.T. INSIDE OF KITCHEN
- 1/3 OF FIELD IS SCHOOLS, 2/3 OF FIELD IS PARKS AND REC.
- SCHOOL WILL HAVE CART BLANCHE USE OF FIELD TO WEST DURING THE DAY.



OIA – ASSESSMENT OF BUILDINGS AND CLASSROOMS  
US VIRGIN ISLANDS – ST. THOMAS



FIGURE

07

IVANNA EUDORA KEAN HIGH SCHOOL

DISCLAIMER: SITE PLAN FEATURES ARE CONCEPTUAL AND NOT INTENDED FOR DESIGN PURPOSES

|                 |                    |
|-----------------|--------------------|
| PRINCIPAL       | MS. DAPHANE THOMAS |
| ENROLLMENT      |                    |
| SCHOOL OPENED   |                    |
| SITE VISIT DATE | FEB., 2015         |



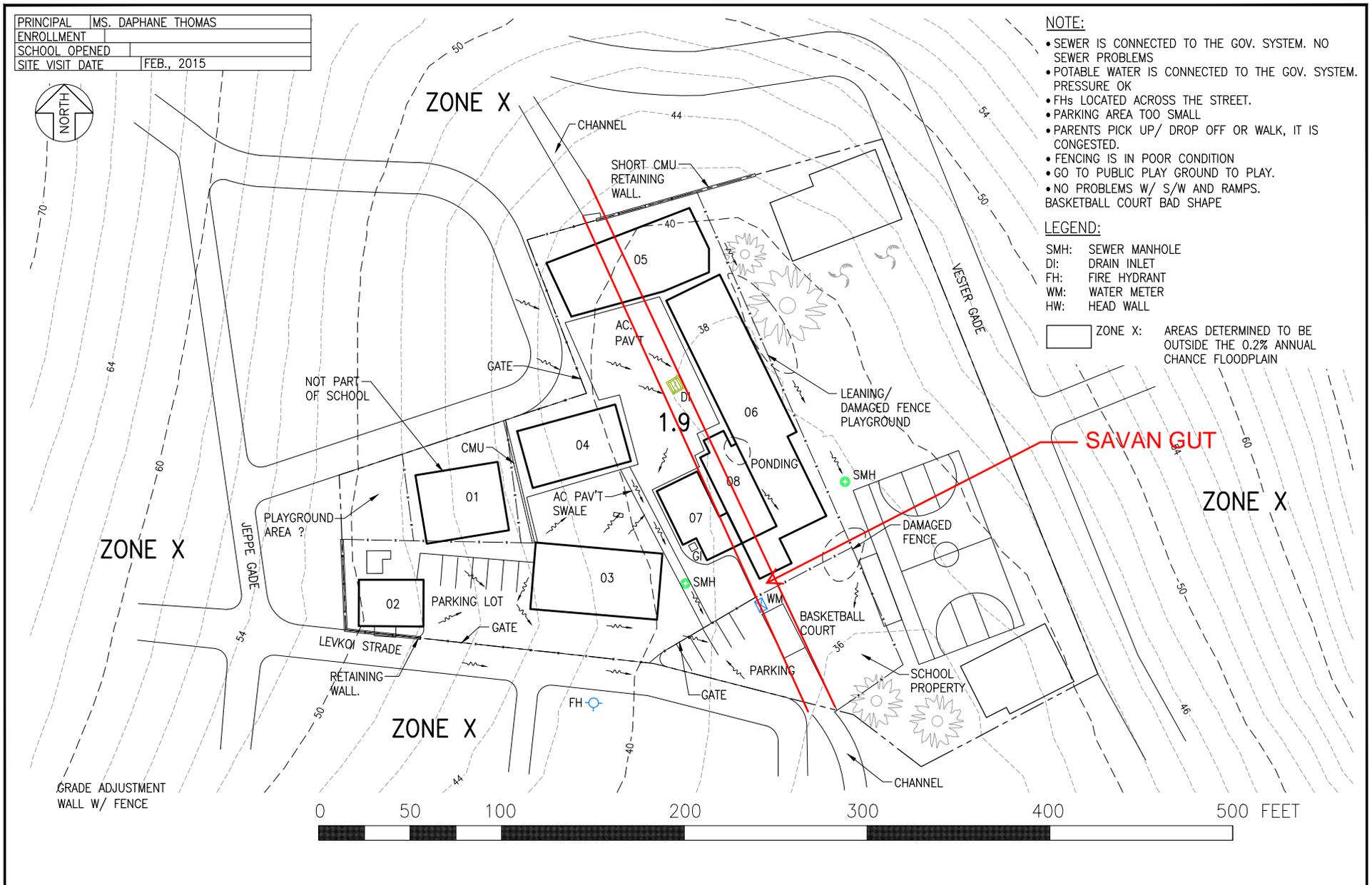
**NOTE:**

- SEWER IS CONNECTED TO THE GOV. SYSTEM. NO SEWER PROBLEMS
- POTABLE WATER IS CONNECTED TO THE GOV. SYSTEM. PRESSURE OK
- FHs LOCATED ACROSS THE STREET.
- PARKING AREA TOO SMALL
- PARENTS PICK UP/ DROP OFF OR WALK, IT IS CONGESTED.
- FENCING IS IN POOR CONDITION
- GO TO PUBLIC PLAY GROUND TO PLAY.
- NO PROBLEMS W/ S/W AND RAMPS.
- BASKETBALL COURT BAD SHAPE

**LEGEND:**

- SMH: SEWER MANHOLE
- DI: DRAIN INLET
- FH: FIRE HYDRANT
- WM: WATER METER
- HW: HEAD WALL

**ZONE X:** AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN



OIA – ASSESSMENT OF BUILDINGS AND CLASSROOMS  
US VIRGIN ISLANDS – ST. THOMAS



FIGURE

08

**JANE E. TUITT ELEMENTARY SCHOOL**

DISCLAIMER: SITE PLAN FEATURES ARE CONCEPTUAL AND NOT INTENDED FOR DESIGN PURPOSES

|                 |                  |
|-----------------|------------------|
| PRINCIPAL       | MS. AUDVEY BOWRY |
| ENROLLMENT      |                  |
| SCHOOL OPENED   | 2000             |
| SITE VISIT DATE | FEB., 2015       |



ZONE X

ZONE X

ZONE X

ZONE X

**NOTE:**

- NO FLOODING, SOME LEAKS, POSSIBLY BY OLD CISTERNS
- SEWER IS CONNECTED TO GOV. SYSTEM FOR SEWER, G.I. INSIDE KITCHEN, GETS CLOGGED.
- POTABLE WATER IS CONNECTED TO THE GOV. SYSTEM, NO ISSUES.
- FHs/ RISERS ONSITE, RISERS (4 ONSITE), BEGINNING TO RUST AT THE BOTTOM.
- MOST KIDS WALK, SOME CONGESTION WHEN PICK UP/ DROP OFF/ 1 BUS
- ESL - BUSED TO THIS LOCATION
- NO ISSUES WITH RETAINING WALLS.
- NO ISSUES WITH FENCE
- PLAY FIELD IS ROCKY
- S/W OKAY, EXIT GATES NEED RAMP FOR WHERE THE GROUND IS LOWER THAN THE SIDEWALK

PLENTY OF TREES NEED TO CUT. NEEDS REGULAR MAINTENANCE

**LEGEND:**

- MH: MANHOLE
- SMH: SEWER MANHOLE
- DMH: DRAIN MANHOLE
- DI: DRAIN INLET
- FH: FIRE HYDRANT
- GYM: GYMNASIIC
- CONC: CONCRETE
- ZONE X: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN



OIA - ASSESSMENT OF BUILDINGS AND CLASSROOMS  
US VIRGIN ISLANDS - ST. THOMAS

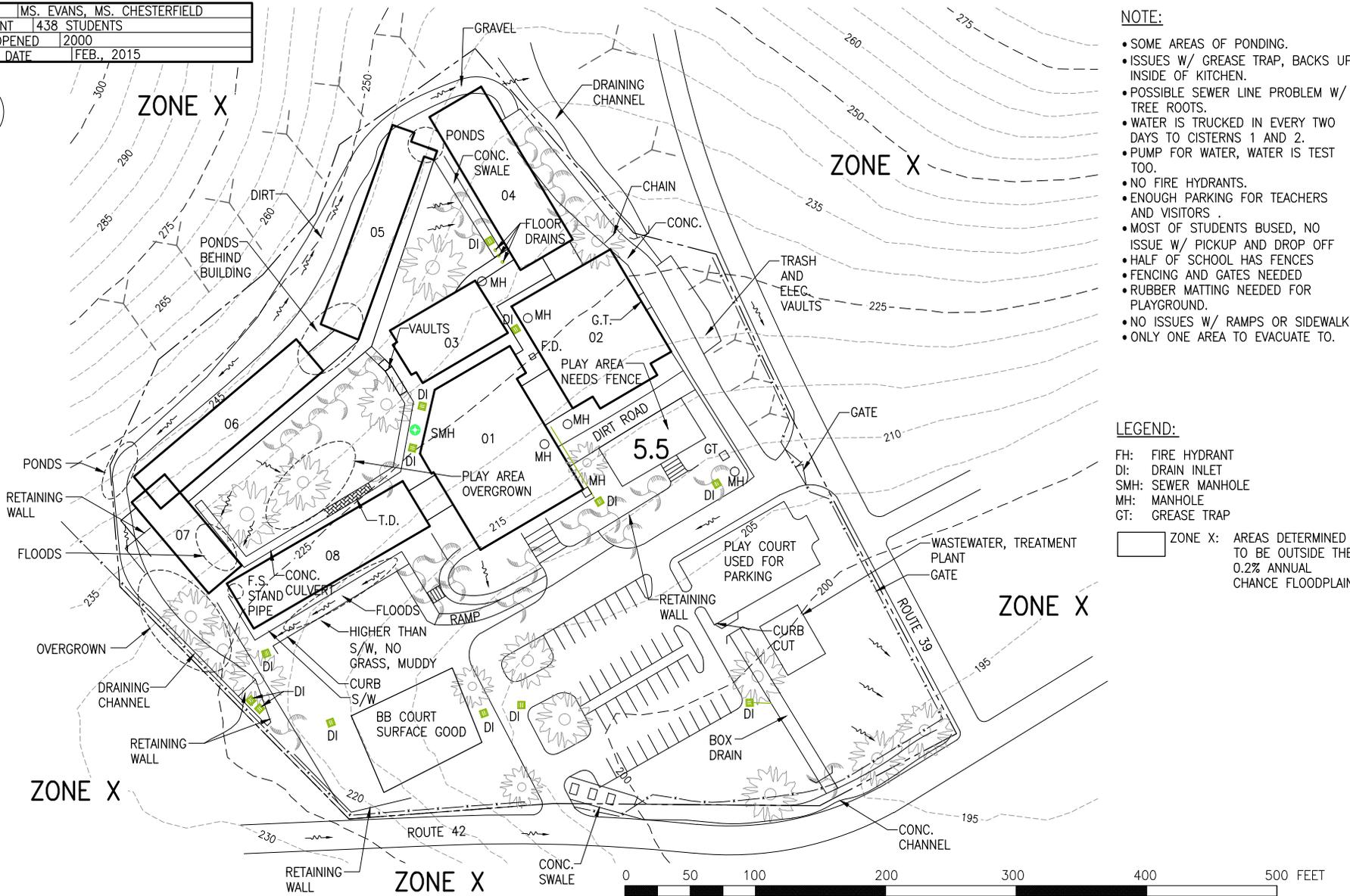


FIGURE

LOCKHART ELEMENTARY SCHOOL

13

|                 |                             |
|-----------------|-----------------------------|
| PRINCIPAL       | MS. EVANS, MS. CHESTERFIELD |
| ENROLLMENT      | 438 STUDENTS                |
| SCHOOL OPENED   | 2000                        |
| SITE VISIT DATE | FEB., 2015                  |



- NOTE:**
- SOME AREAS OF PONDING.
  - ISSUES W/ GREASE TRAP, BACKS UP INSIDE OF KITCHEN.
  - POSSIBLE SEWER LINE PROBLEM W/ TREE ROOTS.
  - WATER IS TRUCKED IN EVERY TWO DAYS TO CISTERNS 1 AND 2.
  - PUMP FOR WATER, WATER IS TEST TOO.
  - NO FIRE HYDRANTS.
  - ENOUGH PARKING FOR TEACHERS AND VISITORS .
  - MOST OF STUDENTS BUSED, NO ISSUE W/ PICKUP AND DROP OFF
  - HALF OF SCHOOL HAS FENCES
  - FENCING AND GATES NEEDED
  - RUBBER MATTING NEEDED FOR PLAYGROUND.
  - NO ISSUES W/ RAMPS OR SIDEWALK.
  - ONLY ONE AREA TO EVACUATE TO.

- LEGEND:**
- FH: FIRE HYDRANT
  - DI: DRAIN INLET
  - SMH: SEWER MANHOLE
  - MH: MANHOLE
  - GT: GREASE TRAP
- ZONE X:** AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN



OIA – ASSESSMENT OF BUILDINGS AND CLASSROOMS  
US VIRGIN ISLANDS – ST. THOMAS



**YVONNE E. MILLINER-BOWSKY ELEMENTARY SCHOOL**

FIGURE  
**15**

DISCLAIMER: SITE PLAN FEATURES ARE CONCEPTUAL AND NOT INTENDED FOR DESIGN PURPOSES



# Virgin Islands Department of Education

## Office of Planning, Research and Evaluation

### Public Schools Enrollment by Grade

2024-2025



| Districts\Schools                           | PK         | KG         | 01         | 02         | 03         | 04         | 05         | 06         | 07         | 08         | 09         | 10         | 11         | 12         | Total         |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|---------------|
| <b>St. Thomas-St. John District</b>         | <b>81</b>  | <b>408</b> | <b>364</b> | <b>372</b> | <b>364</b> | <b>393</b> | <b>366</b> | <b>361</b> | <b>415</b> | <b>386</b> | <b>477</b> | <b>499</b> | <b>416</b> | <b>363</b> | <b>5,265</b>  |
| Jane E. Tuitt Elementary School             |            | 30         | 31         | 32         | 32         | 30         | 24         |            |            |            |            |            |            |            | 179           |
| Joseph Gomez Elementary School              | 14         | 97         | 73         | 72         | 80         | 78         | 78         |            |            |            |            |            |            |            | 492           |
| Joseph Sibilly Elementary School            | 21         | 41         | 37         | 42         | 32         | 37         | 25         |            |            |            |            |            |            |            | 235           |
| Lockhart Elementary School                  |            | 66         | 59         | 72         | 71         | 78         | 66         | 145        | 176        | 171        |            |            |            |            | 904           |
| Ulla F. Muller Elementary School            | 17         | 71         | 73         | 62         | 72         | 78         | 74         |            |            |            |            |            |            |            | 447           |
| Yvonne E. Milliner-Bowsky Elementary School | 14         | 64         | 69         | 63         | 58         | 71         | 81         |            |            |            |            |            |            |            | 420           |
| Julius E. Sprauve School                    | 15         | 39         | 22         | 29         | 19         | 21         | 18         | 24         | 27         | 24         |            |            |            |            | 238           |
| Bertha C. Boschulte Middle School           |            |            |            |            |            |            |            | 192        | 212        | 191        |            |            |            |            | 595           |
| Charlotte Amalie High School                |            |            |            |            |            |            |            |            |            |            | 254        | 312        | 243        | 209        | 1,018         |
| Ivanna Eudora Kean High School              |            |            |            |            |            |            |            |            |            |            | 223        | 187        | 173        | 154        | 737           |
| <b>St. Croix District</b>                   | <b>72</b>  | <b>380</b> | <b>385</b> | <b>375</b> | <b>359</b> | <b>414</b> | <b>374</b> | <b>388</b> | <b>434</b> | <b>335</b> | <b>468</b> | <b>423</b> | <b>366</b> | <b>372</b> | <b>5,145</b>  |
| Alfredo Andrews Elementary School           | 14         | 66         | 66         | 76         | 60         | 61         | 58         | 83         |            |            |            |            |            |            | 484           |
| Juanita Gardine                             | 9          | 32         | 24         | 31         | 29         | 40         | 26         | 34         | 39         | 32         |            |            |            |            | 296           |
| Claude O. Markoe Elementary School          | 10         | 58         | 60         | 61         | 47         | 63         | 68         | 44         |            |            |            |            |            |            | 411           |
| Eulalie Rivera                              | 7          | 74         | 73         | 66         | 60         | 70         | 72         | 62         | 80         | 67         |            |            |            |            | 631           |
| Lew Muckle Elementary School                | 8          | 55         | 60         | 46         | 50         | 58         | 52         | 34         |            |            |            |            |            |            | 363           |
| Pearl B. Larsen                             | 11         | 46         | 50         | 49         | 47         | 58         | 39         | 58         | 49         | 41         |            |            |            |            | 448           |
| Ricardo Richards Elementary School          | 13         | 49         | 52         | 46         | 66         | 64         | 59         | 73         |            |            |            |            |            |            | 422           |
| John H. Woodson Junior High School          |            |            |            |            |            |            |            |            | 266        | 195        |            |            |            |            | 461           |
| St. Croix Central High School               |            |            |            |            |            |            |            |            |            |            | 195        | 169        | 152        | 181        | 697           |
| St. Croix Educational Complex High School   |            |            |            |            |            |            |            |            |            |            | 273        | 254        | 214        | 191        | 932           |
| <b>Virgin Islands</b>                       | <b>153</b> | <b>788</b> | <b>749</b> | <b>747</b> | <b>723</b> | <b>807</b> | <b>740</b> | <b>749</b> | <b>849</b> | <b>721</b> | <b>945</b> | <b>922</b> | <b>782</b> | <b>735</b> | <b>10,410</b> |